

Incentivizing Emotions Online: Understanding the role of digital emotional labor and digital emotional contagion on misinformation and disinformation in TikTok

Galuh Paramita Prameswari

3110583

First Supervisor: Dr. Alex van der Zeeuw

Second Supervisor: Dr. Meike Belter

Master of Communication Science

Faculty of Behavioural, Management and Social Sciences, University of Twente

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Abstract

Purpose: Misinformation and disinformation are major problems on social media, especially in TikTok. The platform offers engaging audio-visual content that makes information even more appealing for its users. Reaction buttons such as comments or likes are used to trigger users' emotional responses, which further assists the platform in predicting the users' content preferences. As a result, emotions become vital in the platform's operation. This research explores the concept of digital emotional labor, where users navigate their emotions when exposed to misinformation and disinformation, and analyses the contagious effect of the emotional display under the framework of digital emotional contagion.

Methods: The research's primary method is content analysis with a dual approach: quantitative, to assess the presence and intensity of emotions as the degree of digital emotional labor, and qualitative, to determine the characteristics of digital emotional contagion.

Findings: Digital emotional labor is present in comments with positive, negative, or neutral sentiments, expressed through various engagement and disengagement strategies. In the digital emotional contagion analysis, social appraisal stands out as the most noticeable feature, followed by category activation. Conversely, mimicry is the least observed aspect found in this study.

Conclusion: This research contributes to a further understanding of emotions as the driver of the circulation of misinformation and disinformation in social media through the concepts of digital emotional labor and digital emotional contagion. The primary finding lies in uncovering users' emotional display to false information and the contagious effect these emotions create, which is shown through the most visible characteristics of social appraisal and category activation.

Keywords: *digital emotional labor, digital emotional contagion, misinformation, disinformation, TikTok, social media*

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Introduction

Over the past few decades, the rise of misinformation and disinformation has been closely linked to advancements in the internet and social media, which have enabled users to disseminate information quickly and widely (Shu et al., 2017). Unlike traditional media, social media facilitates a more dynamic mode of communication between content creators and their audiences, fostering active conversations. Arriagada and Ibáñez (2020) highlight how reaction buttons like 'likes' can rapidly establish relationships between content creators and their audiences, fostering a sense of intimacy. This intimacy, as described by Wittel (2001), reflects network sociality or connective sociality—where connections and networks are maintained through digital means.

Particularly on TikTok, the platform's significant rise in popularity can be attributed to its "hyperpersonalized" algorithms, which exert a level of influence not seen on other platforms (Einstein, 2024). These algorithms enhance the ability to customise content to individual user preferences by considering their emotional responses through features such as likes, comments, or shares. When a user exhibits an emotional response to specific content, the platform can display similar content or present it to other users with similar profiles. This shift in communication dynamics highlights a unique aspect where emotions become highly visible, significantly influencing online conversations and contributing to the spread of false information.

Misinformation is defined as unintentionally-spread false information, while disinformation refers to intentionally-spread false information. Studies have shown that emotions play a pivotal role in both the creation and dissemination of misinformation and disinformation, serving as a primary motivation for spreading such content.

Literature supports the idea that individuals are more inclined to share information that triggers an emotional response, regardless of its accuracy (Berger, 2011; Lewandowsky et al., 2012; Peters et al., 2008). This suggests that emotion is a significant factor in the circulation of information, misinformation, and disinformation. Further research indicates that increased emotional arousal heightens an individual's willingness to disseminate information (Wang et al., 2020). Thus, emotion is a key driver in the spread of misinformation and disinformation.

In this study, emotional labor is defined as the act of seeking to show socially acceptable emotions in a service environment (Hochschild, 1979). Previously, the concept of emotional labor was primarily applicable within the scope of physical labor. However, recent studies have demonstrated its application in the online context, leading to the introduction of digital emotional labor (Rodis, 2023). Online conversations can clearly display manifestations of digital emotional labor, such as users' constant efforts to correct what they perceive as false information or misaligned beliefs, or when they prefer to disengage from the conversation entirely (Rodis, 2023). In summary, digital emotional labor can be defined as the process by which users navigate their emotions to display appropriate feelings or behaviours towards specific social media content. Users may also unconsciously exert emotional effort towards content, which qualifies as digital emotional labor. Furthermore, when such emotional displays trigger responses from others, a contagious effect occurs, which can be considered emotional contagion.

Emotional contagion refers to the tendency of individuals to automatically align their own emotions with others' expressions, verbalizations, and behaviors (Hatfield et al., 1993). Initially studied in physical environments through facial expression or other means, emotional contagion's characteristic mimicry is now also relevant in digital contexts (Dimberg, 1982; Lundquist & Dimberg, 1995; Chartrand & Bargh, 1999). With communication increasingly

occurring online, it is important to explore digital emotional contagion. A multimodal approach to emotional contagion (Peter & Kashima, 2015) and mechanisms of digital emotion contagion (Goldenberg & Gross, 2020) will be used to assess whether characteristics such as mimicry, category activation, and social appraisal are present in comments on misinformation and disinformation content.

There remains a gap in the current literature landscape in understanding the intricate relationship between digital emotional labor and digital emotional contagion on social media, especially on TikTok. Some possible reasons for this discrepancy could be the limited application of the emotional labor concept beyond the physical labor context and the narrow use of emotional contagion in physical settings where the contagion can be visibly seen and assessed quite straightforwardly. Meanwhile, conversations and various other activities are increasingly taking place online. Therefore, this study aims to bridge these gaps by delving into the emotional management users adopt in response to misinformation and disinformation in the digital environment, as well as the dynamics of digital emotional contagion on TikTok.

This research aims to investigate the existence of digital emotional labor and digital emotional contagion in the context of misinformation and disinformation on TikTok. Substantially, the study seeks to unravel the main research question of emotions as the driver of the circulation of misinformation and disinformation in TikTok, which will be addressed in the following sub-questions:

RQ1: How do users engage in digital emotional labor when encountering misinformation and disinformation in TikTok?

RQ 2: How does digital emotional contagion manifest in online conversations on misinformation and disinformation in TikTok?

In the next few parts of this paper, the structure is presented with a theoretical framework that introduces the core concepts of digital emotional labor and digital emotional contagion, the dynamic operation of TikTok, and the distinction between misinformation and disinformation in a thorough explanation. Subsequently, the methodology section covers the dual approach to content analysis. The quantitative strategy examines the presence of emotions as a manifestation of emotional labor and serves as an initial evaluation of emotional contagion. Afterwards, qualitative analysis is used to analyse each individual comment and assess the overall nuance of each statement. The main findings, alongside the conclusion, are presented in the latter section to demonstrate the presence of digital emotional labor in online interactions and shed light on the phenomena of digital emotional contagion regarding misinformation and disinformation on TikTok.

Theoretical Framework

The research aimed to uncover the nuanced display of emotion on the platform in response to false information in the digital environment. The theoretical framework provided a fundamental lens for explaining the laborious nature of emotions within the platform and for understanding the process through which emotional displays can lead to a contagious effect concerning misinformation and disinformation in TikTok.

2.1 Social Media and TikTok Dynamics

The rise of social media as a main source of information has risen for the past few decades. Many literatures have discussed how social media enabled the fast spread of all types of information, hence creating an ideal environment for both the right information and false information circulation. According to Shu et al. (2017), the convenience of spreading news on the internet, as opposed to traditional media, results in a larger output of fake news. Despite the abundance of social media platforms such as Facebook, Twitter, Instagram, and others, this study will focus exclusively on misinformation and disinformation on TikTok.

Cosmann et al. (2022) highlighted that TikTok, since its launch in 2016, had emerged as the most rapidly growing social media platform, accumulating a total of 3 billion downloads. Notably, 383 million of these downloads had occurred between January and June 2021. The platform itself had focused on hyper-personalised and emotionally evocative content that used robust visual and audio cues along with sophisticated personalization algorithms to extend user engagement and use time (Su et al., 2021; Boeker & Urman, 2022).

Cosmann et al. (2022) further explained one of the features in TikTok, which was called the 'For You Page'. This page is the first landing page when users opened the app, and the video content that appeared on this page had been personalised to users' preferences. Appearing in the

'For You Page' had been the aim for most content creators because it had helped them to maximise the visibility of their video content. Although curating videos on the 'For You Page' to match a user's preferences might have seemed favourable, it could have created a filter bubble that restricted access to a broader range of information and perspectives (Törnberg, 2022). This limitation had posed a new challenge in the spread of false information.

Analysing the dynamics of TikTok had been crucial for understanding how user engagement intensified emotional contagion and how features such as likes, comments, shares, reposts, and other metrics could amplify both positive and negative emotions. These emotional responses were tied to emotional labor and played a critical role in the platform's operation. TikTok's 'For You Page' and sophisticated personalization algorithms kept users exposed to content they preferred, prompting them to continually adjust and express their emotions. The comment section stood out as a prominent feature where emotional expressions were clearly observable, as users articulated their feelings through text, making the emotional tonality more evident.

Swani and Labrecque (2020) supported the idea that users' emotional needs motivated them to leave comments. They noted that users often commented to share their opinions and to demonstrate their credibility, expertise, and concerns. This study underscored that commenting had served not merely as an exchange of thoughts but also as a platform for users to express their emotional responses and engage deeply with content. Therefore, it became pivotal to recognise TikTok's role in shaping user experiences by laborising users' emotional response, which further drove the circulation of misinformation and disinformation.

2.2 Misinformation Contents

Social media became a primary source for the widespread dissemination of various types of content, making it a key information hub for people worldwide. Nevertheless, this came with a downside where a vast amount of information could not be verified or checked and was misleading; some users might have intentionally or unintentionally given the wrong news or information, which resulted in a variety of misinformation.

According to Wu et al. (2019), the term misinformation was a broad category encompassing any false or inaccurate information that was disseminated on social media. Following the definition, there were many types of content that were considered misinformation, including unintentionally spread misinformation, urban legends, fake news, unverified information, rumours, crowdturfing, spam, trolling, hate speech, and cyberbullying (Wu et al., 2019). Besides the aforementioned types of misinformation, this study also discussed political misinformation and conspiracies. Political misinformation was defined by Kulinski et al. (2000) as, “Incorrect, but confidently held, political beliefs” (as cited in Jerit & Zhao, 2020). Meanwhile, conspiracies were defined as, “Attempts to explain the ultimate causes of significant social and political events and circumstances with claims of secret plots by two or more powerful actors” (Douglas et al., 2019, p.4). However, solely analysing the definition might not have been sufficient for classifying content as misinformation. In this study, the main distinction came from the content creator’s intent. Therefore, additional characteristics for identifying misinformation were provided.

One notable aspect to detect misinformation spreaders was by examining cues from both user posts and profiles, among the various indicators used to detect misinformation. Characteristics such as lengthy screen names, detailed account descriptions, and account

longevity, as discussed by Lee et al. (2021), could serve as key indicators. In addition to the content and profile of the spreader, Wu et al. (2019) classified the identification through the social networks associated with misinformation spreaders, the interactions with real accounts, and the number of followers and following, which collectively could be utilised to detect the credibility of the information they disseminated. A conventional assumption was that misinformation spreaders rarely created meaningful networks of friends, so having a limited number of links alongside a comparatively long account age might have suggested that the account was fake (McCord & Chuah, 2011). Another strategy to identify misinformation could have come from the individuals (Jerit & Zhao, 2020). This could have been examined by whether users clung to certain false information because it aligned with their worldview or preexisting beliefs (Kulinski et al., 2000) or if it stemmed from media coverage (Gershkoff & Kushner, 2005) that reinforced such beliefs.

