Exploring Trust in TikTok Content: Investigating the Role of Sender and Receiver Characteristics

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Abstract

Media trust and misinformation are one of the grand challenges in the digitalized century. As social media platforms have become the primary source of information for young adults and shape how they consume information, it is important to examine the factors by which a content's trustworthiness is established. This is the first step to combat misinformation and address the challenges of online credibility. By exploring sender and receiver characteristics, this study aims to examine the various factors that shape young adults' trust in TikTok content. Using a cross-sectional survey, data from 155 participants, aged 18 to 29 (M = 24.5), who provided information on their personality traits and the relevance of sender characteristics, were gathered. Two separate linear regression analyses were conducted, along with examining media literacy as a possible moderator. The findings indicate that the relevance of sender characteristics, especially verification, is positively associated with higher trust among TikTok users, while receiver characteristics were not associated with trust. The results emphasize the need for platform transparency about verification and media literacy programs. Future research is needed to examine these correlations in more detail and explore behavioral measures to further investigate trust dynamics in fast-paced social media environments like TikTok.

Keywords: social media trust, TikTok, verification, sender and receiver, personality traits

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Social media has become increasingly integrated into society in recent years, fundamentally shaping how people view the world. A variety of social media platforms like Instagram, Snapchat, or TikTok are central to the daily routines of young adults worldwide (O'Day & Heimberg, 2021) with 88 % of 18- to 29-year-olds actively using social media to share content, interact with each other, or consume information as passive users (Furinto et al., 2023). Users increasingly use social media to receive factual information or news (Appel et al., 2020). Among the most used platforms, TikTok stands out due to its distinctive short-form video content, emphasizing rapid creation and consumption. These characteristics appeal to the predominantly young user base and set TikTok apart from, e.g., Instagram, which focuses on aesthetics and curated content (Miltsov, 2022; Blandi et al., 2022; Lan & Tung, 2024).

With around two billion users consuming and sharing content daily, the platform TikTok has become an influential source of information (Statista, n.d.). However, its fast access, production, and spread of information also comes with the downside of spreading misinformation. TikTok's design, which allows both verified experts and laypeople to contribute content on the same topics, increases the difficulty of distinguishing between correct and false information. Furthermore, the platform's algorithmic personalization to enhance user experience can create echo chambers, potentially amplifying the spread of misleading content by prioritizing viral content over verified information and making critical assessment even more challenging (Klug et al., 2021). As users actively shape the platform by sharing content and opinions, the potential for misinformation to proliferate increases, necessitating a deeper understanding of the factors associated with trust and how users assess credibility in this dynamic environment (Montag et al., 2021).

Prior research indicated that the process of trusting content is largely shaped by the interplay between the features of the content or creator (the sender) and the characteristics of the individual consuming the content (the receiver) (Metzger & Flanagin, 2015; Strömbäck et al., 2020). Firstly, visual cues like the creator's verification badge or follower count have often been shown to act as heuristics for credibility in the online social world (Liao et al., 2024; Pittmann & Abell, 2022; Dumas, 2021). These cues (in the following called sender characteristics) can influence how trustworthy content is perceived by users.

Secondly, the user's personality traits, such as extraversion, which is described by being sociable and curious (Danner et al., 2016; Chen, 2024), and their ability to understand, i.e., their need for cognition (NFC; Cacioppo et al., 1983), are associated with trust. These characteristics have been found to impact how users evaluate content by either focusing on superficial cues or engaging in a deep evaluation of content (Petty et al., 1986).

Independent of these traits, users' media literacy skills, such as examining perceived indicators of credibility, can be helpful to assess the trustworthiness of content (Appel et al., 2020; Muhammed & Mathew, 2022; Lan & Tung, 2023). Research has shown that media literacy plays a key role in shaping trust in information and combating misinformation (Jones-Jang et al., 2021; Zips & Holendova, 2023). However, assessing the credibility of content becomes increasingly challenging due to the fast-growing amounts of information and the lack of barriers to posting, which allows inauthentic claims to be shared.

The current study will build upon existing research and broaden the perspectives on trust in social media content. While misinformation and trustworthiness in digital media have been widely studied, less research has focused on the individual differences associated with users' susceptibility to misinformation, e.g., media literacy or personal characteristics. This study will shift the focus to explore trust dynamics among young adults, as the primary target group of TikTok, which has often been overlooked in previous studies where broader demographics were analyzed (Ruak, 2023; Zips & Holendova, 2023). While some research has examined

content characteristics and their effect on trust, and others have focused on personality traits, few studies combined both perspectives (Fawzi et al., 2021). As both characteristics possibly influence how information is processed, the current research addresses the gap by examining how sender and receiver characteristics are associated with trust in TikTok content. Further, while the use of social media, e.g., Facebook, and its relation to trust, has been studied, little research has investigated whether these correlations remain robust in the unique environment of TikTok.

