Evaluation of the most liked videos on TikTok: an evaluation instrument development for assessment of a video's engagement rate and viral potential

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Abstract

Purpose: TikTok's importance is constantly increasing, accordingly the current study examines the factors that increase TikTok videos' engagement.

Objective: The main objective of the current study is to identify and examine the engagement factors on TikTok and to elaborate on the existing information on online engagement.

Methodology: Performing a systematic literature review, five academic databases were searched for information on online engagement. The most liked videos on TikTok were analyzed to identify engagement factors. By combining all of the factors, an evaluation instrument was created and tested.

Findings: The main findings include a collection of engagement factors in an evaluation instrument. It was found out that the identified factors and parameters differ in their importance for the increasement of engagement.

Conclusion: The developed evaluation instrument can be used in academic research and by non academic content creators, who are willing to expand their knowledge and improve their online communication strategy.

Keywords: *TikTok, engagement, engagement factors, social media, evaluation instruments*

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Introduction

Social media is often times referred to as "*online platforms where users chat, share videos and pictures, companies make their fan pages and many more"* (Schivinski et al., 2016; Perreault & Mosconi, 2018, p. 3569). According to Perreault and Mosconi (2018) these social media functions often are identified as engagement measures. Considering that the main functions of social media are also engagement measures, it can be assumed that one of the main characteristics of social media is closely related to engaging with other users and with their content.

This statement is also applicable to TikTok, which is a platform for short-form videos between 3 seconds and 10 minutes and was first launched in 2017 (Li et al., 2021). The social media platform TikTok differs from other social media platforms on its unique purely algorithmic-driven distribution. Unlike Facebook and Instagram, in which relationship between users have the most important role for content distribution, TikTok shows videos mainly based on the individual-oriented algorithm (Boeker & Urman, 2022). This unique function might be connected to the enormous influence that TikTok has nowadays and the research interest on this application. According to Boeker and Urman (2022), TikTok is '*the fastest growing social media platform with over 1 billion active monthly users'* (p. 2298). The rapid growth of the platform, gives it distinctive qualities, to name a few, to make a destination famous overnight (Wengel et al., 2022), to improve students' academic performance (Herlisya & Wiratno, 2022) or even affect the user's confidence based on their online behaviors (Yuliana, 2022).

Considering the above mentioned strengths of TikTok, this platform provides a large assortment of opportunities for the users. Falgoust and colleagues (2022) came up with the six most common purposes of using TikTok, namely for entertainment, for encountering and sharing widespread communication, to increase one's social interactions, to find support from the

society, to find information and to escape the daily life. Moreover, Sharabati and colleagues (2022) elaborate these findings by stating that social media users seek not only social purposes, but also business opportunities. Regardless of the reason behind using TikTok, users can benefit from increasing the engagement rates of their videos. Reaching wider audiences can positively affect the creator by increasing the amount of people, who encounter the message and therefore lead to better recognition of the creator.

Due to the rapid growth of TikTok, the social media platform has been broadly researched throughout various academic fields. However the empirical database could benefit from a elaborated data on what increases the engagement online and more specifically on TikTok, where the main content is in the form of short dynamic videos. The current study aims to benefit the professional and academic community by developing an evaluation tool that can be used in future research. Moreover, the article aims to contribute by presenting the TikTok content creators with an evaluation instruments, that they can use in their work and also provide them with guidelines on how to increase their engagement levels. To increase the knowledge on the topic, the next section presents a theoretical framework that focuses on social media engagement, engagement factors and specifics of TikTok.

Theoretical Framework

In order to understand the importance of the current research, it is relevant to elaborate on the existing knowledge on social media, more specifically on TikTok and online engagement.

Firstly, it is important to identify a common description of the term engagement that will be used throughout the current research. Engagement has been defined in various manners throughout existing empirical studies. Regardless the numerous manifestations of the definition of engagement, practitioners have '*defined engagement in social media as the action of liking, commenting and sharing content from the brand* (e.g., Van Doorn et al., 2010; Gummerus et al., 2012; Kim et al., 2016; Oh, & Syn, 2015; Oviedo-García et al, 2014; Pletikosa Cvijikj, & Michahelles, 2011; Schivinski et al., 2016; Tsai, & Men, 2013; Friends or Foes, 2016).' (Perreault & Mosconi, 2018, p. 3570). Alongside liking, commenting and sharing, also referred

as ‘forwarding’ in this paper and it includes sharing the video on and off TikTok as well as reposting the video on TikTok, this platform provides further engagement functions that will also be included in the previously quoted definition of engagement. These are ‘views’, which stands for the number of times a specific video has been viewed and ‘adding to favorites’, which is marking the video as a favorite and adding it to specific category that the user can access and find the video there.

In the current research other TikTok specific characteristics are frequently mentioned. Therefore, they are explained in this section. Firstly, ‘For You Page’, also referred as ‘fyp’ or ‘for you’ within the text is ‘*a feed of videos recommended to users based on their activity’* (Boeker & Urman, 2022, p. 2298). Another characteristic that is mentioned is ‘duet’, which ‘*allows users to record a new video side-by-side of already posted TikTok videos’* (Krutrök, 2021, p. 8). Finally, *‘the stitch function allows users to “stitch” together (using sewing terminology) their own videos with videos of other users’* (Krutrök, 2021, p. 8). The ‘duet’ and ‘stitch’ options differ in the format of the videos. The ‘duet’ option presents the dueted video and the new one side by side, whereas the ‘stitch’ options show the dueted video first and then the new one.

After elaborating on the meaning behind engagement and other platform-specific terms within the current paper, it is relevant to observe how TikTok users differentiate in their use of the platform. Regarding TikTok engagement, Frățilă (2021) states that TikTok users differ in their reasons for participating in the platform. There are two main groups, the ones who actively produce content and the ones who only consume content from other users. The first group is commonly referred to as ‘producers’ and the second one – as ‘consumers’. The term ‘prosumers’, which is a combination of producers and consumers, also gains popularity within the new media world. Meng and Leung (2021) elaborate on this idea by introducing different levels of engagement on TikTok. They identify ‘contribution’ as the minimum engagement level, in which users simply consume content and potentially like, comment, forward, follow, add to favorites, etc. Secondly, ‘enhancement’ is a higher level, in which the user use TikTok as an application to improve a video by using the visual effects, filters, music, subtitles, etc. Finally, ‘creation’ is the highest level, in which the user produces videos and uploads them online, does live streams,

interact with other users, etc.