All of this highlighted that misinformation was often unintentionally misleading. This occurred because the content creators might have genuinely believed in the false information, leading them to produce such content without having the intention to deceive. This could have happened either because the information aligned with their existing beliefs or reflected the consistent narratives they encountered through their media consumption.

2.3 Disinformation Contents

Among the various types of false information that circulated online, audiences often remained unaware of whether certain false information was spread intentionally or unintentionally by the creators. User awareness of the malicious intent behind the spread of such information was crucial for its dissemination. The more people recognized that creators were

intentionally (or unintentionally) producing false content, the less likely they were to engage with it, thereby reducing its circulation.

False information was primarily distinguished by the intent behind its dissemination. In this research, misinformation encompassed all forms of false or unverified information spread without the intention to mislead the audience. Conversely, disinformation included all forms of false information deliberately spread with the intent to deceive, in line with Fetzer's (2004) definition. Further, according to Fallis (2015), several features of disinformation helped provide a broader framework of disinformation as follows.

First, disinformation was information. Information referred to anything that was representational or had semantic meaning (Floridi, 2011; Scarantino & Piccinini, 2010). A supporting statement for this concept was that any object from which one could learn was considered information (Bates, 2006; Buckland, 1991). Disinformation content on social media, despite its harmful intent to mislead, contained information that fit the concept of semantic meaning because it represented ideas. Even further, one might have derived an understanding about a certain issue from this false knowledge.

Second, disinformation was misleading information. According to Mahon (2008; as cited in Fallis, 2015), even if the audience did not believe the false information being spread, it was still considered disinformation as long as it was intended to deceive or mislead. Therefore, this statement emphasised that disinformation heavily depended on the intent of the spreader.

Last, disinformation was non-accidentally misleading information. In the literature referring to Fallis (2015), the final crucial aspect of disinformation was that its misleading nature had to be intentional, not accidental. Consequently, any type of information that lacked the intent

to mislead, even if it did mislead the audience—such as when someone inadvertently shared incorrect information they received—did not qualify as disinformation.

Accurately identifying the traits of disinformation and misinformation was crucial for distinguishing between these types of false information. This distinction was important for evaluating whether different forms of false information triggered different emotional responses from users and how those responses could create a cascading effect. therefore, understanding these indicators became essential for a thorough analysis of digital emotional labor and digital emotional contagion.

2.4 Digital Emotional Labor

Emotional labor was a term coined by Hochschild that was initially and most often used in the context of organisations. By definition, it referred to the act of seeking to show appropriate emotions in accordance with the demands of a role (Hochschild, 1983). Several statements about emotional labor introduced in *The Managed Heart: The Commercialization of Human Feeling* (Hochschild, 1983) were widely used to assess this phenomenon. In that particular literature, Hochschild highlighted several noteworthy aspects, including emotion management and its key components of deep acting and surface acting.

The concept of emotion management (or emotion work) was explained as the strategy of individuals in actively shaping and navigating their emotions, and the researcher employed the term ‘feeling rules’ to describe societal norms dictating the appropriate types and levels of emotion that should be experienced in specific situations (Hochschild, 1983; Wharton, 2009). In the context of social media, emotion became a form of labor or was commercialized when users were constantly regulating and displaying emotions in response to the content they were exposed

to. Although the explicit requirement to display emotion was absent, social media platforms were architected to elicit emotional reactions from their users, thereby deliberately provoking certain emotional responses.

Delving into the discussion of its original reference of emotional labor, it became essential to comprehend the processes that came with it. The first step was called “deep acting” as an attempt to alternate internal feelings, followed by “surface acting,” which referred to what was publicly displayed (Hochschild, 1983; Wharton, 2009). In online interactions, this emotional engagement was evident in how users continuously regulated their feelings, which they then expressed through actions such as liking and reposting to indicate agreement, or commenting to express their thoughts on specific content. Nevertheless, this initial definition of emotional labor and its associated characteristics has its limitations, as these concepts had been predominantly applied within the context of physical labor. Yet, with the evolution of communication and labor into the digital realms, their applicability was undergoing a transformation.

A recent study introduced a more relevant concept for analysing emotional participation in the online realm, which was labelled as digital emotional labor. According to Rodis (2023, p. 5), “Digital emotional labor to describe the unpaid yet unavoidable work (involving unique emotional expectations and affective states) individuals are expected to undertake online. Failing to act accordingly or perform such labor could have negative effects on individuals’ social and professional networks.” Furthermore, the literature pointed out, “These response strategies—managing the self, teaching the ignorant, and interacting with contrary interlocutors—required a great deal of emotional effort” (Rodis, 2023, p. 5). The research was carried out as an extension of applying emotional labor in different areas beyond the formal workforce or any other conventional context, by referring to the groundwork of Evan and Moore

(2015; as cited in Rodis, 2023) where they applied the concept of emotional labor in novel contexts while preserving its core characteristics.

Aggressive conversation and cyber aggression were also integral in the study of Rodis (2023). This aligned closely with this study where navigating emotional response in this kind of online environment was pivotal. Deducted from the digital emotional labor concept, several key insights into online emotional management emerged.

First, educating others as one of the response strategies in the concept of digital emotional labor (Rodis, 2023). Educating others to address discrimination might have stemmed from a desire to assist and effectively engage people at their comprehension level (Fleming et al., 2012; Rodis, 2023), while also bolstering a positive self-image (Cialdini and Goldstein, 2004; Rodis, 2023). In the context of responding to misinformation and disinformation, user interactions often involve efforts to educate others and correct misunderstandings. This process not only aimed to clarify information but also served to maintain a positive self-image by reinforcing the user's knowledge and perceived superiority over others.

Second, exhaustion in labor of response. Referring to the respondents of the study, one of the emotional labors they engaged in was dealing with persistent online harassment, and the pressure to behave appropriately could make responding to cyber racism and sexism feel like a form of labor (Rodis, 2023). This dynamic was evident in heated online conversations, where users were deeply invested in affirming their beliefs. Simultaneously, they had to continuously manage their emotional responses to adhere to the platform's community guidelines. This ongoing effort to balance personal convictions with appropriate conduct could be emotionally exhausting for users.

Beyond direct engagement in emotional labor, disengagement strategies also fell under the umbrella of emotional labor. These strategies typically began with an initial emotional response, followed by individuals navigating their feelings and choosing not to interact further to shield themselves from heightened emotional involvement.

Third, emotional disengagement referred to individuals' decisions to refrain from participating in an argument or generally disconnect from others (Rodis, 2023). Opting this way, according to Rodis (2023), was a strategic action that allowed the researcher's participants to uphold their impression and reduce additional interpersonal emotional labor in digital contexts.

Fourth, avoiding engagement with hostility. In the landscape of cyber aggression, individuals could easily become embroiled in heated conversations, leaving them constantly on edge and facing hostility. One emotional labor strategy employed to manage this was reducing exposure to triggering content or avoiding certain features on social media platforms altogether (Rodis, 2023). Therefore, this suggested that users exposed to misinformation and disinformation might not always publicly share their emotional reactions. However, they were still engaged in an emotional labor process, having undertaken internal emotional work.

2.5 Digital Emotional Contagion

A user's emotional display could trigger similar reactions and responses from others. This term was explained as emotional contagion, which referred to “The tendency to automatically mimic and synchronise expressions, vocalisations, postures, and movements with those of another person's and consequently to converge emotionally” (Hatfield et al., 1993). From this definition, it was clear that mimicking was part of the emotional contagion process, thus making it one of the major characteristics of emotional contagion.

However, as communication increasingly shifted to the digital environment, the process of mimicking another's emotional state could not be viewed solely through the lens of mimicry. Goldenberg and Gross (2020) introduced the concept of emotional contagion in the digital context, defining it as "The process by which a perceiver's emotions become more similar to others' emotions as a result of exposure to these emotions." Their findings were supported by a study about Facebook, which showed that emotional contagion could occur online even in the absence of the non-verbal cues typical of face-to-face interactions (Kramer et al., 2014).

According to Goldenberg and Gross (2020) and the study on multimodal approach emotion contagion by Peters and Kashima (2015), there were three characteristics that indicated the presence of digital emotional contagion, and these mechanisms could be applied simultaneously. These characteristics were used to analyse and categorise emotionally charged comments in the data for this research.

Mimicry. One of the major attributes of emotional contagion was mimicry, where the display of emotion triggered parallel responses in the receiver (Hatfield et al., 2014, as cited in Goldenberg & Gross, 2020). Referring to its early definition by Hatfield et al. (1993), mimicry was mainly used in the context of verbal and direct communication, with facial expressions, vocal tones, body language, and movements as the measurements of this instrument of emotional contagion. Accordingly, two conclusions arose from the definition. First, a person could accurately imitate the facial expressions or any other specific vocal or physical gestures of their counterparts swiftly. Second, they could automatically mimic and synchronise themselves with a wide range of emotional characteristics simultaneously (Hatfield et al., 1993). For example, in an online context, the first condition could be seen when a social media user initiated a humorous conversation and another user responded quickly with an emoji representing laughter and

matching slang, which created a synchronised conversation. However, applying Hatfield et al.'s (1993) concept had its own nuances that required consideration when applied in the digital landscape; thus, additional literature was provided in subsequent sections.

Mimicry was not confined to emotional state replication; it could be understood within the broader concept of the 'chameleon effect' (Chartrand & Bargh, 1999). This phenomenon arose from automatic mechanisms for individuals to bond with their environment (Parkinson, 2011). In this context, individuals who were exposed to misinformation or disinformation and actively discussed it in comment sections, might have instinctively mimicked the prevailing behaviour of the community in their responses to this content, often without prior internal reflection. Although with that being said, there was other evidence provided from a research by Tamietto et al. (2009; as cited in Parkinson, 2011) where mimicry appeared to rely on emotional interpretation of the imitated behaviour rather than solely responding to its physical configuration (e.g. motor resonance). The concept introduced by Tamietto et al. (2009) might have differed from the primitive notion of mimicry where physical configuration (e.g., body language, vocalisations, facial expressions) seemed to be integral. However, it was still applicable in the digital environment where physical cues were absent and emotional contagion relied heavily on the appearance of verbal text.

The second one is *social appraisal*, when people made comparable emotional experiences by using the feelings of others as a reference for their own emotion evaluations (Manstead & Fischer, 2001; Clement & Dukes, 2017). For instance, in the case of the spread of misinformation contents, a video gained a significant number of comments or emotional reaction. Among these comments, a particular user showed frustration and disagreement. Other users exposed to this response might have engaged in social appraisal by using the expressed

emotions from that particular user as a reference for their own emotional evaluation. This illustrated how users' emotional experiences could be shaped by the feelings shared among them. Goldenberg et al. (2019) supported this by showing that when negative situations were prevalent in the vast majority, users were more likely to experience and be influenced by negative emotions.

Social appraisal or social evaluation was the second pathway of emotion contagion mechanisms that had been reviewed recurrently in numerous literature sources. Other conditions defining this concept included the evaluation of others' emotional reactions (Manstead & Fischer, 2001), requiring a reflective process through cognitive appraisal (Lazarus & Alfert, 1964), and dependency on the individual's internal process in registering their counterparts' emotional state or behaviour over particular circumstances (Parkinson, 2011). Therefore, when evaluating social appraisal mechanisms in online conversations about misinformation or disinformation content, multiple perspectives were necessary to analyse the comments.