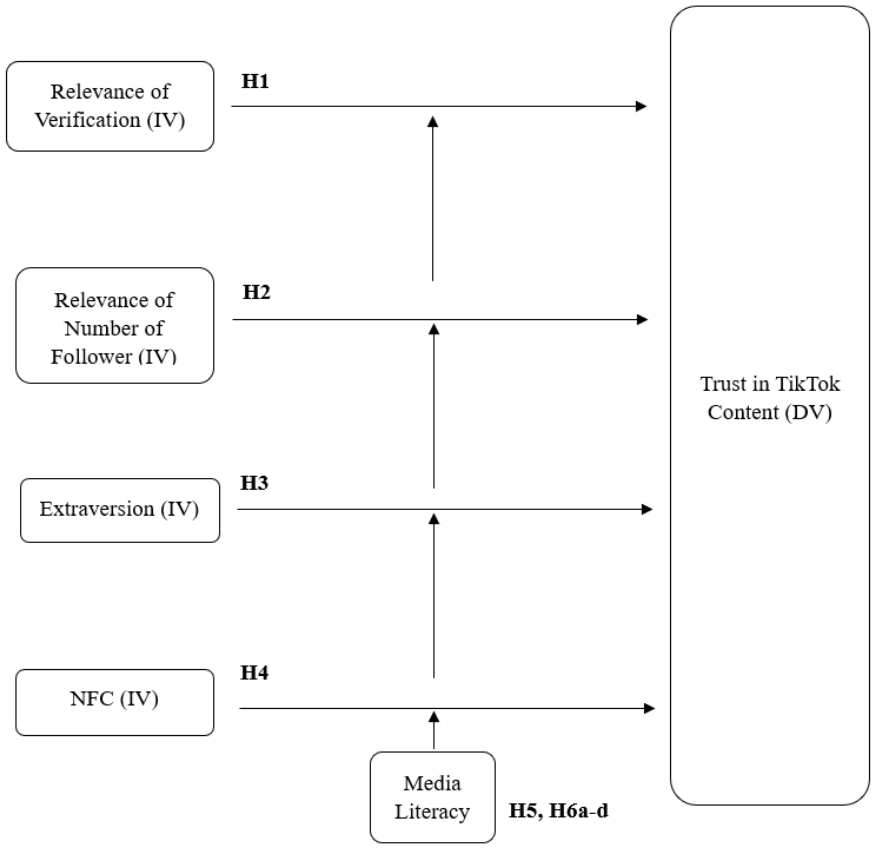
As young adults increasingly rely on information presented to them on TikTok, understanding how sender and receiver characteristics are associated with their trust in the presented content is crucial for addressing misinformation risks and enhancing media literacy programs. Next to the contribution to the academic discourse on media literacy, misinformation, and trust in TikTok content, there are also practical implications. The findings offer valuable insights for policymakers and social media platforms aiming to combat misinformation and enhance content credibility (Kohring & Matthes, 2007; Tandoc et al., 2018). This research adopts a broad, exploratory approach to TikTok content, prioritizing the understanding of fundamental associations with trust to establish foundational insights specific to the context of TikTok. Thus, this research examines the research question: "*How are sender characteristics (verification, number of followers) and receiver characteristics (need for cognition, extraversion) associated with trust in TikTok content among young adults (age 18-29), and to what extend is this relationship moderated by media literacy?".*

For this purpose, the concepts of sender and receiver characteristics, trust, and media literacy, as a possible moderator, will be introduced. The subsequent section provides a theoretical overview of these key variables, along with the proposed hypotheses. Following, there will be a description of the theoretical framework, methodology, results, and discussion of the findings.

Theoretical Framework

This theoretical framework centers on the fundamental duality of content consumption, focusing on the interplay between the content creator (sender) and the user (receiver). This duality is in line with general communication models (SMCR, Berlo, 1960). These communication models highlight that the outcome of an interaction is not solely dependent on sender or receiver characteristics but on their interplay, which is examined here. Within the context of TikTok, the sender corresponds with the creator whose characteristics, e.g., verification and number of followers, can have an impact on message processing and trust formation. This study approaches sender characteristics specifically through the lens of the user. The perceived relevance of verification and follower count is assessed and examined from the perspective of the receiver. The receiver represents the TikTok user whose personal characteristics can influence how trustworthy the content is perceived. Figure 1 depicts the theoretical model.

Figure 1 *Theoretical model*



Note. IV = independent variable; DV = dependent variable; Media Literacy = moderator variable; H1-6 = hypotheses; NFC = need for cognition

Media Trust

Media, and especially social media, are a large part of the current information and communication infrastructure. As the spread of misinformation is increasing (Bennett & Livingston, 2018), it becomes increasingly important to understand the factors playing a role in how people trust social media content. In digital environments like TikTok, where anyone can publish content, information is disseminated rapidly and algorithmically, and trust becomes harder to establish (Metzger & Flanagin, 2015). Users are confronted with rapidly growing amounts of content from creators ranging from experts to laypeople sharing information. This makes it difficult to evaluate credibility and build trust.

Trust describes the expectation of someone that information, statements, or promises of someone else are reliable (Rotter, 1967, p.651; Jackob, 2010) and plays a crucial role in the assessment of the believability of such contents (Bailey et al., 2003). Closely related to trust is the concept of media trust, which has gained significant scholarly attention as a factor shaping an individual's evaluation of information on media platforms. In recent literature, media trust is often discussed and used interchangeably with related concepts such as media credibility and trustworthiness (Strömbäck et al., 2020). An approach adopted in this research project as well. Further, media trust is frequently conceptualized as a multidimensional construct encompassing facets like credibility and reliability. Perceived credibility refers to the believability of information, regarding, e.g., quality and accuracy of the information, while reliability refers to the consistency and dependability of information from one source over time (Tsfati & Cappella, 2003; Kohring & Matthes, 2007; Fletcher & Park, 2017). This approach allows for a nuanced understanding of media trust concerning TikTok content. Tsfati and Cappella (2003) further describe media trust as being the relation between two sides: "a

trustor, the side that places trust, and a trustee, the side being trusted" (Tsfati & Cappella, 2003, p. 505). This approach is in line with the sender (as the trustee) and receiver (as the trustor) characteristics in this present study.