Moreover, TikTok users differ in their content preferences. Considering the data from Statista (2020), 60% of the studied TikTok users use TikTok to find entertaining and funny videos. Other relevant reasons for the use of the application are filling up spare time, finding new ideas and expressing oneself, alongside more. Further studies support the idea that TikTok's main purpose is entertainment and that comedy-related content is the one that usually attracts the most attention on the platform (e.g., Shutsko, 2020). Since studies have examined the factors that increase the engagement on TikTok (*e.g.*, García-Marín & Salvat-Martinrey, 2022), the current

study aims to identify various engagement factors that deal with numerous dimensions of the content and to provide an evaluation instrument that incorporates all these previous factors alongside newly found ones. This evaluation list could be a guideline for TikTok creators, researchers or business owners, who are willing to expand their online performance within the platform or could use the data provided in this article in their future research practices. The study focuses on understanding why certain videos on TikTok receieve higher engagement rates than others. Accordingly, a main objective and seven specific objectives were formulated.

Objectives

The current research examines the phenomenon of TikTok engagement. The main objective of this research is to identify engagement factors on TikTok. Consequently, in order to reach the main objective, the following specific objectives were identified:

(1) Review the academic literature to identify previously studied engagement factors (2) Identify a set of reference videos, selected according to their engagement rates (3) Analyze the selected videos and identify and extract new factors of engagement (4) Create an evaluation instrument taking into account the factors collected in the literature review and in the expert analysis

(5) Validate the instrument by analyzing the corpus of reference videos

(6) Define the evaluation instrument according to the results of the validation (7) Describe and explain the most important engagement factors considering the previous tasks and

observations

In order to reach the main and the specific objectives, the following section identifies the methodology used within the current article.

Methodology

In order to fulfill the above mentioned objectives, firstly, a systematic review was performed, following the PRISMA 2020 statement's guidelines (Page et al., 2021, *see Appendix 4*). The objective of the systematic review is to review previous articles on TikTok and social media engagement and identify factors that positively contribute for the engagement rates of a post. Accordingly, the data was collected during the period between 2nd of March and 17th of May. The data was collected through browsing academic databases and search engines, namely SCOPUS, Web of Science, Google Scholar, Bielefeld Academic Search Engine (BASE) and ScienceDirect.

To access the data needed for the achievement of the mentioned objectives, the searching process was separated into three stages. Firstly, the abovementioned academic databases and search engines were browsed for an elaborated information about TikTok as a platform and its importance nowadays, using the following query, which will be identified as Search 1 within the article: *TikTok AND (engagement OR participation OR involvement OR commitment).*

Secondly, the mentioned academic resources were browsed to retrieve information on engagement factors that were previously analyzed as beneficial for the increasement of the engagement rates on TikTok, using the following query (Search 2): *TikTok AND engagement AND (factors OR indicators OR dimensions OR attributes OR criteria OR variables OR characteristic OR properties).*

Finally, a third query was used to identify additional engagement factors that were previously

researched on social media outside of TikTok, namely social media platforms such as Instagram, YouTube, etc. The keywords for the third search (Search 3) were: *(Youtube OR Instagram OR "social media") AND video AND engagement AND (factors OR indicators OR dimensions OR attributes OR criteria OR variables OR characteristic OR properties).*

For all three of the searches on all of the databases and search engines, the following criteria were defined: published between 2018 and 2023 and sorted by relevance. The date range was decided upon according to Anderson's (2020) paper, since in 2018 TikTok became the application we are familiar with nowadays. For the current systematic review it was decided that when the retrieved results are above the number of 200, only the first 50 sorted to be the most

relevant ones will be reviewed. This method is applied throughout all of the searches. For result count below 200 all of articles were reviewed.

On SCOPUS, Search 1 retrieved 217 results. Search 2 retrieved 46 documents and Search 3 displayed 283 results (*See Appendix 3.01*.). Web of Science retrieved 181 results in Search 1. Search 2 found 41 results and Search 3 retrieved 402 results (*See Appendix 3.02*.). The total of 36,700 articles were found on Google Scholar for Search 1. Search 2 obtained the total of 17,300 results. Search 3 led to 19,000 results (*See Appendix 3.03*.). Search 1 on BASE led to 1,487 finds. Search 2 introduced 186 articles and for Search 3, there were 1,449 results (*See Appendix 3.04*.). The query for Search 1 discovered 1,247 results on ScienceDirect. Search 2 identified 44 results and Search 3 reached 13.707 publications (*See Appendix 3.05*.).

Regarding this systematic review, the total of 998 results were reviewed within all of the above mentioned databases and search engines. However, some of them were repetitive or considered not relevant for the needs of this research. Therefore, for the current article, 33 of the results were used. In order to identify which articles are going to be used, firstly, the title, the abstract and the keywords were considered. Afterwards, if the article was considered relevant to the topic, the whole paper was reviewed, collecting the data needed for the current research. The chosen articles that were considered suitable, included one or more from the following selection criteria: relevant information on the TikTok platform or online engagement; engagement parameters and indicators online or other specific characteristics regarding the increasement of a

post's engagement.

Subsequently, 150 TikTok videos were gathered and analyzed. Since there is no data explicitly identifying the most liked 150 videos, possibly because of the always evolving nature of TikTok, to identify them a mixed-approach was used. Firstly, the TikTok official newsroom articles from 2019, 2020, 2021 and 2022 were used, where the company identified the 10 most trending videos (TikTok, 2019; TikTok, 2020; TikTok, 2021; TikTok, 2022). After using this approach, the total of 50 videos were gathered, since in the article of TikTok (2021) in 2021, the company identified 20 videos that had mention-worthy engagement rates. Afterwards, as proposed by Shutsko (2020) the hashtags #foryou and #foryoupage were used to identify the other most viral videos from 2019 to nowadays. However, instead of #foryou, #fyp was used, which is the abbreviation of ForYouPage, since it is the most popular hashtag and retrieved more

videos and more viral ones than the *foryou* hashtag. Shutsko (2020) incorporated these hashtags due to their relevance on TikTok. These are the most recognizable and frequently used hashtags on TikTok. They are related to a user's inclination to be featured on the 'For You Page', which is the discovery page that is first presented to a user once they open the TikTok application. It is considered that once a content reaches the For You Page, its organic growth increases based on how many people's 'For You Page' they have reached. Shutsko (2020) also proposed the #fürdich, which is the German equivalent of 'foryou', however it was decided not to use this hashtag, since the current research focuses on the most liked videos without limits to a country or a language. For the #fyp and #foryoupage the results found on TikTok were sorted by most liked without any other criteria. The first 50 videos per each hashtag were used in the creation of the video dataset for this research. Finally, after combining the videos from the TikTok newsroom articles and the ones found using #fyp and #foryoupage, the dataset included the total of 150 videos. Each of the videos was analyzed based on engagement rate. To do so, firstly the information presented on Table 1. was extracted from each video:

Characteristic	**Explanation**
Link	The URL that is used to access the video of interest.