A user might have engaged in an evaluative process by correcting someone and providing information they deemed as accurate, with the intent of reshaping another user's perception of the topic under discussion. This situation could be aligned with the pathway of social appraisal concerning the influence of information in appraisals, where knowledge and beliefs were significantly shaped by the information received from others (Kashima, 2007; Kashima et al., 2011). Alternatively, the user might have directly indicated their emotional state after being exposed to a particular comment.

Category activation or according to Peters and Kashima (2015) and Niedenthal et al. (2009) is a situation where the receiver's mind is primed or activated to experience a certain emotion category upon exposure to emotional expressions (either through visual cues, such as

text, or non-visual signals, such as facial expressions). In other words, it sets the stage for the perception and experience of a particular emotion. Category activation, or *affect categorization* as stated in Peters and Kashima (2015), drew limited literature review as an aspect of emotional contagion, but the idea originated from existing research revealing that people immediately categorised others' actions according to associated emotional states.

Category activation involved two steps. The first process is social influence, where individuals tend to spontaneously categorise an expresser's affective action as an indication of the expresser's specific emotional state (Peters & Kashima, 2015). For example, when social media user A used an emoji representing a negative emotion such as anger, user B, who saw that emoji, perceived user A's affective state as anger. Consequently, the category of anger is activated for user B. However, according to Peters and Kashima (2015), there was no necessary behavioural or emotional outcome, such as responding with anger (which could be seen as mimicry) or any other type of reaction, once the effect category had been activated. Nevertheless, it could still trigger a similar emotional response in the observer (Lindquist et al., 2006; Niedenthal et al., 2009; Oosterwijk et al., 2009), creating a possibility of a pathway to mimicry. This situation could also be referred to as affect induction (Peters & Kashima, 2015).

As previously mentioned, all of these mechanisms of digital emotional contagion could occur in tandem (Peters & Kashima, 2015). This meant that a particular comment might have exhibited two characteristics together or all of them at once. This research aimed to uncover patterns of digital emotional contagion that arose from comments exhibiting multiple mechanisms simultaneously. Additionally, it sought to discover more nuanced findings related to digital emotional contagion, connecting them to the established concept of emotional labor.

In conclusion, this research examined the influence of emotions on misinformation and disinformation in two stages. The initial step introduced digital emotional labor to understand users' emotional display when they encountered aggressive or triggering conversations on misinformation and disinformation contents. Subsequently, the second stage was to analyse the digital emotional contagion through the presence of the characteristics—mimicry, social appraisal, and category activation that will be presented in subsequent subsections.

Methodology

This section provided a comprehensive explanation of the dual approach used in content analysis as a research method. Content analysis was deemed as the most appropriate method due to the objective of this study to examine two distinct aspects of emotional display in response to misinformation and disinformation in TikTok. This methodological approach ensured a detailed examination of the emotional dynamics at play within the context of TikTok's misinformation and disinformation content.

3.1 Research Design

This study employed a dual approach to content analysis, combining qualitative and quantitative methods. Content analysis is a method that aims to quantify and interpret a phenomena (Krippendorff, 1980; Downe-Wamboldt, 1992; Sandelowski 1995) that can be derived from documents analysis or qualitative data to create a substantial description of that particular phenomenon (Elo & Kyngäs, 2008). Furthermore, content analysis can be employed either in qualitative or quantitative manner (Elo & Kyngäs, 2008), enhancing its adaptability to various research objectives and frameworks.

First, quantitative analysis will use statistical computing to conduct sentiment analysis on TikTok comments. This approach seeks to reveal emotional sentiments in users' verbal expressions that will be identified in positive, negative, or neutral sentiment and demonstrate that emotion is present and actively involved. A supplementary qualitative observation of digital emotional labor was also conducted to see the manifestation of positive, negative, and neutral sentiments in the comments by referring to the study of Rodis (2023) on engagement and disengagement strategies as an indication of digital emotional labor.

Second, qualitative methods were used to assess the digital emotional contagion characteristics, exploring whether emotional responses fulfil the characteristics of digital emotional contagion. Qualitative content analysis was deemed more appropriate due to the limitation of statistical computing or programming language to fully capture the overall nuances of the comments, therefore a manual coding was applied. Furthermore, manual coding allowed a more profound comprehension of the users' comments and enhanced the researcher's understanding (Hase et al., 2020). The comments that underwent qualitative analysis were only those indicating an emotional sentiment. The positive or negative sentiment indicated there was a prior emotion that could trigger others to react similarly as defined in digital emotional contagion by Goldenberg and Gross (2020).

The study will focus on content related to fake news, conspiracy theories, unverified information, and political misinformation, which are likely to evoke strong emotional reactions. Research by Osmundsen et al. (2021) and Weeks and Garrett (2019) found that political misinformation often triggers anger or mistrust in the public. Similarly, Zollo et al. (2015) discovered that many people on Facebook express negative or neutral sentiments toward conspiracy theories and science. Therefore, the misinformation and disinformation videos selected for this study are expected to show some level of emotional expression.

3.2 Data Collection

The primary data for this study was collected from TikTok using TikTok Comment Explorer, retrieving 1,643 comments from posts made between February and May 2024. The misinformation and disinformation videos were differentiated by mainly looking onto: the content creator's profile, the content of the video, and the responses between the content creator and the audiences (see Appendix 1A and 1B).

After gathering the data, quantitative analysis was conducted by using the tidytext R library for sentiment analysis. For the qualitative analysis that excluding neutral-sentiment comments, then were manually coded with categories of the digital emotional contagion characteristics. Additionally, Google Fact Check Explorer is utilised for content classification to verify accuracy and identify false information (Charquero-Ballester et al., 2021).

3.2.1 Data Sample

Four different videos contributed a total of 1,006 comments to the dataset (see Appendix 1A). Meanwhile, 637 comments were gained under the disinformation category from 4 different videos (see Appendix 1B). The selected video content meets the requirement of having at least 100 comments per video, enabling a more effective analysis of emotional contagion within the comment sections of specific misinformation and disinformation videos.

3.2.2 Data Preparation

The retrieved comments were subsequently classified into two datasets of misinformation (N = 1,006) and disinformation (N = 637) were uploaded to the software environment RStudio. After the sentiment analysis, further data preparation was undertaken for the qualitative analysis. Neutral comments were removed in this stage, leaving only comments with positive or negative sentiment. This results in a final dataset of 504 misinformation comments and 265 disinformation comments for the qualitative analysis of digital emotional contagion.

3.3 Quantitative Data Analysis

Sentiment analysis was performed using the R programming language, specifically the tidytext R version. Sentiment analysis is also known as opinion mining, which is centred on the technique of implementing an automated algorithm to analyse and categorise opinions (Khanna,

2017). This analysis quantified the emotional valence of comments, classifying them into positive, neutral, or negative groups as the degree of emotional labor.

The R programming language has been commonly used to find the context of content analysis due to its benefit of providing a comprehensive package for natural language processing (Fogarty, 2022). After the misinformation and disinformation dataset was uploaded to R Studio, each comment was then broken down into shorter sentences by using the command of *tibble* package and the `unnest_tokens()` function. This procedure breaks one statement into one token per document per row and the tokenization step splits the statement into single words or sentences (Fogarty, 2022).

Afterwards, a sentiment function is performed with one of the sentiment lexicons in the *tidytext* package in R, which is the Bing lexicon. It has over 6788 English words and assigns a score of +1 for positive words and -1 for negative words. This package offers multiple methods and dictionaries for identifying any indication of a stated opinion or emotion in the text (Hossain et al., 2021). The *tidytext* R package and functions ensure that sentiment analysis can accurately capture the emotional tone of each part of the comment. The result revealed a final distribution of sentiment scores for both misinformation and disinformation (see Appendices 4) and the distribution for each dataset (see Appendices 2 and 3).

3.4 Qualitative Data Analysis

A qualitative content analysis will be implemented to understand digital emotional contagion as a phenomenon. The research employed a qualitative content analysis phase into three phases: immersion, reduction, and interpretation (Coffey & Atkinson, 1996; Miles & Huberman, 1994; Sandelowski, 1995; Forman & Damschroder, 2007).

First, immersion. According to Forman and Damschroder (2007), immersion includes the process by which the researcher initially engages with the data by making sense of the raw data and creating a memo. In the initial phase, 1,643 retrieved comments were categorised into misinformation and disinformation groups. The data was then reviewed to gain an initial understanding of the nuances and context.

Second, reduction. Approximately 10% of the dataset (81 out of 769 comments) containing misinformation and disinformation with positive or negative sentiment were manually coded by the researcher and two external coders to improve reliability (see Appendices 6A and 6B). The codes that are assigned are deductive codes that refer to the characteristics of digital emotional contagion, namely mimicry, social appraisal, and category activation.

The coding stage also makes use of a codebook (see Appendix 5) to facilitate coding agreement and consensus among all coders who independently code the data (Forman & Damschroder, 2007). This seeks to reduce bias caused by the researcher as the major instrument that influences data interpretation (Mason, 2002), while also acknowledging potential researcher bias that can interfere with the research validity (Lincoln and Guba, 2003; Sandelowski & Barroso, 2003). The level of agreement between the coders is then measured with Fleiss’ Kappa inter-rater agreement as shown below (Table 1).

Table 1. Fleiss’ Kappa Level of Agreement Between Coders

Measures	Fleiss’ Kappa (k)	Fleiss’ Kappa (k) in percentage
Social Appraisal	0.2908	29.08%
Category Activation	0.3844	38.44%
Mimicry	0.5933	59.33%
Note: Fleiss’ Kappa measures Almost perfect=0.81-1.0 Substantial agreement=0.61-0.80 Moderate agreement=0.41-0.60 Fair agreement=0.21-0.40 Light agreement=0-0.20 Poor<0.		

The coding process also revealed that a single comment could exhibit multiple types of emotional contagion, with "Social Appraisal" appearing in the majority of the comments (see Appendices 6). However, the Fleiss' Kappa results indicate varying levels of agreement among the coders. While "Mimicry" had moderate agreement, "Social Appraisal" and "Category Activation" showed lower levels of agreement. For most statements, there was initial consensus among the coders (see Appendices 6). In cases where consensus was not achieved, it was reached after discussion.

Lastly, interpretation. The data will be presented in descriptive analysis to offer interpretive summaries and present the primary findings (Miles & Huberman, 1994) on digital emotional contagion and digital emotional labor, including any potential relationships between them.

Results

4.1 Digital Emotional Labor on Misinformation and Disinformation in TikTok

This research aimed to understand the role of digital emotional labor when social media users were exposed to various types of information online, including misinformation and disinformation. The quantitative analysis revealed a distribution of the sentiment and sentiment score on misinformation and disinformation, which was further explained below.

Distribution of Sentiments of Misinformation and Disinformation Data

The sentiment analysis revealed the distribution of sentiment across misinformation and disinformation (see Fig. 1). It showed no significant difference in the sentiment of neutral versus positive or negative comments about misinformation. However, there was a slight distinction in the sentiment towards disinformation. Neutral comments (Misinformation: N = 502; Disinformation: N = 372) were those that did not contain any positive or negative words. The remaining emotionally charged comments were then classified based on the sentiment analysis result (Misinformation: N = 504; Disinformation: N = 265).