Sender Characteristics

Understanding how users arrive at trust judgements in the social media context is necessary when examining the duality of content consumption. According to Kohring (2019), individuals assess the trustworthiness and credibility of content based on observable cues. Therefore, two heuristics related to the sender were identified that are relevant for TikTok: verification and the number of followers. As universal cues on social media platforms, they indicate social proof and platform-endorsed credibility (Heinström, 2003; McKnight et al., 1998). Here, the Elaboration Likelihood Model (ELM; Petty et al., 1983) provides a valuable framework. This model distinguishes between two routes of information processing: the central route, where the individual thoughtfully analyses the information, and the peripheral route, which relies on superficial cues. In a fast-paced environment like TikTok, with a vast volume of content, the sender's characteristics, such as the number of followers or verification, serve as a peripheral cue. These cues cause low engagement in information processing and faster judgments as they are easily accessible (Jin & Phua, 2014). For some users, such cues might serve as a critical factor forming and influencing their trust, while others may prioritize different content characteristics, e.g., length or originality of the content (Schreiner et al., 2021). The ELM is often applied alongside the limited capacity model of mediated message processing (LC4MP; Lang, 2000). The LC4MP assumes that humans have a certain amount of cognitive capacity to process information. This cognitive capacity is allocated to the current cognitive processes a person is engaging in. Certain tasks might need more cognitive resources (e.g., using social media) than others, which can cause cognitive overload (Pittman & Haley, 2023).

Relevance of verification

The verification “badge” was introduced in 2009 on Twitter to tackle credibility and authenticity challenges (Dumas & Stough, 2022). TikTok defines it as “means that we've confirmed the account belongs to the person or brand it represents” (TikTok, n.d.). During the verification process, the platform has checked and confirmed whether the account belongs to a real person or organization. Therefore, users wanting to be verified need to upload identification, a passport, or a driver’s license (TikTok, n.d.).

As a visual cue, the verification badge can serve as a credibility heuristic, a factor that can be associated with the users’ perceptions regarding, e.g., accuracy and credibility. A credibility heuristic allows users to make quick judgements about trustworthiness (Morris et al., 2012). In 2012, Morris and colleagues conducted a survey and experimental study that focused on the social media platform Twitter and the factors influencing the credibility of Tweets. Morris et al. (2012) identified that, next to the username and the topic of the content, e.g., science or politics, verification was one feature to which most participants paid attention. Features that are visible at first glance, e.g., a verification badge, convey greater reputation and credibility (Vaidya et al., 2019). Similar to content presented on Twitter, content on TikTok provides limited information at first glance. While Twitter's predominantly text-based nature allows users to process information through various textual cues, TikTok's emphasis on short-form video content offers different cues for processing. Sender verification may exert a stronger association with trust on TikTok as visual cues are more dominant.

Liao et al. (2024) identified that verification causes people to trust content based on the trust transfer theory (Stewart, 2003). This means that the verification badge as a third-party certification has a positive impact on trust, resulting in a transfer of trust from the sender to the content (Liao et al., 2024). Even though the high relevance of verification, perceived by the user, does not indicate that the sender is trustworthy, users still place trust in the sender

and their content. The verification badge offers a predefined judgment about credibility on which users rely rather than questioning it themselves, as it is perceived to be safeguarded from a third party (McKnight et al., 1998). Given the potential of verification to impact trust judgements, this study explores whether users who place more relevance on verification also place more trust in the content they are presented with on TikTok. Thus, the following hypothesis is proposed.

H1: high relevance of verification increases the trust young adults have in content presented to them on TikTok

Number of Followers

Among various cues visible on social media platforms, the follower count of a creator often works as a reference point for users when evaluating content. Tamara and colleagues (2021) conducted a survey study that focused on the social media platform Instagram. They examined how the number of followers moderated the relationship between credibility and purchase intention. The popularity of creators, measured by the number of followers, influenced the purchase intention positively (Tamara et al., 2021). This effect also interacted with the positive effect of the verification badge. Creators who have a large following are often viewed as more popular or credible in comparison to those who have fewer followers (Tafesse & Wood, 2021; Jin & Phua, 2014). Similar to Instagram, TikTok offers great amounts of information and content, which possibly leads users to look for superficial cues on which they can base their judgements, e.g., the number of followers. This is in line with the ELM.

Users often rely on social proof and the behavior of others, which aligns with the social learning theory and the herd theory, describing how people model and follow the behavior of others (Bandura,1986; Stewart, 2003). Translated to the context of social media, this suggests that users observe engagement on social media, for instance, a creator’s follower count. Consequently, a high number of followers might be perceived as an indicator that the creator

offers valid information, as others already engage with their content (Liao et al. 2023). Building on research linking follower counts on Instagram to credibility (De Veirman et al., 2017), this study investigates whether the perceived relevance of follower count is associated higher trust in TikTok content. Therefore, the following hypothesis is proposed:

H2: high relevance of the number of followers increases the trust in content presented on TikTok

Receiver Characteristics

Next to sender characteristics, personality traits are key features that influence and define people's behaviors on social media. This also includes how the receiver evaluates information and how a person's trust in media is shaped (Barman & Conlan, 2021; Gökaliler et al., 2022). Therefore, the following two personality traits are examined.

Need for Cognition

Need for cognition (NFC) is a personality trait that describes the ability to think. It further is a desire to understand, and a driver of behavior directed toward achieving a goal (Co-hen et al., 1955, p.291). While it is not solely focused on thinking abilities, NFC also entails an individual's need to stay informed, e.g., through news engagement (Karnowski et al., 2017). This personality trait is important to gain an understanding of how people approach the information they are presented with. While prior research suggests that high NFC leads to more careful message processing and users focusing less on superficial cues (e.g., verification badge), it potentially gives insights into the evaluation of content.