Username	The TikTok username of the creator of the video.
Likes count	The amount of times users liked the video of interest.
Views count	The amount of times users viewed the video of interest.
Shares	The amount of times users shared the video of interest.
Favorites	The amount of times users added the video of interest in *Favorites*.
Comments count	The amount of times the users commented on the video of interest.

Date	The date and year on which the video was posted.
Hashtag count	The amount of hashtags used in the video's description.
Hashtag wording	The specific words used in these hashtags.
Selection criteria	The criterion by which the video was found on TikTok, coded the following way: 1 - through #fyp; 2 - through #foryoupage and 3 – through TikTok newsroom articles.

Engagement score	The sum of the number of likes, views, comments, shares and adding to favorites of the video of interest.
Days of existence	The days from posting the video until the day of gathering the information, which was 17th of May. This information was calculated using Planetcalc (2023).

Table 1. The data extracted from each video and an explanation.

All of this data was gathered on May 17th to reduce the biases due to collecting data on different days and therefore allowing certain videos to have more time to receive engagement. The total engagement score was calculated using all engagement values, not simply the views, because of Habibi and Salim's (2023) statement that number of views does not always indicate the total engagement score. Finally, in order to reduce the time bias, since some videos were posted in 2019 and others later up until 2023, all of the engagement rates were normalized by dividing the engagement scores by the days of existence of each video, following the methodology of Dey and colleagues (2018) (*see Appendix 1.01 for the complete dataset of videos and their engagement values*).

After all of the data was normalized, the final engagement rate of each video was used to sort them from the one with the highest rate to the one with the lowest. The videos that were in top 100 were used for further analysis, the other 50 were considered less relevant and therefore were left out of the analysis. After watching each video several times, new engagement factors

were proposed that were not mentioned in any previous research, but are common within the most popular videos. Combining those factors with the already researched engagement factors, the final evaluation instrument was created following the stages of designing an evaluation instrument suggested by Morales-Vargas and colleagues (2023) (*See Evaluation instrument in Results section*).

The evaluation instrument consists of 50 factors, each of them include a title, a description, an analysis question and an evaluation score, which is either a binary scoring system, where *1* - stands for *yes* and *0* - for *no* in the evaluation question, or a multiple scoring system where the rating stands between *0* and *3* if the question requests a more elaborate answer (Guallar et al., 2021). Each of the videos was evaluated based on these questions and the final total score per each category, as well as for the whole evaluative process were calculated (*See Appendix 1.02 for the evaluation results and Appendix 1.03 for calculated totals).* The final evaluation instrument is presented in a simplified version of the model proposed by Codina and Pedraza-Jiménez (2016).

Results

To reach specific objective 1, articles found on SCOPUS, Web of Science, Google Scholar, ScienceDirect and BASE were reviewed. Finally, the ones that have identified social media engagement factors were used to collect data regarding factors that increase the engagement rates online. The below mentioned relevant information was gathered. According to previous research, the factors that increase online engagement are listed below.

Videos that are:

1. Produced by using the 'stitch' or 'duet' option on TikTok (Marcellan, 2021)
2. Filmed as a close-up or medium-shot (Ling et al., 2022)
3. Produced using a second point of view (Ling et al., 2022)
4. In a carousel format (more than one photo/video per post) (Wahid & Gunarto, 2021)
5. Dynamic (including movement) (Habibi & Salim, 2021)
6. Including a visual imagery (photos and videos) (Moran et al., 2019; Aydin, 2019)
7. Attractive (Al-Emadi & Yahia, 2020)
8. Shorter than 40 seconds (Chen et al., 2021; Zhang et al., 2021; Zhang & Su, 2022)

9. Including a popular topic in the headline/cover, namely a topic that is considered important for the society (Zhu et al., 2019)
10. Including a short title (García-Marín & Salvat-Martinrey, 2022)
11. Using emojis (Valipour, 2022; Jones & Lee, 2022)

12. Containing a higher number of hashtags (Li et al., 2021; Marcellan, 2021) *13.* Presenting emotionality in the post description (Weismueller et al., 2023) *14.* Using captions (Jones & Lee, 2022)

15. Presenting a popular topic that is important for the society in the video itself (Zhu et al., 2019)

16. Entertaining (Zhu et al., 2019; Schreiner et al., 2021; Xiao et al., 2023)

17. Informational (Wahid et al., 2023; Kujur, 2017; Wahid & Gunarto, 2021) *18.* Useful (Al-Emadi & Yahia, 2020)

19. Educational (Easwar et al., 2023)

20. Using emotional words verbally (Valipour, 2022)

21. Sharing achievements (Wahid & Gunarto, 2021)

22. Original (Schreiner et al., 2021)

23. Containing metacommunicative messages (Romney & Johnson, 2018)

24. Emotional (Wahid et al., 2023; Jones & Lee, 2022).

25. Tutorials (Wiguna et al., 2023)

26. Containing an attractive person/object of interest (Al-Emadi & Yahia, 2020) *27.* Including 'cute' visuals (Zhang & Su, 2022)

28. Incorporating storytelling components (Oh & Choeh, 2022; Dessart & Pitardi, 2019)

29. Including a subjective language style (Munaro et al., 2021; Romney & Johnson, 2018; Easwar et al., 2023)

30. Containing dancing (Li et al., 2021)

31. Including questions (García-Marín & Salvat-Martinrey, 2022; Wahid & Gunarto, 2021; Schreiner et al., 2021; Aydin, 2019; Zhu et al., 2019; Abbas et al., 2021) *32.* Calling for action (Schreiner et al., 2021)

33. Calling for feedback (Schreiner et al., 2021)

34. Including replying to comments (Marcellan, 2021; Zhu et al., 2019) *35.* Mentioning other users (Zhang & Su, 2022)

36. Produced by verified users (García-Marín & Salvat-Martinrey, 2022)

37. Showing women (García-Marín & Salvat-Martinrey, 2022)

38. Produced by a creator, who has over 10,000 followers (Ling et al., 2022) *39.* Produced by mega-influencers namely, people who have above 1 million followers (Jones & Lee, 2022)

To reach specific objective 2, the most liked 150 videos based on TikTok newsroom articles and Shutsko's (2020) methodology were identified (*see Appendix 1.01 for the full dataset*).

To reach specific objective 3, the 100 most liked videos were studied. As a result of the examination, 11 additional engagement factors were identified. These new factors that have not been found within the reviewed articles are:

1. Videos that show charity of any sort (donations, adoptions, etc.) received high engagement scores.
2. Videos that display food (e.g., being cooked, eaten, etc.) received high engagement. 3. Videos that include lip-syncing (mouthing the words to a song, without actually singing) receive high engagement.
4. Including people's (or animals') reactions in a video leads to high engagement rates.
5. Videos that include singing are likely to receive high engagement.
6. Videos that include art works are likely to receive high engagement.
7. Pranks in videos seem to increase the engagement.
8. Restocking (e.g., refilling cabinets/fridge with food) seems to increase the engagement.
9. Displaying babies or young children in videos is likely to increase the engagement. 10. Transformations (the before and after of a person/room/art work, etc.) seems to increase the engagement.
11. Showing animals in videos is often times present within the 100 most liked videos, therefore it is likely to increase the engagement.