Percentage Distribution of Sentiments by Dataset

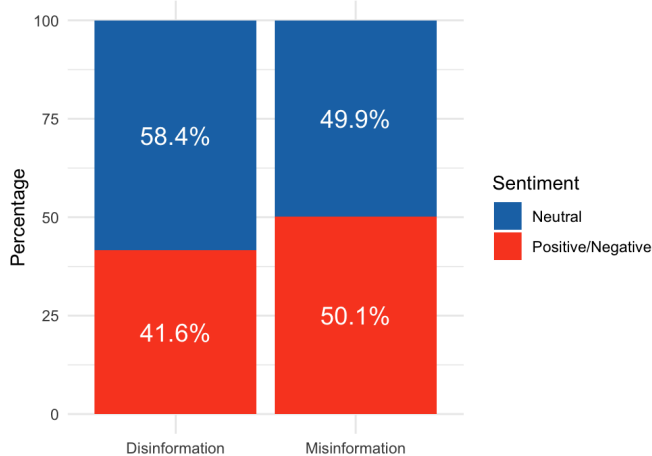


Fig.1 Sentiment Distribution

Percentage Distribution of Sentiments by Data

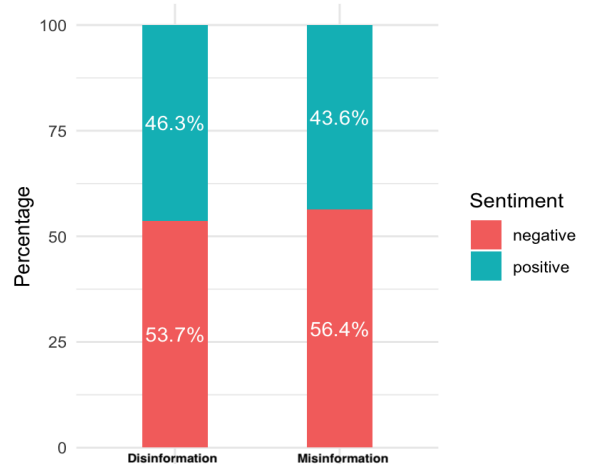


Fig.2 Positive and Negative Sentiment Distribution

A more detailed distribution of positive and negative sentiment was presented (see Fig. 2), which revealed that negative sentiment was consistently higher in both datasets. The sentiment analysis was based on the count of negative and positive words found in the comments. This method did not necessarily indicate that the majority of comments in both datasets were negative, as it analysed individual words without considering the overall context of the comments. However, it could be inferred that comments about misinformation tended to use more aggressive language, while comments about disinformation used slightly fewer negative words. Meanwhile, based on content categories, misinformation fake news gained the most significant negative emotional tone, accounting for more than 60% negative sentiment compared to the rest (see Appendix 4C). Further, a separate distribution of the sentiment scores for each dataset was also presented (see Appendices 2 and 3).

The misinformation dataset had 504 comments (N = 791 sentence IDs), and 54.1% of the sentiment score lay in -1, which fell under the negative side (see Appendix 2A). Meanwhile, for disinformation, analysis revealed that out of 265 comments (N = 380 sentence IDs), emotional sentiment exhibited a predominance of negative emotions over positive ones, accounting for 52.2% centred around the score of -1 (see Appendix 3A).

4.1.1 Positive and Negative Sentiments as Indication of Digital Emotional Labor

The initial presumption of emotional labor and its original concept suggested that only comments displaying emotional sentiment were considered emotional labor. Based on this research, which utilized the content analysis method to examine the phenomena of exposure to misinformation and disinformation content, only what was publicly displayed emotion or “surface acting” was observed from the comments, such as:

“Don’t be a jerk. You can ask AI to do anything. That hand is an AI artifact.”

“You make good points.”

Another aspect of emotional labor, known as “deep acting,” involves internal emotional work where users alter or navigate their emotional responses. This aspect could not be visibly observed in this study. However, the sentiment scores ranged from -1 to -3 for negative sentiment and from 1 to 3 for positive sentiment, supporting the idea that exposure to misinformation and disinformation involved some form of emotional management or labor.

4.1.2 Neutral Sentiments as Indication of Digital Emotional Labor

Overall, in the combined dataset of comments (N = 1,643) from both misinformation and disinformation data, slightly more than half (N = 874) lacked any discernible positive or negative words. These neutral comments made up 53.2% of the total, while 46.8% were categorised as emotional comments with positive or negative sentiment (see Fig. 3). Conversely, when examining each dataset individually, the results suggested slightly different interpretations (see Fig. 4).

Misinformation data had a fair distribution of sentiments compared to disinformation. Disinformation, on the other hand, had a slightly higher number of neutral-sentiment comments. Despite these findings, neutral sentiment still posed a degree of emotional labor through disengagement strategies observed in the later stages. By adopting a neutral tone, users were able to express their viewpoints while simultaneously disengaging emotionally from potential ongoing debates. Several comment examples that didn’t carry emotional valence included:

“I don’t think so neither” or “I believe it. Thanks”

“The footage was debunked a long time ago”

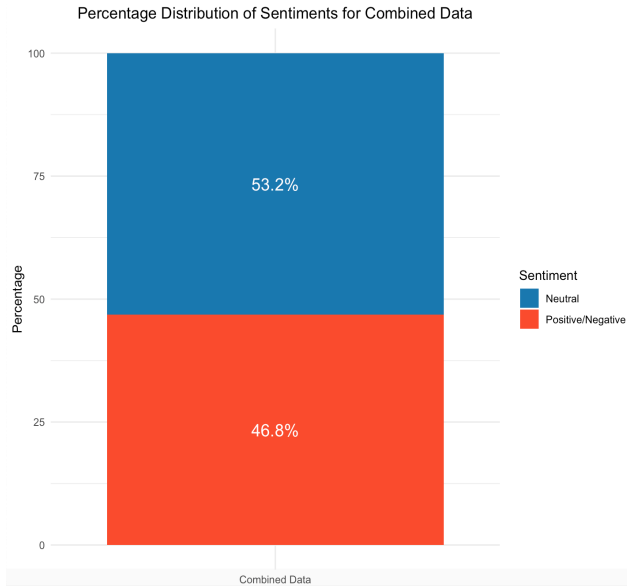


Fig.3 Misinformation and Disinformation Sentiment Distribution

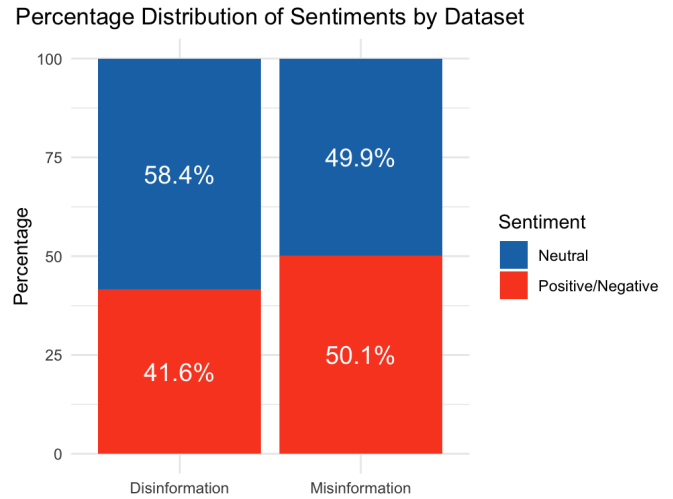


Fig.4 Sentiment Distribution by Dataset

In summary, the previous comments reflected various expressions of agreement or disagreement without explicitly using positive or negative language, as identified through sentiment analysis.

4.2 Engagement and Disengagement Strategies as Digital Emotional Labor

Despite the inconclusive findings that emotional sentiments were dominantly expressed in misinformation and disinformation content, this study still coincided with the concept of digital emotional labor. Further analysis of the emotional display under the dimension of engagement and disengagement strategies was presented in the next few subsections.

Some engagement strategies introduced in the concept of digital emotional labor include *educating others* and *exhaustion in the labor of response*. These types of engagement might not necessarily incorporate any positive or negative words of choice, yet they demonstrated an undertaking activity of emotional work that was found in this study.

First, educating the other. The comment below served as an example of educating the other as they engaged in the concept of digital emotional labor, as follows:

“You can disagree all you want, but I study LLMs/AI and even made some of my own. What’s your experience in LLMs and AI? This isn’t AI, It’s a non AI altered image (photoshopped) at best”

This particular statement illustrated a comment that was emotionally charged, as indicated by the choice of words “disagree” that represented negative sentiment and “best” which reflected positive sentiment. Conversely, a neutral-toned comment could also reflect engagement in digital emotional labor, as demonstrated below:

“Im not trying to spam you btw. Just educate. This is my area of study”

Both comments appeared to be attempts at correcting misunderstandings and reinforcing the user’s knowledge over others. Therefore, it could be assumed that users were willing to engage in emotional labor if it served beneficial functions for themselves or met their fundamental social needs.

Second, exhaustion in the labor of response. Consistent engagement in online discourse through specific conversations or ongoing emotional navigation within the social media environment can lead to fatigue. This is particularly evident in discussions on misinformation and disinformation, where users are often faced with comments that contradict their beliefs, potentially inducing a state of weariness. This phenomenon is illustrated by the following comments:

“I’m tired of us all fighting each other like left vs right when it’s really us versus them...”

“yes, u ‘won’ tiktok, and it's definitely not that ppl get tired to talking to willfully ignorant walls 🏆”

The exhaustion in the labor of response can be deemed an effect of continuous engagement with emotional labor, such as “Managing the self, teaching the ignorant, and interacting with contrary interlocutors” (Rodis, 2023, p. 5), which is required when engaging with such content and conversations. This emotional toll was a consequence of the persistent effort to navigate and respond to emotionally charged interactions, highlighting the strain of sustained emotional involvement in online discourse.

Third, neutral sentiments as a means of avoiding hostility and emotional disengagement strategy. Contrary to the engagement strategies of digital emotional labor evident in users’ comments, the framework of digital emotional labor also introduced disengagement strategies. This withdrawal or neutral response could be viewed as a form of emotional labor, where individuals manage their emotional expression by distancing themselves from potentially taxing discussions. Such behaviour highlights the diverse strategies people employ to navigate emotional labor in digital spaces, balancing active participation with self-preservation.

“Not a single fact used”

“They are up to something”

The examples above show disagreement comments, but there was an absence of positive or negative words that could either drag users further into hostile conversations or indicate their choice to disengage emotionally from the discussion.

4.3 Digital Emotional Contagion on Misinformation and Disinformation in TikTok

In regard to the previous findings, although neutral-sentiment comments can still be considered a form of emotional labor, they are not further analysed under this digital emotional contagion framework. This subsection mainly discusses the pathway of digital emotional contagion and the prevalence of each characteristic—mimicry, social appraisal, and category activation—in a digital environment, specifically concerning misinformation and disinformation.

4.3.1 Limited Presence of Mimicry

In digital contexts, emotional contagion involves the spread of emotions through online interactions. Although, the initial concept of mimicry heavily relied on non-verbal affective actions such as body language, facial expressions, or gestures, which could not be transferred to the digital environment, the mimicry aspect could still be seen from another perspectives such as through the intent or whether it mimics prior emotional state (Moody et al., 2007). Yet, in this study, when dealing with misinformation or disinformation, mimicry was not consistently observed or apparent (see Appendices 6).

Despite the lack of mimicry in most comments, there were still instances where comments imitated another expresser's emotional reaction or showed a parallel response to the content, such as:

“TRUE”

“Wow”

“Good point”

The above examples were users' comments that exhibited the feature of mimicry in the form of agreeing with the previous users' statement or emotional expression.