Leding & Antonio (2019) focused on whether there were differences between people with low and high NFC, their ability to detect false information, and their memory recall. In their experimental research, participants were presented with ten-minute videos, and their memory recall for the (mis-)information was measured. Individuals with higher NFC were

better able to remember if they were presented with misinformation. Thus, Leding & Antonio (2019) suggest that people with high NFC can detect false information more easily. This is caused by their engagement in elaborative thinking and information monitoring (Leding & Antonio, 2019; Kozuh & Caks, 2021; Cacioppo et al., 1983). It is expected that this effect extends to TikTok, even though it can be challenging to distinguish true from false information in fast-paced environments. As rapid production and consumption are central features of TikTok, users need to be able to make quick judgments when evaluating the credibility of a creator. People who are more likely to investigate and question information presented to them make slower and more thought-through judgments on TikTok, which in turn decreases their trust in TikTok content. Therefore, the following hypothesis is proposed:

H3: high NFC decreases the trust young adults have in content presented to them on TikTok

Extraversion

The personality trait extraversion shapes social behavior (John & Srivastava, 1999). Extraverted individuals are enthusiastic, assertive, active, and confident, which is also reflected in their information-seeking behavior (Costa & McCrae, 1999; Heinström, 2003). Extraverted people seek information by focusing on fast solutions and social cues, e.g., heuristics. Their focus on social interactions, fulfilling personal identity needs, and emotions rather than accuracy makes them more prone to believe false information or misinformation (Heinström, 2003).

Sindermann and colleagues (2021) investigated how individual differences and personality traits influence the misclassification of fake and true news. They found that higher extraversion is associated with lower news discernment, as extroverted individuals tend to rely on heuristics rather than analytical processing. This inclination leads people to trust the information they encounter more easily (Ahmed & Tan, 2022; Sindermann et al., 2021).

Given its platform design that emphasizes rapid, heuristic-driven consumption, emotional engagement, and social cues, this effect likely extends to TikTok. It is important to consider that TikTok usage may not be solely focused on social interactions but also on entertainment, which could contribute to a tendency to trust information more easily as users focus on entertainment rather than the credibility of information. This study builds upon prior research primarily focused on false rumors, false information on Twitter or Instagram, and misinformation during the COVID-19 pandemic (Ahmed & Rasul, 2022), while addressing a gap by examining extraversion in the context of TikTok and its association with trust.

Extraverted individuals tend to seek sociable situations and interactions, which causes them to engage with TikTok's interactive features, e.g., posting comments and sharing content with others (Costa & McCrea, 1999; Heinström, 2003). This focus on social interactions shapes their information processing by increasing the attention to social cues rather than towards critical content evaluation. Thus, extraverted individuals rely on peripheral processing, having less cognitive capacity to question and check the credibility of claims online, which makes them more prone to believe and trust the information they are presented with. Therefore, the following hypothesis is proposed.

H4: high extraversion increases the trust young adults have in the content presented to them on TikTok

Media Literacy

Media literacy is a concept widely researched and encompasses the critical analysis of news, advertisements, and mass media entertainment (Hobbs, 2010; Rasi et al., 2021). It is a core competence for people living in today's digitalized world and entails the ability to access, analyze, and evaluate messages and contents (Aufderheide, 1993). While people with high media literacy are expected to engage in central processing of the ELM, this might not always be the processing route that is used. Particularly in fast-paced environments like TikTok,

individuals with less media literacy might rely on peripheral cues rather than their media literacy skills, due to cognitive overload (Pittman & Haley, 2023), emotional salience, or constraints presented by the environment.

Users with higher media literacy skills are better able to recognize false information, persuasive attempts, and algorithmic biases because they understand the strategies employed by platforms and content creators (Friestad & Wright, 1994). Consequently, it is expected that users with high NFC and media literacy skills are more skeptical when processing information due to their desire for understanding, motivation for critical evaluation, and knowledge about persuasive strategies (Karnowski et al., 2017). Conversely, media literacy may reduce positive associations with trust, as personal cues are undermined by critical assessment. Moreover, media-literate users might discern that the verification badge lacks significance in terms of credibility, and they understand that popularity or the number of followers does not necessarily indicate trustworthiness.

In this study, media literacy is investigated as a moderator of the association between sender characteristics, receiver characteristics, and trust in TikTok. Thus, the following hypotheses are proposed:

H5: high media literacy decreases the trust young adults have in the content presented to them on TikTok

H6a: The positive relationship between the importance of verification and trust in content presented on TikTok is weakened by media literacy

H6b: The positive relationship between the importance of the number of followers and trust in content presented on TikTok is weakened by media literacy

H6c: The negative relationship between NFC and trust in content presented on TikTok is strengthened by media literacy

H6d: The positive relation between extraversion and trust is weakened by media literacy

Methodology

Design

In order to test the hypotheses, a quantitative research approach was chosen for this study, as this allows the collection of data from a diverse and large sample. It further facilitates the examination of possible associations between the variables by applying standardized and reliable measurement scales. A cross-sectional online survey was conducted using the platform Qualtrics (Qualtrics, n.d.). This research design enables the collection of data at a single point in time, providing an insight into the associations between the measured variables.

Previous to the data collection, the researcher applied and received ethical approval from the Ethics Committee of the Faculty of Behavioral Sciences. Data was collected by using the online survey constructed with Qualtrics. Data was collected during the period from the 28th of April to the 11th of May 2025.

Participants

Participants were recruited via convenience and snowball sampling. Therefore, the researcher used their personal network to distribute an anonymous link to the survey via various social media platforms, including Instagram, Facebook, and WhatsApp. Additionally, flyers with a QR code forwarding potential participants to the survey were distributed in cafes, supermarkets, and at the university of the researcher. Further, the survey was published on the website “SurveyCircle” (SurveyCircle, n.d.). Participants were required to be between 18 and 29 years old, representing the age group that is most active on TikTok. Additional inclusion criteria were proficiency in the language of the study (English) and current use of the social media platform TikTok.

A sample of $N = 269$ participants was collected. Incomplete responses ($N = 34$), responses of participants who were either under 18 or above 29 years old ($n = 30$), responses of people who did not use TikTok ($n = 30$), and responses of participants who finished the survey in under three minutes ($n = 64$) were removed from the sample. The three-minute cutoff was based on a test participation of two independent participants, which measured the time of their participation, going through the items fast but thoroughly. These two responses were also removed. This resulted in a final sample ($N = 155$) of young adults between the ages of 18 and 29 ($M = 24.5$, $SD = 2.6$). Table 1 summarizes the characteristics of the final sample.