To reach specific objective 4, the engagement factors were combined into an evaluation instrument. It includes the total of 50 indicators, categorized in 5 parameters based on the type of characteristics they are related to. These parameters are presented and described in Table 2.

Title	Description

Video format	Includes engagement factors that concern the visual formation of a video (e.g., how a video is shot; which TikTok format functions it uses, etc.).
Text/description format	Incorporates all textual information and characters in the video and the description.
Content/message	Involves the meaning of the video and the information/visuals it contains, also the purpose of the video.
Interaction	Includes the TikTok actions performed on the platform between the users (e.g., commenting, tagging each other, etc.)
Author/account	Incorporates the factors that concern the creator of the video (e.g., their gender, followers count, etc.)

Table 2. Parameters' titles and their descriptions.

Evaluation instrument (50)

Presented using the model of Codina and Pedraza-Jiménez (2016)

1. **Video format (9)**
2. **Text/description format (5)**
3. **Content/message (27)**
4. **Interaction (5)**
5. **Author/account (4)**

Video format

Co-creation

Definition	Videos on TikTok that are co-created or produced using the 'stitch' or 'duet' option receive higher engagement.

Analysis question	Does the video use the ‘stitch’ or ‘duet’ option?
Score	0-1
Source	Marcellan (2021)

Video framing

Definition	Videos filmed as close-ups (a shot, where the object/person of interest is closely framed) or medium-shots (the person of interest is shot from a medium distance, often including the person from the waist up) are more common among viral videos
Analysis question	Is the video shot as either a close-up or a medium-shot video?
Score	0-1
Source	Ling et al. (2022)

Point of view

Definition	Videos filmed from a second point of view namely, someone other than the person/object of interest holding the camera, are more common among the videos that went viral on TikTok
Analysis question	Is the video filmed from a second-point-of-view person?
Score	0-1
Source	Ling et al. (2022)

Carousel format

Definition	Posts in carousel format namely, more than one visual cue in a post, have more likes.
Analysis question	Does the post include more than one video/photo?
Score	0-1
Source	Wahid & Gunarto (2021).

Dynamic experimental video

Definition	Videos that include a dynamic/moving and vivid object of interest or a performance of any kind receive higher engagement levels.
Analysis question	Does the video contain a dynamic and vivid object/person?
Score	0-1
Source	Habibi & Salim (2021); Oh & Choeh (2022); Aydin (2019)

Visual imagery

Definition	Videos that contain visual image, not simply audio and a blank screen, are connected to higher engagement rates
Analysis question	Does the video contain visual elements?
Score	0-1
Source	Moran et al. (2019); Aydin (2019)

Aesthetics

Definition	Visually attractive content is connected to higher engagement rates.
Analysis question	Is the content visually attractive?
Score	0-1
Source	Al-Emadi & Yahia (2020)

Content duration

Definition	Shorter content, less than 40 seconds, is considered to attract more engagement.
Analysis question	Is the content short?
Score	0-1
Source	Chen et al. (2021), Zhang et al., 2021; Zhang & Su, 2022)

Headlines/cover page

Definition	Videos that use a popular topic, which is a topic that concerns the general public, in the headlines/cover pages receive higher engagement rates.
Analysis question	Does the headline/cover page of the video include a popular topic?
Score	0-1
Source	Zhu et al. (2019)

Text/description format

Title length

Definition	Shorter titles, below 34 characters, are more attractive to the audience. Usually the title on a TikTok video can be found in the description or on the headline.
Analysis question	Is the title short?
Score	0-1
Source	Zhu et al. (2019)

Emojis

Definition	The presence of emojis within the textual information of a video, is considered as beneficial for the increasement of the engagement.
Analysis question	Are there emojis anywhere within the video?
Score	0-1
Source	Valipor (2022); Jones & Lee (2022)

Hashtags

Definition	The higher number of hashtags is related to higher engagement.
Analysis question	How many hashtags does the video contain?
Score	0-3 (*0 – no hashtags, 1 – 1 hashtag, 2 – 2 hashtags, 3 – 3 or more hashtags*)

Source	Marcellan, (2021); Li et al. (2021)

Emotionality in description

Definition	Emotional statements within the description are associated with higher engagement levels. For this context, emotionality stands for the ability of the video to provoke any emotion in the viewer (e.g., sadness, happiness, fear, etc.).
Analysis question	How emotional is the description of the video?
Score	0-3 (0 – not emotional at all, 1 – barely emotional, 2 – somewhat emotional, 3 – very emotional)
Source	Weismueller et al. (2023)

Captions

Definition	The presence of a caption in a post leads to higher engagement levels.
Analysis question	Does the video contain a caption?
Score	0-1
Source	Jones & Lee (2022)

Content/ message

Popular topic

Definition	Videos that engage with a popular topic, a topic that reflects a subject that is on importance for the general public, receive higher engagement.
Analysis question	Does the video deal with a popular topic?
Score	0-1
Source	Zhu et al. (2019)

Entertaining content

Definition	Content that is entertaining, light and easy to understand receives higher engagement.

Analysis question	Is the content entertaining?
Score	0-1
Source	Schreiner et al. (2021), Zhu et al. (2019), Xiao et al. (2023)

Informational content

Definition	Videos that inform the public are connected to higher engagement.
Analysis question	Is the content informational?
Score	0-1
Source	Wahid et al. (2023); Kujur (2017); Wahid & Gunarto (2021)

Useful content

Definition	Videos that provide useful content receive higher engagement.
Analysis question	Does the video include useful content that can be used to facilitate a situation or the daily life?
Score	0-1
Source	Al-Emadi & Yahia (2020)

Educational content

Definition	Educational videos are considered to receive higher engagement rates.
Analysis question	Is the content educational?
Score	0-1
Source	Easwar et al. (2023)

Emotional words

Definition	Verbally expressed emotions receive higher engagement.
Analysis question	Are there any verbally expressed emotions in the video?

Score	0-1
Source	Valipour (2022)

Achievements

Definition	Sharing achievements in a post leads to more engagement.
Analysis question	Are there any achievements shared in the video?
Score	0-1
Source	Wahid & Gunarto (2021)

Original content

Definition	Original content (not replicating previously existing videos) increases the engagement rates.
Analysis question	Is the content original?
Score	0-1
Source	Schreiner et al. (2021)

Metacommunication

Definition	Content that contains metacommunication leads to higher engagement. Metacommunication is a piece of information that explain how the previously given information should be understood.
Analysis question	Does the video contain metacommunicative messages?
Score	0-1
Source	Romney & Johnson (2018)

Emotionality

Definition	Emotional content increases the engagement rate. For this context, emotionality stands for the ability of the video to provoke any emotion in the viewer (e.g., sadness, happiness, fear, etc.).
Analysis question	How emotional is the video?