4.3.2 Category Activation as A Primary Pathway

Category activation occurred when a receiver's mind was stimulated by exposure to an expresser's affective state. During the emotional contagion process, this activation often preceded the receiver's engagement in mimicry—an unconscious imitation of another's affective state or nonverbal communication—or social appraisal, where they evaluated others' emotions and used that information for their own emotional reference. This cognitive or affective category activation was a critical and ongoing part of receiving and processing the expresser's affective condition. Examples that illustrated the characteristics of emotional contagion occurring simultaneously include:

Mimicry and Category Activation

Among the coded data, the coders identified some comments where mimicry and category activation appeared together (see Appendices 6). These two features often occurred simultaneously due to their shared nature of being automatic responses. Category activation highlighted the automatic activation of emotional expressions, while mimicry involved the automatic imitation of these expressions. An example would be:

“agree with u on that. Sadly 😞”

This statement initially showed agreement with the previous comment or with the content itself, exemplifying mimicry. When the commenter then expressed sadness, it activated an internal affective category, revealing category activation. Further, this could lead to an emotional contagion effect: another reader might read this comment, register it internally, and come to perceive the original content about the conspiracy as harmful, thereby influencing their own affective feelings in a similar manner.

Social Appraisal and Category Activation

Social appraisal involved a cognitive process that included reflection, wherein individuals interpreted the meaning of comments, evaluated the underlying affective states, and compared these experiences with their own. This evaluation might involve responses such as reinforcing beliefs or generating new information. However, before engaging in this reflective process, individuals typically activated a mental category when interpreting another person's explicit expression. This activation occurred as they prepared to compare and evaluate their own emotional responses with those of others.

“No mate it is impossible factually not in my mind even flat earthers argue it is impossible that’s the whole idea of the experiment because one side has to be wrong about it” (see Appendix 6A)

“Bro is smarter than me 🧠” (see Appendix 6B)

Both comments demonstrated a social appraisal process, as evident from the references to others with terms like "No mate" and "Bro." The first comment engaged in further evaluation under social appraisal by correcting a perceived misunderstanding, while the second comment assessed another individual's intelligence level in comparison to their own. Category activation was also observed in both instances—the first comment triggered a mental category associated with concepts of factual accuracy or impossibility, while the second comment activated a category related to competence. These activations illustrate how individuals categorise and respond to stimuli based on their perceptions and evaluations of others' statements or attributes.

4.3.3 Predominance of Social Appraisal

According to the coding, social appraisal is the most apparent feature alongside category activation, or second after, in response to misinformation and disinformation content (see Appendices 6). Social appraisal emerged prominently due to its inherent functions of conveying and expressing users' own thoughts and beliefs. Some statements that displayed the characteristics of social appraisal are as follows:

“Sounds to me your fooled. But you go ahead and do you we got this and we got his back.” (see Appendix 6B)

“no I'm defending facts lol it is not possible on a flat earth no matter how much you try to twist and change things” (see Appendix 6A)

“your delusional and lies have already been caught out have a nice day I won't reply again” (see Appendix 6A)

As presented above, social appraisal comments are most often expressed by reaffirming users' beliefs or evaluating others' opinions. Particularly in the context of misinformation and disinformation, this is quite common due to the nature of the content, which is often based on subjective beliefs.

Social Appraisal and Mimicry

Another finding identified by the coders was the occasional occurrence of social appraisal alongside mimicry in some comments (see Appendices 6). Examples of comments exhibiting these characteristics appeared in tandem:

“Could be lasers but my guess is as good as urs” (see Appendix 6A)

“PURE PROPAGANDA!!” (see Appendix 6B)

“Propaganda” (see Appendix 6B)

In the first example, social appraisal was more apparent as the commenter evaluated the situation by suggesting "could be lasers." Meanwhile, the phrase "but my guess is as good as urs" subtly hinted at mimicry, reflecting a shared uncertainty and aligning with the sentiments expressed by previous users. This suggested a merging of independent evaluation and an echo of the tone and uncertainty present in the ongoing discussion. In the second and third examples, the comments shared a similar style while also evaluating the disinformation content.

In conclusion, the findings on digital emotional contagion revealed that social appraisal and category activation consistently surfaced in the majority of the coding process. Meanwhile, mimicry was the least coded among all comments. Other findings in this study indicated that some codes appeared together, such as social appraisal and category activation, mimicry and category activation, and mimicry and social appraisal. Although these occurrences were less frequent, this outcome should still be considered.

Apart from the results mentioned above, the analysis also highlighted the degree of emotional labor involved in addressing misinformation and disinformation on TikTok. It showed that neutral-sentiment comments were distributed similarly to those with positive or negative sentiment, indicating involvement in digital emotional labor. While there was minimal indication of higher scores for distinctly positive or negative words, as the scores centred around -1 for negative and 1 for positive, this still meant that users had moderately engaged in digital emotional labor.

Discussion and Conclusions

This chapter summarises the main findings on digital emotional labor and digital emotional contagion in response to misinformation and disinformation content by answering to the primary research objectives of uncovering emotional display and its contagious effect. Digital emotional labor and digital emotional contagion emerges as a central aspect of this social phenomenon due to the volatile nature of conversations typically found in such contents. Additionally, this chapter will discuss the practical and theoretical implications of the study, outline the limitations of this research, and suggestions for future research.

5.1 Main Findings and Theoretical Implications

This section delves into the main conclusions of the research on user engagement in digital emotional labor in response to misinformation and disinformation on TikTok. It also examines how digital emotional contagion occurs in conversations through its key characteristics.

The concept of digital emotional labor originated from the framework of emotional management on physical labor, which then was extended to the online environment in this study. Traditionally, emotional labor was defined as the act of displaying appropriate emotions (Hochschild, 1983). This definition suggested that prevalent emotional displays should be analysed to determine the presence of emotional labor and whether emotions are represented in socially acceptable ways.

Overall, the combined datasets on misinformation and disinformation show a predominance of neutral-sentiment comments (see Appendix 4D). However, when examining each dataset separately, misinformation features more emotionally charged comments compared to disinformation, where neutral-sentiment comments are more dominant (see Appendix 4A).

This outcome can be attributed to the characteristics of misinformation, which typically lacks deliberate deception, reducing the audience's awareness of the content's falseness and fostering increased emotional investment and expression of personal opinions.

Another indication is that users tend to avoid aggressive or excessively positive language when responding to misinformation and disinformation. This pattern suggests that users might be moderating their expressions in accordance with social norms or community guidelines. Non-compliance with these guidelines on the platform could lead to account suspension or banning, either through user reports or the platform's evaluation.

In this research, participation in digital emotional labor is identified through sentiment analysis, which produces scores ranging from -3 (most negative) to 3 (most positive). The sentiment scores cluster significantly around -1 (see Appendices 2 and 3). This indicates that users engage in digital emotional labor by choosing words that express their negative emotional sentiments in socially acceptable ways, regardless of the intensity of their feelings. Accordingly, the analysis provides minimal evidence of a strong and distinct degree of emotional labor indicated by higher sentiment scores.

Despite the distribution of scores, a comparison of positive and negative sentiments reveals a higher number of negative words used in comments on both misinformation and disinformation (see Appendix 4B). This finding suggests that users who display a degree of emotional labor through negative or positive words, are taking part in digital emotional labor through *surface acting* (Hochschild, 1983), which is referred to publicly displayed emotion.

One advantage of content analysis is its flexibility to incorporate both qualitative and quantitative approaches, allowing for a deeper understanding of the data's context. In this study, the distribution between neutral and positive or negative sentiments was fairly balanced. A

supplementary qualitative approach was employed to observe the context of the comments, following the methodology of Rodis (2023) on digital emotional labor. This study contends that neutral-sentiment comments may still represent participation in digital emotional labor, as users may employ engagement and disengagement strategies in a neutral-sentiment manner. These strategies include educating others, experiencing exhaustion from the labor of response, avoiding hostility, and emotional disengagement (Rodis, 2023).

Educating others and the associated exhaustion are evident in users' verbal expressions. Many users explicitly stated that the misinformation and disinformation as false, striving to correct the false information. Repeated efforts to assert the falsity of the information and reinforce what they perceive as the truth can lead to exhaustion from ongoing emotional labor. However, some users remain highly motivated to continue educating others, reflecting a desire to enhance their positive image (Cialdini & Goldstein, 2004; Rodis, 2023).

Disengagement strategies involve users opting to disengage emotionally or avoid hostility. In emotionally charged environments, individuals may choose to express their opinions in a neutral or composed manner to prevent conflicts from escalating. The study identifies instances where users either disengage entirely from the conversation or use neutral-toned comments to avoid heated exchanges (Rodis, 2023).

In the context of digital emotional contagion, existing literature posits that mimicry serves as a fundamental concept. The term is defined by Hatfield et al., (1983) as “The tendency to automatically mimic and synchronise expressions” or by Goldenberg and Gross (2020) as emotions becoming more aligned between individuals. However, mimicry’s role in misinformation and disinformation circulation is less pronounced, suggesting that users become more aware of false information and engage in more reflective actions. Social appraisal—where

users evaluate and judge others' statements—has taken on greater significance compared to mimicry.

Social appraisal can be traced back to the concept of emotional assimilation, which emphasises the role of emotions in social interactions (Hatfield et al., 1983). It highlights two primary functions: the signalling function, where emotional display conveys information about our thoughts, feelings, and identity; and the affiliation function, where individuals adjust their emotions and expressions to foster positive relationships. When individuals assess and align with the ideas or statements of other commenters, they engage in the signalling function of emotional assimilation, expressing agreement or conveying their own thoughts and beliefs. Social media often fosters a sense of belonging within communities that share similar values, enhancing the affiliation function of emotional assimilation. This indicates that social appraisal stands out as a significant aspect of digital emotional contagion, fulfilling individuals' primary intention of adapting emotional assimilation.

Category activation, defined by Goldenberg and Gross (2020) as the state of an activated category when exposed to someone's affective state, is prominently represented in the dataset. Building on the work of Peters and Kashima (2015), an activated affect category or category activation can prompt a coherent affective state in the receiver. This suggests that in most double-coded responses, such as mimicry—where users imitate others' emotional reactions or display parallel responses—there is often an indication of prior category activation, as shown by the double-coded characteristics (see Appendices 6). Besides mimicry, the double-coded data also shows category activation and social appraisals. This result stems from the idea that before users give an appraisal or evaluation, they need to register the expresser's affective state. However, the literature supporting the double-coded characteristics is limited, necessitating a

more comprehensive study in a controlled environment. Although, literature has proven that these characteristics can occur simultaneously (Goldenberg & Gross, 2020; Peters & Kashima, 2015).

The findings of this study extend traditional theories of emotional labor and emotional contagion, which have primarily focused on face-to-face interactions into the digital environment. In contrast to traditional settings, TikTok users primarily exhibit mild negative and neutral sentiments in line with community guidelines, indicating that they actively manage their emotional responses. This study suggests that emotional labor theories should be expanded to include social media environments, as much of this labor nowadays takes place online. Additionally, the discussion of digital emotional contagion reveals opportunities for refining the existing framework. Future research should evaluate the significance of social appraisal and category activation as key components of digital emotional contagion, and examine the role of double-characteristics and the exact processes involved. This can further contribute to the existing body of knowledge on digital emotional contagion.

5.2 Practical Implications

This study underscores several practical implications for multiple stakeholders. It finds that the majority of sentiments regarding misinformation and disinformation content are neutral, indicating that community guidelines on the platform are largely adhered to. Users are aware of the platform's reporting capabilities to address extreme offensiveness and negative expressions, which promotes a safer online discourse. However, challenges remain, as some comments contain subtly offensive language, often cloaked in sarcasm or very aggressive words that are disguised by altering a few letters and may go unnoticed by the current moderation system.