Table 1 *Sample characteristics for the final sample*

Sample characteristics		
	n	%
Nationality		
German	125	80.6
Dutch	10	6.5
Other	20	12.9
Gender		
Female	112	72.3
Male	40	25.8
Non-binary	3	1.9

Note. $N = 155$

Procedure

Before participating, the participants were informed about the purpose of the study, anonymity, data processing, data security, and provided informed consent in the form of active anonymous online informed consent. After agreeing to participate, participants were

first asked to answer socio-demographic questions, and proceeded with items on the different variables NFC, extraversion, relevance of verification, relevance of the number of followers, media trust, social media use, and media literacy. In case participants did not agree to participate, they were forwarded to the end of the survey. Participation was voluntary and took approximately 5-10 minutes to complete. The final survey can be found in Appendix A.

Measures

Trust

To measure media trust specifically on the social media platform TikTok, a media trust scale was used (Williams, 2012). In recent studies, media trust is measured on continuous scales, reflecting levels of trust rather than a binary distinction between trust and distrust. These measures assess self-reported attitudes towards the media. As this research focuses on the trust users have in the content presented to them on TikTok, William's (2012) media trust scale was adapted to specifically measure trust towards TikTok. Therefore, items were reformulated. The scale consists of 5 items ($\alpha = 0.77$) to which the participant either indicated agreement or disagreement on a five-point Likert scale ranging from 'strongly disagree' (1) to 'strongly agree' (5). High scores on this scale indicate high trust towards TikTok. An exemplary item is: "I trust the information that I get from TikTok."

Prior to the regression analyses, a factor analysis was conducted. The scale for trust in TikTok content indicated an acceptable reliability with a sampling adequacy (Kaiser-Meyer-Olkin measure, KMO) of .77. Bartlett's test of sphericity was significant ($\chi 2$ (10) = 217.84, $p < .001$), indicating that the data were suitable for factor analysis. Based on the Kaiser criterion and the inspection of the scree plot, it was confirmed that the scale measured one dimension of trust in TikTok content. This dimension explained 43 % of the variance. The following analyses were based on a one-factor model.

Sender Characteristics

Relevance of Verification. The relevance of verification was measured by three items (α = 0.84) using a 5-point Likert scale ranging from ‘strongly disagree’ (1) to ‘strongly agree’ (5). High scores indicate that the user perceives the verification to be of high relevance when looking at content on TikTok. All items were constructed and modified by the researcher and loosely based on and adapted from research by Morris et al. (2021) and Tamara et al. (2021) focusing on credibility of influencers. One exemplary item is: “I always check whether a creator is verified when browsing through TikTok.”

This scale was suitable for factor analysis based on the KMO (.71) and Bartlett’s test of sphericity ($\chi 2$ (3) = 192.84, $p < .001$). Factor analysis confirmed that, based on the Kaiser criterion and scree plot, the scale measured one single dimension of relevance of verification. This dimension explained 64% of the variance in all items. The following analyses were based on a one-factor model.

Relevance of the Number of Followers. The relevance of the number of followers was measured by three items (α = 0.73) using a 5-point Likert scale ranging from ‘strongly disagree’ (1) to ‘strongly agree’ (5). High scores indicate that the user perceives the number of followers as highly relevant when looking at content on TikTok. The second item (“I am more likely to engage with content where the creator has a large following.”) was adapted from Tamara et al. (2021) and modified for better understanding and to fit the measurement of relevance of the number of followers. The other two items were constructed by the researcher and modified based on research by Tamara et al. (2021). An exemplary item is: “I always check the number of followers a creator has when looking at content”.

This scale was also suitable for factor analysis based on the KMO (.60) and Bartlett's test of sphericity ($\chi 2$ (3) = 116.53, $p < .001$). Based on Kaiser's criterion, one factor was

extracted, measuring one dimension of relevance of the number of followers and explaining 51.6% of the variance in all items. The following analyses were based on a one-factor model.

Receiver characteristics

Need for Cognition. To measure the personal characteristic NFC, the shortened version of Cacioppo and Petty's (1982) NFC scale was used. Participants indicated on a 5-point Likert scale ranging from 'not too much like me' (1) or 'a lot like me' (5), whether the statements described themselves. Items 2, 4, 6, and 8 were reverse-coded in Qualtrics, so that a higher score indicates greater NFC. The scale consists of 9 items ($\alpha = 0.74$), such as: "I would prefer complex to simple problems.".

No factor analysis was conducted for this scale as it has been widely used in previous research and has not been adapted or changed for this study.

Extraversion. The extraversion subscale from the Big-Five-Inventory (BFI; John & Srivastava, 1999) was used to measure the extraversion of the participants. The whole extraversion subscale consists of 7 items ($\alpha = 0.86$), to which the participant can either indicate agreement or disagreement on a 5-point Likert scale ranging from 'strongly disagree' (1) to 'strongly agree' (5). The items 2, 4, and 6 were reverse-coded in Qualtrics, so that a higher score indicates greater extraversion. A high score on the items indicates high levels of extraversion as a personality trait. An exemplary item is: "I see myself as someone who is talkative".

No factor analysis was conducted for this scale as it has been widely used in previous research and has not been adapted or changed for this study.

Media Literacy

Media literacy is assessed by adapting a scale from Koc and Barut (2016). The scale was adapted to include only the two factors of functional and critical consumption of new media

literacy, as these factors align with the conceptualization of media literacy applied in this study. This decision was motivated by the research's focus on how individuals consume and engage with media rather than how they produce media content. By excluding the factors related to production, the scale ensures reliable measurement, and that the measurement aligns with the objectives of the study. Although this instrument measures two factors of media literacy, it is also suitable for a one-dimensional measurement (Koc & Barut, 2016), which is implemented here. The final scale included 18 items, where a total media literacy score was obtained from each participant. An example was added to item 13 for better understanding. Participants indicated either their disagreement 'strongly disagree' (1) or agreement 'strongly agree' (5) on a 5-point Likert scale. A higher score on these items indicates higher media literacy. Additionally, one item ("I can explain how users obtain a verification badge.") was added to measure specific media literacy of TikTok, taken from Dumas (2021).