Score	0-3 (0 – not emotional at all, 1 – barely emotional, 2 – somewhat emotional, 3 – very emotional)
Source	Wahid et al. (2023); Jones & Lee (2022)

Tutorial content

Definition	Tutorial content increases the engagement rates.
Analysis question	Does the video have the function of a tutorial?
Score	0-1
Source	Wignuna et al. (2023)

Attractiveness

Definition	Visually attractive person/object of interest is connected to higher engagement rates.
Analysis question	Is the person/object of interest visually attractive?
Score	0-1
Source	Al-Emadi & Yahia (2020)

Cute visuals

Definition	Videos that include visuals that are considered ‘cute’ receive higher engagement rates.
Analysis question	Does the video include ‘cute’ visuals?
Score	0-1
Source	Zhang & Su (2022)

Storytelling

Definition	Content that contains storytelling elements, for example, a story plot, characters, and verisimilitude trigger consumer engagement, generates more engagement.
Analysis question	Does the content contain storytelling elements?

Score	0-1
Source	Dessart & Pitardi (2019); Oh & Choeh (2022)

Language style

Definition	Subjective language style namely, a language style from a personal point of view, is considered more engaging.
Analysis question	Is the language style subjective?
Score	0-1
Source	Munaro et al. (2021); Romney & Johnson (2018); Easwar et al. (2023)

Dancing

Definition	Videos that include dancing receive high engagement rates.
Analysis question	Does the video show a person/people dancing?
Score	0-1
Source	Li et al. (2021)

Charity videos

Definition	Based on personal observations, 5% of the top 100 most liked videos contain some kind of charity/donations/social help.
Analysis question	Does the video contain any kind of charity?
Score	0-1
Source	Own proposal

Food

Definition	Based on personal observations, 21% of the top 100 most liked videos contain food.
Analysis question	Does the video display any type of food?
Score	0-1

Source	Own proposal

Lip-syncing

Definition	Based on personal observations, 4% of the top 100 most liked videos include lip-syncing. Lip-syncing is a synchronization of the background music with the movement of the lips of the person in front of the camera.
Analysis question	Does the video include lip-syncing?
Score	0-1
Source	Own proposal

Reactions

Definition	Based on personal observations, 25% of the top 100 most liked videos include people's reactions.
Analysis question	Does the video include people/animal's reactions?
Score	0-1
Source	Own proposal

Singing

Definition	Based on personal observations, 13% of the top 100 most liked videos include singing.
Analysis question	Does the video include singing?
Score	0-1
Source	Own proposal

Art

Definition	Based on personal observations, 7% of the top 100 most liked videos display the process of creating an art piece.
Analysis question	Does the video include the creation of an art piece?
Score	0-1

Source	Own proposal

Pranks

Definition	Based on personal observations, 7% of the top 100 most liked videos contain pranks Pranks are jokes that are targeted at someone and the reaction of this person is caught on camera.
Analysis question	Does the video contain a prank?
Score	0-1
Source	Own proposal

Restocking

Definition	Based on personal observations, 4% of the top 100 most liked videos include a restock. Restocking stands for household products being restocked or re-packing bags, other kind of products, etc.).
Analysis question	Does the video show any kind of restocking?
Score	0-1
Source	Own proposal

Babies/children

Definition	Based on personal observations, 7% of the top 100 most liked videos include babies or young children.
Analysis question	Does the video include babies or children?
Score	0-1
Source	Own proposal

Transformations

Definition	Based on personal observations, 5% of the top 100 most liked videos show a transformation of some kind. Usually these videos display the before and after of some transformational journey. Sometimes the progress itself can also be present in the video.
Analysis question	Does the video show a transformation?
Score	0-1
Source	Own proposal

Animals

Definition	Based on personal observations, 32% of the viral videos include animals of some kind.
Analysis question	Does the video include an animal?
Score	0-1
Source	Own proposal

Interaction

Questions

Definition	Including questions in the video/description leads to higher engagement.
Analysis question	Is there a question in the video or in the description?
Score	0-1
Source	García-Marín & Salvat-Martinrey (2022); Abbas et al. (2021); Wahid & Gunarto (2021); Schreiner et al. (2021); Aydin (2019); Zhu et al. (2019)

Call for action

Definition	Videos that include a call for action receive higher engagement rates.
Analysis question	Does the video include a call for action?
Score	0-1

Source	Schreiner et al. (2021)

Call for feedback

Definition	Videos that include a call for feedback receive higher engagement rates.
Analysis question	Does the video contain a call for feedback?
Score	0-1
Source	Schreiner et al. (2021)

Replies

Definition	Replies to comments increase the engagement.
Analysis question	Does the author reply to (some) comments?
Score	0-1
Source	Marcellan, (2021), Zhu et al. (2019)

Tags

Definition	Users who tag other users to their videos receive higher engagement.
Analysis question	Has the author tagged any other users on the video?
Score	0-1
Source	(Zhang & Su, 2022)

Author/account

Verification

Definition	Videos by verified users receive higher engagement rates.
Analysis question	Is the author of the video a verified user?
Score	0-1

Source	García-Marín & Salvat-Martinrey (2022)

Women in videos

Definition	Women present in videos lead to increasement of the engagement rates.
Analysis question	Are there women present in the video?
Score	0-1
Source	García-Marín & Salvat-Martinrey (2022)

Followers count

Definition	Users who have more than 10.000 followers are more likely to produce viral videos.
Analysis question	Does the author of the video have more than 10.000 followers?
Score	0-1
Source	Ling et al. (2022)

Mega influencers

Definition	Mega influencers (users, who have more than 1.000.000 followers) receive higher engagement rates.
Analysis question	Does the author of the video have more than 1.000.000 followers?
Score	0-1
Source	Jones & Lee (2022)

To reach specific objective 5, all 100 videos were analyzed using the newly created evaluative instrument (*See Appendix 1.02. for the full dataset and analysis*).

In regards to specific objective 6, the total scores of the evaluative instrument per each video were calculated. All of the most liked videos had between 10 and 24 points (out of 56) according to the evaluative instrument (*See Appendix 1.03 for the full dataset including all of the total*

scores of each video).

Finally, regarding specific objective 7, the engagement factors and their importance has been analyzed (*See Appendix 1.04 for the full dataset*). The indicators per each category that obtained more than 40% presence within the analyzed videos are considered worth mentioning and are presented from the highest to lowest presence per parameter in Tables 3-7.

Video format

Indicator	Presence rate
Dynamic experimental video	100/100
Visual imagery	100/100
Content duration	75/100
Video framing	50/100
Point of view	47/100

Table 3. Indicators that have the highest presence scores in parameter Video format.