Therefore, there will be a pressing need for enhanced content moderation strategies that integrate advanced technologies to better identify potentially harmful content early and facilitate proactive moderation measures.

5.3 Limitations and Future Research Direction

Several limitations of this study should be acknowledged. Each conceptual framework presents some challenges. The primary methodology of content analysis allows for the observation of individuals' emotional management and contagion effects in a natural setting, without experimental conditioning. However, this approach has its limitations. The concept of emotional labor, particularly the aspect of "deep acting," involves significant internal emotional work that cannot be fully captured through quantitative methods. To address this, subsequent research could benefit from incorporating qualitative methods, such as interviews, to provide a more comprehensive understanding of the phenomena.

Another limitation arises from the use of sentiment analysis. Current sentiment analysis tools often fall short in detecting the full context of statements or sentences, focusing instead on isolated words. This can lead to an incomplete representation of emotional tonality, especially as users frequently employ sarcasm or satire to bypass content moderation while expressing extreme negative sentiments. Enhancing the accuracy of sentiment analysis tools to better interpret nuanced language remains a critical area for future development. As suggested by Jo and Ryu (2018), sentiment analysis might be able to predict sentiment scores (e.g., negative or positive) but is often inadequate in reflecting the true emotional state of the writer or reader.

In the study of digital emotional contagion, several limitations and future research directions should be noted. First, although a codebook exists as a reference for the manual

coding, differences in the depth of understanding between external coders and the primary researcher could affect the results. External coders coded only 10% of the dataset, while the primary researcher coded the entire dataset (N = 769 comments). Consequently, the inter-rater agreement level showed varying degrees of agreement. An iterative process to refine the codebook and increase the dataset sample could improve reliability in future research.

Secondly, as some double-codes emerge in the findings (see Appendices 6) aligned to the literatures indicating that codes can occur in tandem (Peters & Kashima, 2015; Goldenberg & Gross, 2020). Future research should address the processes when characteristics occur together in a more controlled setting.

Lastly, in addition to examining the characteristics, future research should investigate how conversations evolve over time and their relationship to emotional contagion. Employing a longitudinal study design alongside content analysis could provide valuable insights into the dynamics of emotional exchanges in digital interactions. This approach may also aid in developing more effective moderation strategies. Implementing these suggestions could enhance the outcomes and offer a more comprehensive understanding of the complexities involved in digital emotional labor and contagion on social media platforms.

5.4 Conclusion

This research investigates how digital emotional labor and emotional contagion affect misinformation and disinformation on TikTok. It finds that digital emotional labor appears in comments that express positive, negative, or neutral sentiments. The degree of this labor is indicated by the sentiment of the comments (e.g., positive or negative) and the distribution score of these sentiments. Even neutral comments, which do not display clear emotional sentiment,

still contribute to digital emotional labor by educating others, responding to content, or maintaining neutrality to avoid conflict.

In the context of digital emotional contagion, the study discovers that category activation and social appraisal are the most obvious characteristics when dealing with misinformation and disinformation on TikTok. This outcome is influenced by the nature of false information, which users feel motivated to correct, particularly when it contradicts their personal beliefs. Meanwhile, mimicry, which was previously regarded as an essential element in emotional contagion literature, does not occur as frequently. This research implies that when confronted with misinformation and disinformation, users engage in a more reflective process rather than simply mimicking the emotions of others. Overall, this study reveals the influence of emotions in the circulation of misinformation and disinformation on TikTok, manifested in digital emotional labor and digital emotional contagion.

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Appendices

Appendix 1A

Misinformation content

Category	Subject	Content Creator's Profile	Comments	Reasons of Misinformation Classification
Deepfake AI	Allegedly AI generated photo of The UK Royal Family - H.R.H Kate Middleton and her kids	Lifestyle Content creator	180 comments	<p>The content creator is a lifestyle influencer thus most of her contents aren't controversial</p> <p>The video is merely coming from her assumptions and the information she knew about AI generated photo</p> <p>There's no history of the content creator to spread false information</p>
Conspiracy Theory	Flat earth theory NASA allegedly fabricated images related to space exploration	Flat earth conspiracy believer	201 comments	<p>Belief-based sharing</p> <p>The creator's posts are motivated by their own belief system rather than a calculated effort to manipulate or mislead their audience</p> <p>The creator's content lacks the deliberate manipulations—it is more about reinforcing their personal belief</p>
Fake News	Recently found the missing plane MH370 after 10 years surrounded by UFO	UK based online media	412 comments	<p>There's no pattern of spreading fake news regularly</p> <p>The media outlet clearly stated their sources in the caption <i>"This possible footage.... has been circulating on reddit. Obviously, reddit isn't always credible.."</i></p>

				The information is merely shared out of virality in Reddit which lacks credibility, instead of with the intent to deceive
Political Conspiracy	Geoengineering governments or other powerful entities manipulating climate for sinister purpose	Personal account of a geoengineering conspiracy believer	213 comments	<p>Belief-based sharing</p> <p>The creator's posts are motivated by their own belief system rather than a calculated effort to manipulate or mislead their audience</p> <p>If presented with evidence contradicting the flat earth theory, the content creator merely ignores or dismiss it rather than actively defend or perpetuate false claims</p>

Appendix 1B

Disinformation content

Category	Subject	Content Creator's Profile	Comments	Reasons of Disinformation Classification
Fake News	Allegedly arranged accident of baltimore bridge by powerful entities	Controversial issue content creator	130 comments	<p>The content creator profile shows a pattern of sharing controversial issue quite frequently</p> <p>The content creator use a copywriting of "<i>Watch before it's removed, follow share spread the truth</i>" and "<i>It's all a lie, people must watch</i>" which can be considered as manipulation tactics</p> <p>The copywriting of the video showed characteristics of disinformation which provoke emotional responses and create a dichotomy between 'truth-tellers' and those perpetuating lies.</p>
Fake News	Kona Blue Project "Project Aqua" was described as a leaked government initiative related to UFOs.	UFO believer content creator	197 comments	<p>The content creator profile shows a pattern of creating a conspiracy contents related to UFO</p> <p>There's no significant information and subsequent searches did not reveal any official government scheme by that name</p> <p>There's a possibility of a potential agenda setting – shaping public perception on UFOs and government transparency in a misleading manner</p>

Conspiracy Theory	<p>Fake moon landing</p> <p>They argue that the footage and photographs from the moon landings were fabricated to deceive the public and bolster America's space race supremacy against the Soviet Union.</p>	Conspiracy theory content creator	154 comments	<p>The content creator profile shows a pattern of creating a conspiracy contents to the extent of creating visualisations from AI</p> <p>This conspiracy have gained significant evidence supporting the authenticity of moon landing, however the creator bring this conspiracy again to provoke controversy or gain reactions from its audience</p> <p>False information with deliberate intent to deceive</p>
Conspiracy Theory	<p>The mars theory</p> <p>The theory suggests that there is evidence of past or present life on Mars, and that governments and space agencies (like NASA) are covering up this information</p>	Conspiracy theory content creator	156 comments	<p>The content creator profile shows a pattern of creating a conspiracy contents to the extent of creating visualisations from AI</p> <p>False information with deliberate intent to deceive</p> <p>The creator spread falsehoods deliberately across multiple topics to influence public opinion or gain attention</p>

Appendix 2A

Distribution of Sentiment Scores Misinformation

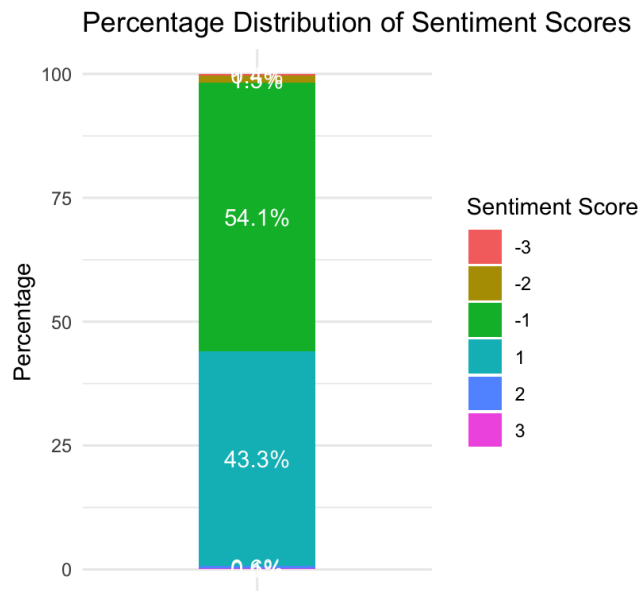
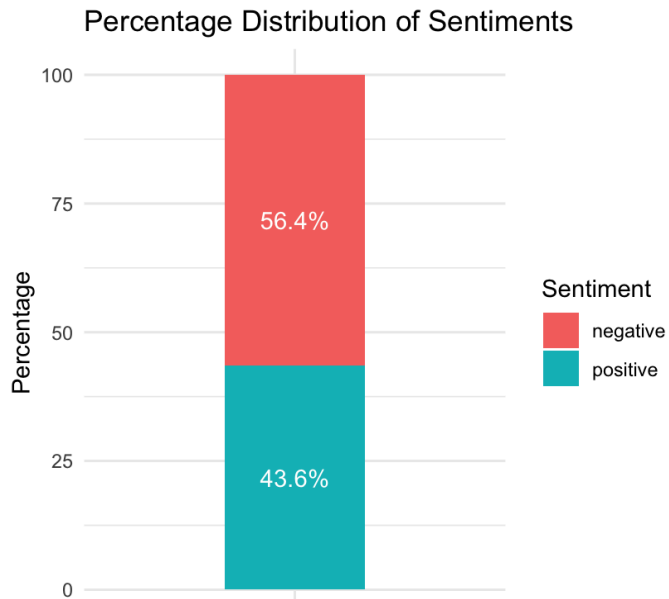


Table 2A. Distribution of Sentiment Scores Misinformation

Sentiment Scores	Percentage
-3 (most negative)	0.4%
-2	1.5%
-1	54.1%
1	43.3%
2	0.6%
3 (most positive)	0.1%