Further, this scale was also suitable for factor analysis based on the KMO (.89) and Bartlett's test of sphericity ($\chi 2$ (136) = 954.03, $p < .001$). Based on the Kaiser criterion and the inspection of the scree plot, three factors were extracted, which explained 43.1% of the variance. The explained variance of the three factors was compared to the one-factor model, which explained 32% of the variance. For further analysis, the three-factor model was used, where 3 items were removed (7, 10, 13) as those items did not load above .40 on either of the three factors. For factor analysis, an oblique (Promax) rotation was used, as this is a common approach in social sciences and the theoretical framework posits related underlying constructs for media literacy. This approach improves validity and the interpretation of the results. The outcomes of the factor analysis are shown in Table 2, and Cronbach's Alpha was 0.81, 0.77, and 0.75 for critical analysis (CA), evaluation of content (EV), and operational competencies (OC), respectively.

Table 2 Results *from a Factor Analysis of the Media Literacy scale from the Questionnaire*

Items	*Loadings*		
	Factor 1	*Factor 2*	*Factor 3*
Factor 1: Critical Analysis			
5. I notice media contents containing mobbing and violence.	.404		
6. I understand political, economical and social dimensions of media contents.	.638		
8. I can distinguish different functions of media (communication, entertainment, etc.).	.633		
9. I am able to determine whether or not media contents have commercial messages.	.450		
11. I can compare news and information across different media environments.	.541		
12. I can combine media messages with my own opinions.	.848		
Factor 2: Evaluation of content			
14. It is easy for me to make decisions about the accuracy of media messages.		.516	
15. I am able to analyze positive and negative effects of media contents on individuals.		.486	
16. I can evaluate media in terms of legal and ethical rules (copyright, human rights, etc.).		.649	
17. I can assess media in terms of credibility, reliability, objectivity and currency.		.770	
18. I manage to fend myself from the risks and consequences caused by media contents.		.595	
19. I can explain how users obtain a verification badge.		.593	
Factor 3: Operational Competencies			

1. I know how to use search tools to get the information I need in the media.	.570
2. I am good at catching up with the changes in the media.	.889
3. It is easy for me to make use of various media environments to reach information.	.621
4. I realize explicit and implicit media messages.	.492

Note. $N = 155$. The extraction method was principal axis factoring with an oblique (Promax) rotation. Only factor loadings above .40 are presented in the table. Reverse-scored items are denoted with an (R).

Social Media Usage

To account for its potential association with trust and ensure a more precise examination of the main variables, the participants' social media usage is considered as a control variable. Social media usage, following also referred to as TikTok usage, defined as the frequency and intensity with which platforms like TikTok are being used, is deeply embedded in the daily life of young adults (Appel et al., 2020). Increased exposure to social media fosters greater trust in its contents through building familiarity and routines (Appel et al., 2020).

Social media usage was measured by asking the participants about the frequency of their usage of the specific social media platform TikTok by choosing one of the multiple-choice options ‘less than once a week’ (1), ‘1-2 times a week’ (2), ‘3-4 times a week’ (3), 5-6 times a week’ (4), or ‘every day’ (5; Woods & Scott, 2016). Participants were further asked to indicate their approximate TikTok use on a typical day by choosing one of the multiple-choice options ‘less than an hour’ (1), 1-2 hours’ (2), ‘2-3 hours’ (3), ‘3 hours’ (4), or ‘4 or more hours’ (5; Woods & Scott, 2016). High scores on these items indicate frequent TikTok usage.

Data Analysis

Data Preparation

Statistical analyses were conducted using the statistical program R Studio. After cleaning the data and removing missing data, the survey data were analyzed by calculating the descriptive statistics (means and standard deviations, SD) for all participants and variables. Afterwards, all continuous variables were standardized, according to z-score standardization ($M = 0$, $SD = 1$) to ensure a reliable comparison, control for inherent scale differences, and improve the interpretation of the regression analyses.

Regression and Moderation Analysis

One multiple linear regression was conducted to test the main associations of the independent variables (NFC, extraversion, relevance of verification, and relevance of number of followers) and the dependent variable (trust in TikTok content). The control variable (TikTok usage) was also added to the analysis model. For the analysis, TikTok usage only refers to the duration. Further, a moderation analysis was conducted to examine how media literacy is associated with the receiver characteristics and trust, as well as the sender characteristics and trust. This was done by applying a linear regression model with an interaction term. Before performing the different regression analyses, the four assumptions (linearity, equal variance of the residuals, independence of the residuals, and normality of the residuals) were tested to ensure that a regression analysis could be conducted. Therefore, both the multiple linear regression and linear regression with the interaction term were modeled and tested for the assumptions. This was done by plotting and examining a histogram of the residuals, a scatterplot of the residuals against the observation numbers, a scatterplot of the residuals against each variable, and a scatterplot of the residuals against the predicted values. These plots can be seen in Appendix B.

Additionally, an exploratory analysis was conducted to test a possible association between age and trust in TikTok content, given that younger users tend to exhibit more familiarity with the application due to their more extensive daily use.

Results

Descriptive Statistics

Table 3 presents an overview of the descriptive statistics of the independent, dependent, and the control variables. Participants indicated to place higher relevance on verification than on the number of followers. Individual differences revealed that participants had rather high NFC and scored moderately on extraversion. Among the three media literacy factors, participants scored highest on CA and OC. Trust towards TikTok was rather low among the participants, indicating skepticism and mixed feelings about the trustworthiness of the social media platform. TikTok usage was moderate overall, with a mean of 2.17, indicating one to two hours of usage on a typical day.