Text description

Indicator	Presence rate
Captions	87/100
Hashtags	249/300 = 83/100
Title length	66/100
Emojis	47/100

Table 4. Indicators that have the highest presence rate in parameter Text description.

Content/ message

Indicator	Presence rate
Entertaining content	87/100
Original content	66/100
Attractiveness	47/100

Emotionality	42/100

Table 5. Indicators that have the highest presence rate in parameter Content/message.

Interaction

Indicator	Presence rate
Replies	40/100

Table 6. Indicators that have the highest presence rates in parameter Interaction.

Author

Indicator	Presence rate
Followers count	100/100
Mega-influencers	81/100
Verification	43/100
Women in videos	42/100

Table 7. Indicators that have the highest presence rates in parameter Author/account.

Additionally, the median score, which is the central number in a dataset within each parameter was calculated and presented in Table 8 (*See Appendix 1.04. for the dataset including the median scores*).

Parameter	Median score
Video format	4 out of 9 (44,4%)
Text/description	5 out of 9 (55,5%)
Content/message	5 out of 29 (17.2%)
Interaction	1 out of 5 (20%)

Author/account	3 out of 4 (75%)

Table 8. Median scores per parameter.

Moreover, the evaluation instrument included 2 engagement factors that were not found in any of the analyzed videos, namely:

Educating videos (Easwar et al., 2023)

Call for feedback in the video (Schreiner et al., 2021)

Discussion and conclusion

The current research combines previous articles and recent observations of the 100 most liked videos on TikTok to create an evaluation instrument that includes various engagement factors and can be used to analyze the engagement rates of a video and to potentially predicts engagement results for an unposted video. Considering the ongoing constant change within the TikTok platform, the existence of an evaluation instrument that concisely evaluates and predicts the engagement, would be highly unlikely. However, the current evaluation instrument presents several very relevant findings. Firstly, it successfully identified three indicators that were present

in all of the viral videos that were analyzed, consequently these factors appear to have a great importance for TikTok engagement. Moreover, 15 other indicators were present in more than 40% of the videos, which makes them relatively important as well. Additionally, even though the new engagement factors that were identified after the expertise review did not show a large presence rate, they were still more successful than academically identified ones, such as educational content (Easwar et al., 2023) and call for feedback (Schreiner et al., 2021), which were not present in any of the analyzed videos.

Finally, the current study gives insight on the differences between the importance of the parameters on TikTok, which will be elaborated on among the other findings within this section.

In regards to the specific objectives of the research, the first objective, namely: *(1)*

Review the academic literature to identify previously studied engagement factors.

After a systematic review of previous research the total of 39 unique factors from academic sources were collected and later used for the creation of an evaluative instrument. 18 out of these 39 factors were present in more than 40% of the 100 videos. However, most of the factors were present in a small amount of the analyzed videos and 2 of them were not present in any of the videos. Moreover, all viral videos obtained from 10 to 24 points from the identified engagement factors in different combinations. Accordingly, the range between 10 to 24 points on the evaluation instrument was concluded to be the ultimately successful for a TikTok video, since all of the analyzed videos fitted within this range.

Regarding the second objective:

(2) *Identify a set of reference videos, selected according to their engagement rates.*

The total of 150 videos were identified using official information from the TikTok organization and replicating methods from previous studies. Afterwards, the 100 of them that showed the highest engagement rates were examined further. It might be relevant to mention that recently created videos were more frequently seen within the top positions of the list of the 150 videos (*see Appendix 1.01*) and therefore were more likely to remain in the 100 videos that were going to be analyzed. Moreover, the top 20 positions were taken by videos produced in 2022 or 2023.

This finding can be justified by Ling and colleagues' (2022) statement that videos created more recently are more likely to go viral and therefore display higher engagement rates.

The selected videos include some of the most popular videos on TikTok that are well known among the users, which makes the set of reference videos adequate for analyzing the TikTok engagement. Moreover, all of the videos had a very high engagement.

(3) Analyze the selected videos and identify and extract new factors of engagement.

After analyzing the videos, based on personal observations 11 new engagement factors were identified. None of them was present in more than 40% of the videos, however some of them showed better success rates within the 100 most liked videos than various factors found in

previous academic research. The most important one seem to be the one that states that animals in videos increase the engagement. 32% of the analyzed videos included this factor. However, the other newly found factors showed a significantly lower importance based on the evaluative results.

Regarding the fourth, fifth and sixth specific objectives, they are going to be discussed together because of their connection to one another:

(4) Create an evaluation instrument taking into account the factors collected in the literature review and in the expert analysis

(5) Validate the instrument by analyzing the corpus of reference videos.

(6) Define the evaluation instrument according to the results of the validation.

The evaluation instrument was created including the total of 50 engagement factors, 39 from previous academic sources and 11 from personal observations. After the analysis of the videos by using the evaluation instrument, several observations need to be mentioned. Firstly, as previously mentioned all of the videos obtained scores between 10 and 24 points out of 56. Consequently, it might be relevant to state that in order to increase the engagement rates on TikTok, a user does not have to include all of the factors. The top 10 videos that obtained the highest scores on the evaluation instrument are not the ones with the highest overall engagement rate (*See Appendix 4 for the 12 top videos on the evaluation instrument*). Accordingly, it does not seem to have a specific amount of factors (between 10 and 24) that increase the engagement, since the total scores are randomly distributed within the 100 positions. However, it might be suggested that a

video that incorporates from 10 to 24 of these factors might have increased chances to reach larger engagement rates.

Finally, the last specific objective was targeted:

(7) Define the most important engagement factors considering the previous tasks and observations.

For the current research, it was decided that the factors that show more than 40% presence in the 100 analyzed videos are going to be considered more important than the ones obtaining below 40%. Therefore, finally, the total of 18 factors were identified as the main factors for TikTok

engagement (*See Tables 3-7*). However, there were three factors that were especially important, since they obtained a 100% presence rate by being found in all 100 of the analyzed videos. Accordingly, these factors are the main indicators for potential engagement online. These are dynamic videos (Habibi & Salim, 2021), visual imagery (Moran et al., 2019) and a creator with over 10,000 followers (Ling et al., 2022). Consequently, TikTok users seem to have a preference towards dynamic videos that contain visual cues, rather than static content. Moreover, the content creator's following count also seem to have an importance in going viral, since all 100 of the videos were created by users, who have above 10.000 followers. It is possible to suggest that the follower count increased due to the viral video and not the other way around, which could be a suggestion for a further research. However, based on current observation, a user that has produced one viral video is likely to produce others, since there are several creators that are present within the top 100 videos more than once.