Appendix 2B

Distribution of Sentiment Analysis Misinformation



Appendix 3A

Distribution of Sentiment Scores Disinformation

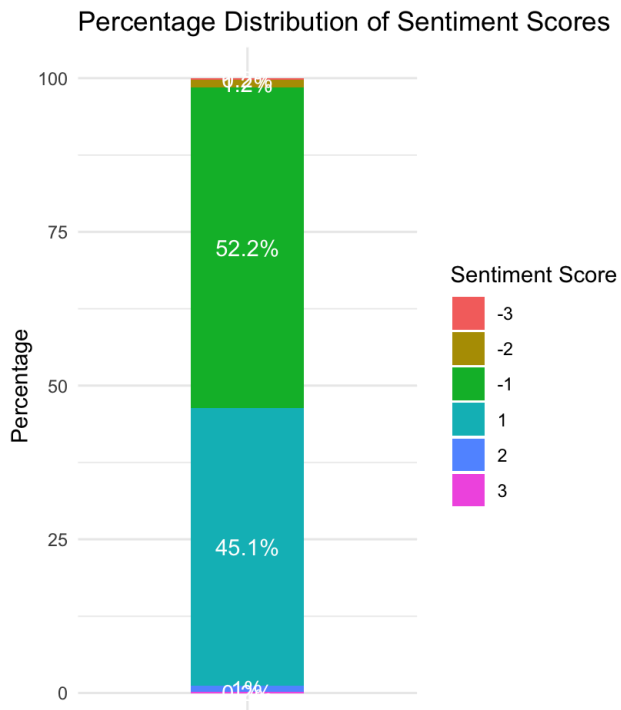
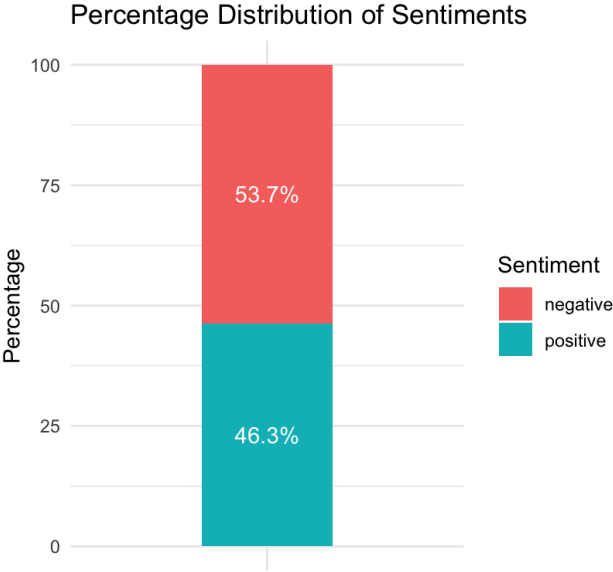


Table 3A. Distribution of Sentiment Scores Disinformation

Sentiment Scores	Percentage
-3 (most negative)	0.2%
-2	1.2%
-1	52.2%
1	0.2%
2	1%
3 (most positive)	45.1%

Appendix 3B

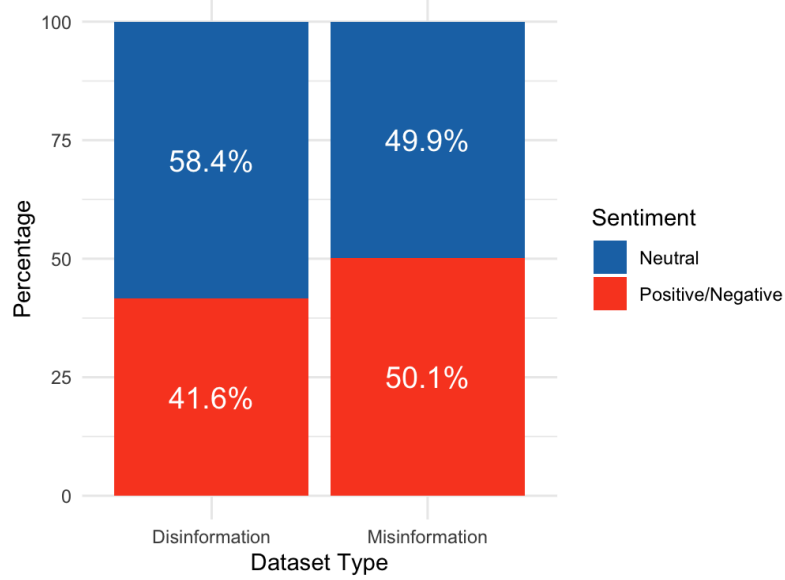
Distribution of Sentiment Analysis Disinformation



Appendix 4A

Percentage Distribution of Sentiments

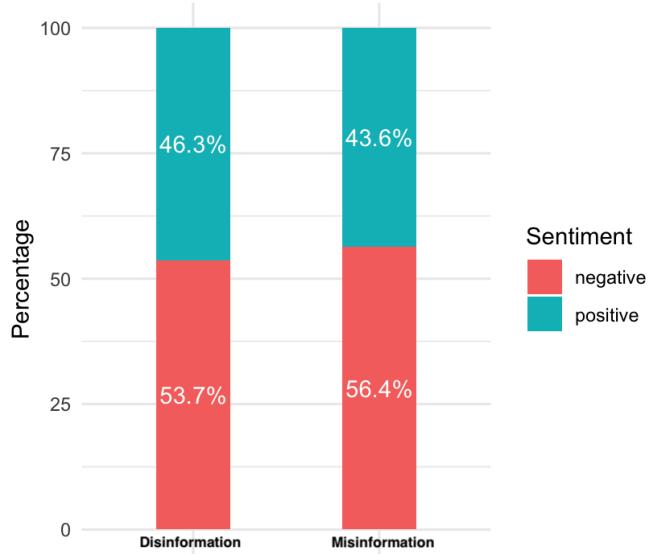
Percentage Distribution of Sentiments by Dataset



Appendix 4B

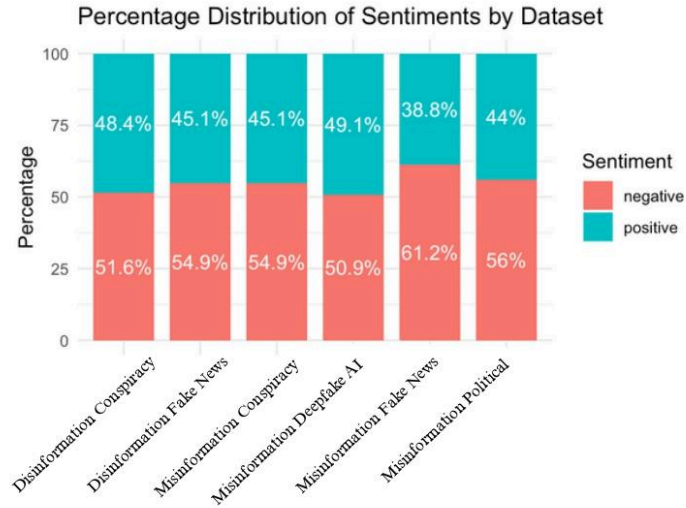
Percentage Distribution Positive and Negative Sentiment

Percentage Distribution of Sentiments by Data



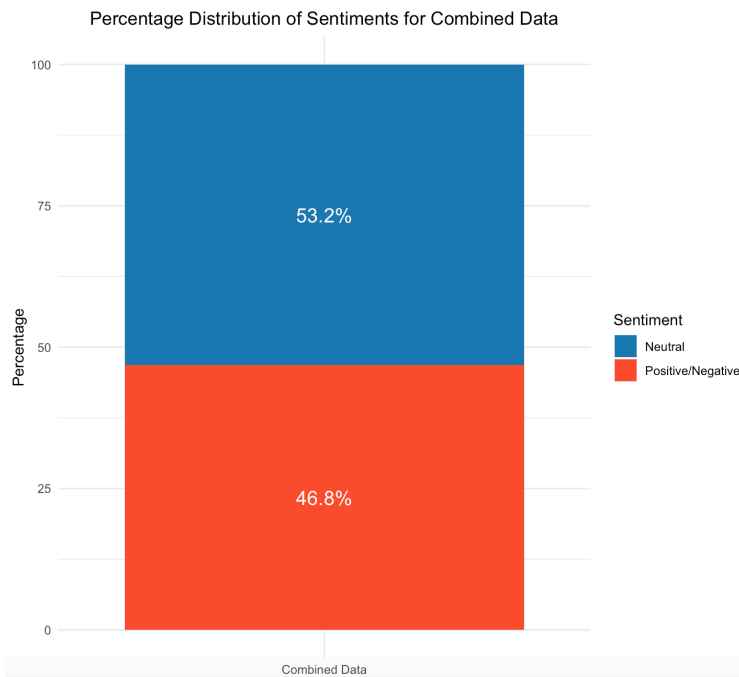
Appendix 4C

Sentiment Analysis by Content Category



Appendix 4D

Percentage Distribution Sentiment of Combined Dataset (Misinformation and Disinformation)



Appendix 5

Digital Emotional Contagion Codebook

Codebook

Categories	Mimicry	Category Activation	Social Appraisal
Definition	An emotional display from an audience in certain content might trigger a similar response from the others	A situation where the receiver's mind is primed or activated to experience a certain emotion category upon exposure to emotional expressions	A circumstance when people make comparable emotional experiences by using the feelings of others as a reference for their own emotion evaluations
Characteristics	<p>Automatic imitation: involves the automatic and often unconscious imitation of another person's emotional expressions, gestures, or behaviours.</p> <p>Parallel emotional and behavioural response: The response in mimicry is typically a direct and parallel imitation</p>	<p>Automatic and unconscious: Category activation involves the automatic and often unconscious activation of emotional categories when observing emotional expressions.</p> <p>Immediate emotional response: This process results in an immediate, often emotional, reaction based on the activated category</p> <p>Perceptual and Behavioural Influence: The activated category influences how individuals perceive and respond to emotional expressions in others</p>	<p>Deliberate and Reflective: Social appraisal involves a more deliberate and reflective process where individuals evaluate and interpret the emotions and intentions of others.</p> <p>Cognitive Evaluation: Requires cognitive evaluation of the context, understanding the social meaning behind emotional expressions, and assessing their implications.</p> <p>Interpersonal Context: Takes into account the interpersonal context and the relationships between individuals, influencing how emotions are understood and responded</p>
Intent	<p>Social Bonding: Enhance social bonds and facilitate smoother social interactions by creating a sense of shared emotional experience</p>	<p>Conceptual Framing: introduce or reinforce specific conceptual frameworks, terms, or categories of thought related to the topic</p> <p>Guiding Perception: influence how others perceive and interpret the</p>	<p>Clarification and Understanding: The emphasis is on evaluating and contributing to the ongoing conversation</p> <p>Engagement and Interaction: Fostering dialogue, exchanging ideas, and</p>

		topic by shaping the cognitive and emotional frameworks in their minds	critical thinking
Type of Influence	Affects the individual's external behaviour, leading to synchronised emotional expressions and actions	Affects how an individual perceives and understands emotional expressions, shaping their cognitive and emotional state	Affect the individual's evaluation towards a certain context and giving evaluation to others
Example	<p>“brilliant example 🍊”</p> <p>(Reflects a parallel response by agreeing to another comment)</p>	<p>“iv done plenty of research I'm open to admitting I'm wrong if something substantial persuades me but nothing does”</p> <p>(Reflects previous knowledge and activate a category)</p>	<p>“get yourself a hobby and stop wasting your life on this nonsense”</p> <p>(Reflects a judgement or evaluation towards someone)</p>

Appendix 6A

10% coded data sample and coding result from the researcher and two external coders