Table 3 *Descriptive Statistics for all Variables*

Variables	*M*	*SD*
Independent Variables		
Relevance of Verification	2.77	0.68
Relevance of number of followers	2.20	0.90
Extraversion	3.25	0.80
NFC	3.54	0.57
Critical Analysis	4.25	0.57
Evaluation of Content	3.63	0.68
Operational Competencies	4.2	0.58

Control Variable		
TikTok Usage [a]	2.17	1.01
Dependent Variable		
Trust	2.68	0.68

Note. N = 155. All variables were measured on a 5-point Likert scale. a) TikTok usage was measured with a multiple-choice question.

Main Associations

Multiple Linear Regression for Receiver and Sender Characteristics

A multiple linear regression analysis was conducted to test whether the receiver characteristics, extraversion, and NFC, and the sender characteristics, relevance of verification, and relevance of number of followers (independent variables) are associated with the trust a person has in TikTok content (dependent variable). No assumptions were violated for the multiple linear regression model. The plots can be seen in Appendix B.

The model explained a significant proportion of variance in the dependent variable, R^2 = .818, *adjusted* R^2 = .808, $F(8, 146) = 81.99$, $p < .001$. This indicates strong predictive power. There was a significant positive association of the relevance of verification on trust in TikTok content, $\beta = 0.911$, $SE = 0.371$, $t(146) = 24.56$, $p < 0.001$, which supports H1. This indicates that if users perceive the verification of creators as more relevant, they elicit greater trust towards TikTok content. Thus, for every increase in the perceived relevance of verification of the user, trust in TikTok content increases as well (see Figure 2). No significant results were found for the relevance of the number of followers, extraversion, NFC, and social media usage (control variable). Detailed statistics are presented in Table 4. The findings suggest that neither the relevance of the number of followers, extraversion, NFC, the three separate dimensions of media literacy, nor social media usage can be associated with trust in

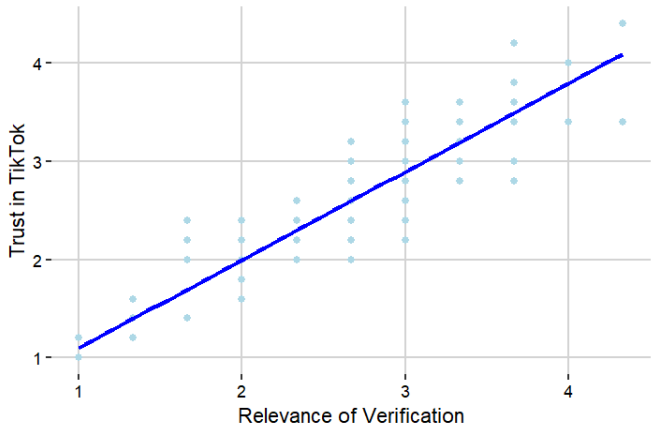
TikTok content when holding the other variables at a constant. Thus, hypotheses H 2, 3, 4 & 5 were rejected.

Table 4 *Multiple Linear Regression*

Effect	β	SE	95% CI		*p*
			LL	*UL*	
(Intercept)	-0.000	0.035	-0.069	0.069	1.000
Extraversion	-0.049	0.037	-0.122	0.024	0.183
NFC	0.012	0.038	-0.062	0.086	0.750
Relevance of Verification	0.911	0.037	0.838	0.984	< 0.001 ***
Relevance of number of followers	-0.009	0.037	-0.083	0.064	0.800
Critical Analysis	0.025	0.051	-0.125	0.075	0.624
Evaluation of Content	0.025	0.043	-0.060	0.110	0.564
Operational Competencies	0.015	0.045	-0.073	0.104	0.736
TikTok Usage	0.039	0.036	-0.032	0.111	0.280

Note. $N = 155$. β = standardized coefficient; CI = confidence interval; *LL* = lower limit; *UL* = upper limit; * indicated p< .05, ** indicates p< .01, ***indicates p<.001

Figure 2 V*isualization of the relation between the Relevance of Verification and Trust in TikTok content*



Linear Regression for the Moderation effect of Media literacy

The linear regression analysis was conducted to test whether the associations between extraversion, NFC, relevance of verification, relevance of number of followers (independent variables), social media usage (control variable) and trust (dependent variable) were moderated by the three factors of media literacy, CA, EV, and OC. No assumptions were violated for the following linear regression analyses with an interaction term (see Appendix B). The model explained a significant proportion of variance in trust, $R^2 = .833$, adjusted $R^2 = .804$, $F(23, 131) = 28.4$, $p < .001$.

The results of the regression model can be found in Table 5. No significant interaction effects were found for any of the independent variables. Consequently, all hypotheses (H6a-d) were rejected. This indicates that the three dimensions of media literacy did not strengthen the negative association between NFC and trust. Furthermore, neither the associations between extraversion, the relevance of verification, the relevance of the number of followers, and trust were weakened by the three dimensions of media literacy. The association among NFC, extraversion, verification, followers, and trust does not significantly change based on an individual's level of media literacy. Thus, none of the three identified dimensions of media literacy had a moderating role.