On the contrary, there are also two indicators that were not found in any of the analyzed videos. These are educating videos (Easwar et al., 2023) and call for feedback in the video (Schreiner et al., 2021). Considering all the previous works that identified TikTok mainly as a source of entertainment (e.g., Schreiner et al., 2021; Zhu et al., 2019; Xiao et al., 2023), a future research might focus on comparing the educational and entertaining videos and provide further information on the role of both on TikTok.

Additionally, previous research has discovered some contradictive results to those used in the evaluation instrument. For example, Chen and colleagues (2021) state that questions in videos have insignificant effect on the engagement which is contradictory to the findings of

García-Marín and Salvat-Martinrey (2022), Abbas and colleagues (2021) and Wahid and Gunarto (2021), who discovered that questions significantly increase the engagement. The video analysis of the current study discovered that 9% of the 100 most liked videos include a question.

Furthermore, Habibi and Salim's (2021) paper states that long videos (more than 40 and less than 60 seconds) are more likely to receive higher engagement, which is the opposite of Chen and colleagues' (2021) findings, which are presented as factor 8 in Video Format in the evaluation instrument. However, 76% of the 100 most liked videos are short, namely less than 40 seconds, which is complementary to Chen and colleagues' (2021) findings.

As for the limitations of the current research, the evaluative coding used for the instrument was created based on the views of only one coder and the videos were analyzed and graded based on the 50 factors only by one person, which gives a rather limited perception, since some of the questions might be considered to be relatively subjective. Additionally, the current research does not present an elaborative information on why certain factors are more important than others, which could be provided by future research by possibly conducting interviews with users and creators on TikTok. Moreover, the current study is somewhat limited to TikTok and does not cover other social media platforms, such as Instagram, Twitter, Facebook, etc. In the future, it might be relevant to examine other online platforms replicating and modifying the current methodology.

In conclusion, the current evaluation instrument obtains a somewhat consentaneous results from all videos on the most and least important factors for TikTok engagement. However, even though some of the factors incorporated in the evaluation instrument are present in the large percentage of the 100 videos, but it is still relatively difficult to precisely predict which characteristics will work and which will not work in the increasement of online engagement. TikTok is constantly growing and evolving, therefore the users and their interests are changing. Considering the results of the current study, TikTok users enormously prioritize visual, dynamic and entertaining content and do not consider educational content to be as important. Moreover, the producer of the video seems to also be of a great importance for the engagement. Creators followed by more than 10.000 people are the ones who produced the most liked videos.

Finally, this study can be of help for potential influencers who are willing to increase their engagement online and for academics who are interested in the field of online engagement,

especially on TikTok. However, it is relevant to mention that TikTok algorithms are relatively unpredictable and even though there are factors that appear to be successful in the creation of viral videos, unique situations are very likely to be present in the everchanging and constantly evolving digital world.

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Appendix

Appendix 1. 150 videos and their engagement characteristics datasets **1.01.** 150 videos gathered using the three different methods and their engagement rates

https://1drv.ms/x/s!AkBgVb0x5GynhxCrldMtz2oozgAb?e=tmidv7

1.02. Dataset of 100 videos with the highest engagement analyzed using the evaluation instrument

https://1drv.ms/x/s!AkBgVb0x5GynhxJ5K0snxuZfFbA1?e=OqgLtT

1.03. Total scores per video per parameter and collective totals

https://1drv.ms/x/s!AkBgVb0x5GynhxQDBWhzhzMkbqaG?e=Rnxxla

1.04. Dataset that includes relevant information regarding the importance of each factor and category

https://1drv.ms/x/s!AkBgVb0x5GynhxZMbFd18CEniKUu?e=EsMjd1

Appendix 2. PRISMA checklist

PRISMA 2020 Main Checklist

Topic No. Item	Location where item is reported
TITLE	
Title 1 Identify the report as a systematic review.	
ABSTRACT	
Abstract 2 See the PRISMA 2020 for Abstracts checklist	
INTRODUCTION	
Rationale 3 Describe the rationale for the review in the context of existing knowledge.	
Objectives 4 Provide an explicit statement of the objective(s) or question(s) the review addresses.	
METHODS	

Eligibility criteria 5 Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.

Objectives Methodology

Methodology

Theoretical Framework

Topic No. Item	Location where item is reported

Information sources 6 Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.

Search strategy 7 Present the full search strategies for all databases, registers and websites, including any filters and limits used.

Selection process 8 Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if

applicable, details of automation tools used in the process. Methodology		
Methodology Methodology		
	including how many reviewers collected data from each report, whether they worked independently, any processes	for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process. Methodology
Data collection process 9 Specify the methods used to collect data from reports,		

Topic No. Item	Location where item is reported

Data items 10a List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.

10b List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.
Methodology Discussion

Study risk of bias assessment

11 Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.
Discussion

Effect measures 12 Specify for each outcome the effect - measure(s) (e.g. risk ratio, mean difference) used in the synthesis or

presentation of results.

Topic No. Item	Location where item is reported
Synthesis methods 13a Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item 5)).	13e Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression). -
13b Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	Methodology
13c Describe any methods used to tabulate or visually display results of individual studies and syntheses.	
13d Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	Methodology -

-

Topic No. Item	Location where item is reported
Reporting bias assessment	
Certainty assessment	- risk of bias due to missing results in a synthesis (arising from reporting biases).
RESULTS	
13f Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	-
14 Describe any methods used to assess	15 Describe any methods used to assess

	the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	
	16b Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	
- certainty (or confidence) in the body of evidence for an outcome.		Methodology Discussion
Study selection 16a Describe the results of the search and selection process, from		
Study characteristics	18 Present assessments of risk of bias for each included study.	Methodology/Results
Risk of bias in studies 17 Cite each included study and present its characteristics.		Discussion

Topic No. Item	Location where item is reported
Results of individual studies 19 For all outcomes, present, for each - study: (a) summary statistics for each group (where appropriate) and (b) an	effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.

Results of syntheses	20a For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	-
	20b Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	-
	20c Present results of all investigations of possible causes of heterogeneity among study results.	-
	20d Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	-

Topic No.	Item	Location where item is reported
Reporting biases	21 Present assessments of risk of bias due to missing results (arising from	-

reporting biases) for each synthesis assessed.

Certainty of evidence

practice, policy, and future research.

OTHER INFORMATION

DISCUSSION

22 Present assessments of certainty (or -confidence) in the body of evidence for each outcome assessed.

Discussion Discussion Discussion

Discussion

Discussion 23a Provide a general interpretation of the results in the context of other evidence.

23b Discuss any limitations of the evidence included in the review.

23c Discuss any limitations of the review processes used.

23d Discuss implications of the results for

Registration and protocol

24a Provide registration information for the - review, including register name and registration number, or state that the review was not registered.