Manual Coding Misinformation

Comments	Researcher	Coder 1	Coder 2
That is not how generative AI works. Try again	Social Appraisal	Social Appraisal	Social Appraisal
Don't be a jerk. You can ask AI to do anything. That hand is an AI artifact.	Social Appraisal Category Activation	Social Appraisal	Social Appraisal Category Activation
no it's not, it's a poor photoshop job	Social Appraisal Category Activation	Social Appraisal	Social Appraisal
Not at all. That's a single , untouched photo, but ignorance hasn't stopped you before, has it.	Social Appraisal Category Activation	Category Activation	Category Activation
this is not wholly true. ai is just fancy pattern recognition. ai can be used to stitch images together, but often times stitched images dont generate new pixels.	Social Appraisal Category Activation	Category Activation	Category Activation
its not really true that ai can "do anything" all AI models are trained to complete very specific kinds of tasks but are inept at doing any task it hasnt trained on	Social Appraisal Category Activation	Category Activation	Category Activation
the most common stitching of images is when using the panoramic camera. but it doesnt make new pixels. instead multiple pictures are taken and then the AI finds points that are the same in both	Social Appraisal Category Activation	Category Activation	Category Activation
the kids hand is not ai. his middle finger is bent overtop the adjacent finger. and his pointer is bent up into his palm	Social Appraisal Category Activation	Social Appraisal	Social Appraisal
Maybe. I very clearly said there is bad retouching that could be AI assisted, but the whole photo is not AI generated.	Social Appraisal Category Activation	Social Appraisal	Social Appraisal
How are they a jerk just for telling you that you're wrong?	Social Appraisal Category Activation	Social Appraisal	Social Appraisal
iv done plenty of research I'm open to admitting I'm wrong if something substantial persuades me but nothing does	Social Appraisal Category Activation	Category Activation	Category Activation

most of what comes back are false statements and manipulates science to the agenda and not factual science	Social Appraisal Category Activation	Category Activation	Category Activation
it's not this proves you do not know what we are talking about here! 24 hour sun on at different times in the north or south can only happen on a globe	Social Appraisal Category Activation	Category Activation	Category Activation
I will look at it but I highly doubt it will contain anything convincing enough to change my mind	Social Appraisal Category Activation	Social Appraisal	Social Appraisal
in your mind it can't happen because you've never done any research to see how it works on the flat earth You just wave it off as nonsense	Social Appraisal Category Activation	Social Appraisal Mimicry	Social Appraisal
That's funny because the documentaries I watched they show it clearly how it works on a flat earth.. again you've done zero research You're just defending your government indoctrination	Social Appraisal Category Activation	Category Activation Mimicry	Social Appraisal
no mate it is impossible factually not in my mind even flat earthers argue it is impossible that's the whole idea of the experiment because one side has to be wrong about it	Social Appraisal Category Activation	Social Appraisal	Category Activation
If you go into it with that frame of mind I'm sure it won't, you have to have a mature brain that is open to new information and know that you will be fighting cognitive dissonance.. look that up befo	Social Appraisal Category Activation	Category Activation	Social Appraisal
every flat earth podcast or pusher claims it is impossible and they would go to prove it then when the chance arises none of them want to go, why?	Social Appraisal Category Activation	Social Appraisal	Social Appraisal
no I'm defending facts lol it is not possible on a flat earth no matter how much you try to twist and change things	Social Appraisal Category Activation	Social Appraisal	Category Activation
You mean go to Antarctica? That's a joke, we're only allowed to go to one cordon off section the size of a small island no one is allowed to explore beyond that.	Social Appraisal Category Activation	Category Activation	Category Activation
false information! you are allowed anywhere in Antarctica nothing stops you the Antarctica treaty states the right to explore and share results	Social Appraisal Category Activation	Category Activation	Social Appraisal

but suppose I am not surprised because flat earthers lie that much they believe themselves	Social Appraisal Category Activation	Social Appraisal	Category Activation
Antarctica get several months of darkness they never get several months of light.. That was debunked a long time ago it's another scam put out by NASA	Social Appraisal Category Activation	Social Appraisal	Category Activation
so it's been debunked that it happens? that's why this experiment is happening and every single flat earther refuses to go 🤔 point proven	Social Appraisal Category Activation	Social Appraisal	Social Appraisal
I'm sorry dude no one is allowed to explore beyond the Arctic wall	Social Appraisal Category Activation	Social Appraisal	Category Activation
what are your flat earth enthusiasts going to push on you when they are part of an experiment that they can no longer claim is fake because they were there?	Social Appraisal Category Activation	Category Activation	Social Appraisal Category Activation
your delusional and lies have already been caught out have a nice day I won't reply again	Social Appraisal Category Activation	Social Appraisal	Social Appraisal
The question shouldn't be what's happened to MH370, but who was on board the plane that made it worth killing everyone on board for ??	Social Appraisal Category Activation	Category Activation	Category Activation
Personal answer, a deadly military weapon like a bio-weapon that couldn't reach the destination. USAF possibly covered the aircraft from radar and shot it down.	Social Appraisal Category Activation	Social Appraisal	Category Activation
Could be lasers but my guess is as good as urs	Social Appraisal Mimicry	Mimicry	Mimicry
bomb	Social Appraisal Category Activation	Social Appraisal	Mimicry
Idk but in the second clip we see that the orbs create disturbance in the air. So it's a physical object, other than that idk	Social Appraisal Category Activation	Mimicry Social Appraisal	Social Appraisal
Drones. Denk ik want ze doen boem boem in the vliegtuig.	Social Appraisal Category Activation	Social Appraisal	Category Activation
This was in the Netflix documentary too. I believe only a single piece of the plane has ever been found and it washed up on a beach. Scary stuff. No black box or anything.	Social Appraisal Category Activation	Category Activation	Category Activation
multiple pieces of the plane have been found on the coast of Africa and Madagascar. the	Social Appraisal Category Activation	Category Activation	Category Activation

plane crashed into the ocean			
We know exactly what happened to the plane. Pilot depressurized it, crashed it.	Social Appraisal Category Activation	Social Appraisal	Category Activation
Impossible	Social Appraisal Category Activation	Social Appraisal	Social Appraisal
I'm sure they'd look at a modern day plane back in the 1700s and say the same 👍	Social Appraisal Category Activation	Category Activation	Category Activation
doesn't make it impossible though :)	Social Appraisal Category Activation	Social Appraisal	Social Appraisal
Not too mention the orbs themselves have been proven several times to be edited. So the plane isn't mh370, and the orbs aren't real. So yes, it's impossible.	Social Appraisal Category Activation	Category Activation	Mimicry
What's the truth then. Never once have you given a counter argument. Would be happy to discuss it, but you can't or won't. Just look at you responses to so many people.	Social Appraisal Category Activation	Social Appraisal	Social Appraisal
If you to make a credible point discuss it with facts.	Social Appraisal Category Activation	Category Activation	Social Appraisal
No your not blocked from seeing it. Also Someone made a hilarious video about keithy that's been passed around. Don't be the next keithy.	Social Appraisal Category Activation	Social Appraisal	Social Appraisal
Except you won't tell anyone what you think that truth is. You are nothing but defensive. Tell us what you think is the truth and cut all the bs. It's that simple.	Social Appraisal Category Activation	Category Activation	Social Appraisal
The problem is they are denying it here in the UK and trying to pass it off as contrails when this is not the case!	Social Appraisal Category Activation	Social Appraisal	Category Activation
They need to fuk off, climate change a hoax, fukin with nature, playing "god" if you will! Just let us be!	Social Appraisal Category Activation	Social Appraisal	Social Appraisal
I personally don't believe in climate change either and neither do quite a few meteorologists that I work with. I do believe in natural cycles though the climate has always fluctuated in temperature.	Social Appraisal Category Activation	Mimicry	Category Activation
Yeh I also agree with that but that fact they are trying to say we are heading towards a climate crisis is BS it's just another way of controlling us like they did with Covid	Mimicry Category Activation	Mimicry	Mimicry

And the next BS they have got installed for us with this bird flu, the agenda 30 is being pressed harder than ever as covid was a failure and to many people now aware of what's really going on!	Social Appraisal Category Activation	Category Activation	Category Activation
They have been telling us we're doomed for at least 50 years with things like the ozone, acid rain etc and magically they all went away. Remember global warming that became climate change.	Social Appraisal Category Activation	Social Appraisal	Category Activation
Well I'm glad we can agree on something, the WHO and WEF are after complete control, they are satanic psychotic individuals that will stop at nothing and need to be dealt with!	Social Appraisal Category Activation	Social Appraisal	Category Activation
A good Schwab is a dead Schwab. Yes we can agree it just takes a civil conversation. 👍	Social Appraisal Category Activation	Social Appraisal	Mimicry

Appendix 6B

10% coded data sample and coding result from the researcher and two external coders

Manual Coding Disinformation

Comments	Researcher	Coder 1	Coder 2
just glad trump be here soon to stop the MADNESS	Social Appraisal Category Activation	Social Appraisal	Mimicry
Unfortunately, Trump is part of their Plan. They'd owned both sides of the congress. We're doomed. Only the Powerful One in heaven can stop these madness. 😊	Social Appraisal Category Activation	Category Activation	Category Activation
I cant believe that. They are trying Way to hard to imprison him because they are scared of him.	Social Appraisal Category Activation	Social Appraisal	Mimicry Category Activation
I know it's hard for you or many of Trump supporters, but what I'm saying here is 1000% true, yep you read that right, not 100% but 1000%. They have big role for him to play from here onwards. 🙏	Social Appraisal Category Activation	Social Appraisal	Social Appraisal Category Activation
You u think they have him in court 91 times for a part of something. We see who is apparently blind. I trust him 99.9.% ans there 104 million like me	Social Appraisal Category Activation	Category Activation	Social Appraisal Category Activation
Unfortunately, they've done an excellent job fooling 104 millions people and you as well. The president is selected, not elected 😞, including Trump.	Social Appraisal Category Activation	Category Activation	Category Activation
sounds to me your fooled. But you go ahead and do you we got this and we got his back.	Social Appraisal Category Activation	Social Appraisal	Social Appraisal
I can guarantee you they did	Social Appraisal Category Activation	Category Activation	Mimicry
maybe he just does not swear to God in the buble its still a sin to swear to God and tell the truth	Social Appraisal Category Activation	Mimicry	Category Activation
NASA never said they lost the footage more flerf confirmation bias	Social Appraisal Category Activation	Category Activation	Social Appraisal
TRUE	Mimicry	Mimicry	Mimicry
The phone call with Nixon is soooooo stupid	Social Appraisal	Social Appraisal	Social Appraisal
why don't we just end this debate as follows... if you're a Trump supporter it was	Social Appraisal Category Activation	Category Activation	Social Appraisal

fake... if you went to school when you were a kid, and you believe in science and love learning, it was real			
I believed the moon landing was fake back in 2008. That's before Trump even considered running for president. It's called critical thinking, which I'm realizing people don't know how to do anymore.	Social Appraisal Category Activation	Social Appraisal	Category Activation Social Appraisal
Damn	Mimicry	Mimicry	Mimicry
how bro said nuclear be like: nuclear	Social Appraisal	Social Appraisal	Mimicry
Mars, like our planet, once had a core and a magnetic field. When Mars' magnetosphere expired, conditions for supporting possible life disappear!!!	Social Appraisal Category Activation	Category Activation	Category Activation
There is scrap around Mars	Social Appraisal	Social Appraisal	Category Activation
Bro is smarter than me 🤖	Social Appraisal	Social Appraisal	Mimicry Social Appraisal
Love it	Mimicry	Mimicry	Mimicry
No that's crazy 🤔🤔	Social Appraisal	Social Appraisal	Mimicry Social Appraisal
PURE PROPAGANDA!!	Social Appraisal	Social Appraisal	Mimicry Social Appraisal
Propaganda	Social Appraisal	Social Appraisal	Mimicry Social Appraisal
Why should the US government (or ANY government) pay for a death due to interaction or exposure to a UFO?	Social Appraisal Category Activation	Category Activation	Social Appraisal
Ummm... UFOs don't exist that's a cover for if they harm us.	Social Appraisal Category Activation	Category Activation	Category Activation
That's why President Trump said watch the water does anybody remember that cause I sure as hell do	Category Activation	Category Activation	Category Activation
I wish the stupid music would end.	Social Appraisal	Social Appraisal	Social Appraisal
oh but it's all just a conspiracy theory 🤔🤔🤔🤔🤔🤔	Social Appraisal	Social Appraisal	Social Appraisal