Topic No. Item	Location where item is reported

	24b Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	-
	24c Describe and explain any amendments to information provided at registration or in the protocol.	-
Support	25 Describe sources of financial or non financial support for the review, and the role of the funders or sponsors in the review.	-
Competing interests	26 Declare any competing interests of review authors.	-
Availability of data, code and other materials	27 Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	-

PRIMSA Abstract Checklist

Topic No.	Item	Reported?

TITLE

Topic	No.	Item	Reported?
Title	1	Identify the report as a systematic review.	Yes
BACKGROUND			
Objectives	2	Provide an explicit statement of the main objective(s) or question(s) the review addresses.	Yes
METHODS			
Eligibility criteria	3	Specify the inclusion and exclusion criteria for the review.	Yes
Information sources	4	Specify the information sources (e.g. databases, registers) used to identify studies and the date when each was last searched.	Yes
Risk of bias	5	Specify the methods used to assess risk of bias in the included studies.	Yes
Synthesis of results	6	Specify the methods used to present and synthesize results.	Yes
RESULTS			
Included studies	7	Give the total number of included studies and participants and summarise relevant characteristics of studies.	Yes

Synthesis of results 8 Present results for main outcomes, preferably indicating the number of	included studies and participants for each. If meta-analysis was done, report the summary estimate and confidence/credible	interval. If comparing groups, indicate the direction of the effect (i.e. which group is favoured). Yes	

Topic No. Item Reported?			
DISCUSSION			
Limitations of evidence	9 Provide a brief summary of the limitations of the evidence included in the review (e.g. study risk of bias, inconsistency and imprecision).		Yes
Interpretation	10 Provide a general interpretation of the results and important implications.		Yes
OTHER			
Funding	11 Specify the primary source of funding for the review.		No
Registration	12 Provide the register name and registration number.		No

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. MetaArXiv.

2020, September 14. DOI: 10.31222/osf.io/v7gm2. For more information, visit: www.prisma statement.org

Appendix 3. Articles used in the current research after the systematic review performed on Scopus, Web of Science, Google Scholar, BASE and ScienceDirect.

3.01. Scopus

Search 1:

1. Communicating COVID-19 information on TikTok: a content analysis of TikTok videos from official accounts featured in the COVID-19 information hub (Li et al., 2021) 2. Static vs. dynamic methods of delivery for science communication: A critical analysis of user engagement with science on social media (Habibi & Salim, 2021)

Search 2:

1. Becoming TikTok Famous: Strategies for Global Brands to Engage Consumers in an Emerging Market (Wahid et al., 2023)
2. Consumer Engagement in Influencer Marketing Video Campaigns: An Abstract (Weismueller et al., 2023)

Search 3:

1. Eliciting Emotion and Action Increases Social Media Engagement: An Analysis of

Influential Orthopaedic Surgeons (Abbas et al., 2021)

3.02. Web of Science

Search 1:

1. Viralizing the truth: predictive factors of fact-checkers' engagement on TikTok (García Marín & Salvat-Martinrey, 2022)
2. Algorithmic Closeness in Mourning: Vernaculars of the Hashtag #grief on TikTok

(Krutrök, 2021)

Search 2:

1. Factors Driving Citizen Engagement With Government TikTok Accounts During the COVID-19 Pandemic: Model Development and Analysis (Chen et al., 2021) 2. Becoming TikTok Famous: Strategies for Global Brands to Engage Consumers in an Emerging Market (Wahid et al., 2023)

3. Exploring the factors influencing consumer engagement behavior regarding short-form video advertising: A big data perspective (Xiao et al., 2023)

Search 3:

1. Social media engagements of music videos on YouTube's official artist channels (Oh & Choeh, 2022)

3.03. Google Scholar

Search 1:

1. Applying the uses and gratifications theory to identify motivational factors behind young adult's participation in viral social media challenges on TikTok (Falgoust et al., 2022) 2. An

Empirical Investigation of Personalization Factors on TikTok (Boeker & Urman, 2022).

3. The TikTok effect on destination development: Famous overnight, now what? (Wengel et al., 2022)

4. Having Good Speaking English through Tik Tok Application. (Herlisya & Wiratno, 2022)

5. The Intensity of Use of Social Networking Applications on Self-confidence. (Yuliana, 2022)

Search 2:

4. How Health Communication via Tik Tok Makes a Difference: A Content Analysis of Tik Tok Accounts Run by Chinese Provincial Health Committees (Zhu et al., 2019) 5. Impact of Expressed Emotions (EE) in TikTok Beauty Influencers' Content on the Degree of Engagement: the Moderating Effect of Inclusive Marketing Factors (IMF) (Valipour, 2022)

6. . (Marcellan, 2021)

Consumer Engagement with Educational Content on TikTok

7. Engaging customers through online participation in social networking sites (Kujur & Singh, 2017).

8. Why Do Citizens Engage With the TikTok Accounts of Public Hospitals in China? (Zhang et al., 2021)

9. Slapping Cats, Bopping Heads, and Oreo Shakes: Understanding Indicators of Virality in TikTok Short Videos (Ling et al., 2022)

Search 3:

1. Factors Driving Social Media Engagement on Instagram: Evidence from an Emerging Market (Wahid & Gunarto, 2021)

2. Impact of content characteristics and emotion on behavioral engagement in social media: literature review and research agenda (Schreiner et al., 2021)

3. Message content features and social media engagement: evidence from the media industry (Moran et al., 2019)

4. Ordinary celebrities related criteria to harvest fame and influence on social media (Al

Emadi & Yahia, 2020)

5. Social media engagement and organic post effectiveness: A roadmap for increasing the effectiveness of social media use in hospitality industry (Aydin, 2019)
6. Show me a story: narrative, image, and audience engagement on sports network Instagram accounts (Romney & Johnson, 2018)
7. How stories generate consumer engagement: An exploratory study (Dessart & Pitardi, 2019)

3.04. BASE

Search 1:

1. No articles used.

Search 2:

1. Selection of TikTok content based on user engagement criteria using the analytic hierarchy process (Wiguna et al., 2023)

Search 3:

No articles used.

3.05. ScienceDirect

Search 1:

1. The Impact of TikTok User Satisfaction on Continuous Intention to Use the Application (Sharabati et al., 2022)

Search 2:

1. Palliative Care TikTok: Describing the Landscape and Explaining Social Media Engagement (Easwar et al., 2023)

Search 3:

2. Outdoor-sports brands' Instagram strategies: how message attributes relate to consumer

engagement (Zhang & Su, 2022)

3. To engage or not engage? The features of video content on YouTube affecting digital consumer engagement (Munaro et al., 2021)
4. Factors Influencing Engagement in Fashion Brands' Instagram Posts (Jones & Lee, 2022)

Appendix 4. Top 10 videos according to the evaluation instrument scores.

Video 1

Video 2

Video 3

Video 4

Video 5

Video 6

Video 7

Video 8

Video 9

Video 10

Video 11

Video 12