Table 5 *Multiple linear regression with interaction term results*

Effect	β	SE	95% CI		*p*
			LL	*UL*	
(Intercept)	-0.309	0.399	-0.110	0.048	0.440
Extraversion	-0.059	0.038	-0.136	0.018	0.133
Critical Analysis	-0.038	0.058	-0.153	0.077	0.516
Evaluation of Content	0.032	0.048	-0.062	0.127	0.500

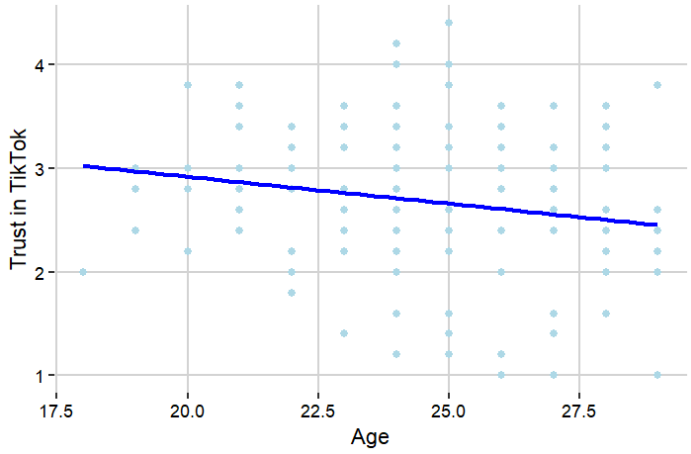
Operational Competencies	0.053	0.053	-0.521	0.159	0.319
NFC	-0.005	0.041	-0.087	0.076	0.893
Relevance of verification	0.911	0.040	0.832	0.991	< 0.001 ***
Relevance of the number of followers	-0.027	0.039	-0.106	0.051	0.489
TikTok Usage	0.034	0.041	-0.048	0.116	0.420
Extraversion*CA	0.023	0.052	-0.080	0.127	0.656
Extraversion*EV	-0.029	0.054	-0.136	0.776	0.589
Extraversion*OC	-0.015	0.051	-0.117	0.085	0.759
NFC*CA	0.049	0.067	-0.084	0.184	0.465
NFC*EV	-0.080	0.049	-0.177	0.016	0.104
NFC*OC	0.038	0.058	-0.076	0.153	0.509
Relevance of Verification*CA	0.007	0.055	-0.101	0.117	0.886
Relevance of Verification*EV	0.003	0.049	-0.094	0.100	0.957
Relevance of Verification*OC	0.021	0.039	-0.057	0.099	0.591
Relevance of number of followers*CA	0.019	0.050	-0.080	0.119	0.699
Relevance of number of followers*EV	0.002	0.042	-0.081	0.086	0.956
Relevance of the number of followers*OC	-0.082	0.048	-0.177	0.013	0.089
TikTok usage*CA	0.024	0.058	-0.090	0.139	0.676
TikTok usage*EV	-0.015	0.055	-0.124	0.094	0.785
TikTok usage*OC	0.063	0.046	-0.029	0.156	0.175

Note. $N = 155$. β = standardized coefficient; CI = confidence interval; *LL* = lower limit; *UL* = upper limit; media literacy factors: CA = critical analysis, EV = evaluation of content, OC = operational competencies; * indicated p< .05, ** indicates p< .01, ***indicates p<.001

Exploratory Analyses

Further, a simple linear regression was conducted to examine the association of age and trust in TikTok content. The model explained a small but significant proportion of variance in trust ($R^2 = .0389$, $F(1, 153) = 6.202$, $p = .013$). A significant negative association between age and trust was identified ($\beta = -0.05$, $p = .014$), indicating that older participants reported slightly lower trust, as seen in Figure 3.

Figure 3 *Simple linear regression Age and Trust*



Discussion

This study examined how sender characteristics (relevance of verification and follower count) and receiver characteristics (extraversion, NFC) are associated with trust in TikTok content, and explored media literacy as a moderating factor. No significant associations were found for the receiver characteristics, and only one significant association was found for the sender characteristics, specifically for the relevance of verification. The ELM (Petty et al., 1986) and the LC4MP (Lang, 2000 & Pittman & Haley, 2023) offer insights into possible explanations of trust formation in algorithm-driven platforms like TikTok.

Sender Characteristics and Trust

Firstly, it was investigated whether sender characteristics, such as the relevance of verification and the number of followers, were associated with trust in TikTok content. While the findings regarding verification showed a significant positive association with trust, the relevance of the number of followers did not significantly correlate with trust.

One possible explanation for the significant positive association is that the environmental design of TikTok increases the user's dependency on cues like the verification badge as a primary signal for trustworthiness and as a platform-endorsed credibility check (Morris et al., 2012). TikTok's fast-paced and visual design seems to amplify the association of verification and trust in content. This aligns with the assumption that users engage in peripheral processing described by the ELM (Petty et al., 1986). Thus, users base their judgements on the verification badge, compensating for the increased cognitive load that they experience when using social media and processing information on the peripheral route (Lang, 2000; Petty et al., 1986). Verification, as a credibility cue, might then outweigh the relevance of the number of followers in evaluating the trustworthiness of a sender.

Similar reasoning might suffice to explain that the relevance of the number of followers was not associated with trust. While previous research examined and linked follower counts to popularity, trustworthiness, and credibility heuristics of senders on Instagram and Twitter (Tamara et al., 2021; Jin & Phua, 2014; Morris et al., 2012), this effect was not replicated for TikTok in the current study. As this sender metric is not directly displayed on the content at first sight, users might be less encouraged to check this metric when browsing through TikTok. Users need to continue to click on the profile to check the number of followers and proceed to make a judgment about credibility, which would disrupt their endless scrolling (Lora et al., 2024; Rixen et al., 2023). However, without direct

observational data of user behavior, this remains a plausible interpretation and raises the question of whether follower count can be acknowledged as a key heuristic on TikTok.

Receiver Characteristics and Trust

Secondly, it was investigated whether personal characteristics of the user were associated with their trust in TikTok content. No significant association of receiver characteristics and trust was found. This suggests that sender characteristics might be more closely related to trust than receiver characteristics.

Against the expectation that high-NFC users have lower trust in TikTok content, the findings show no significant association. One possible explanation could be that people with higher NFC might not use social media to satisfy their cognitive needs and their drive to understand information (Abbasi et al., 2025). This is in line with the uses and gratifications theory (Katz et al., 1974), which suggests that audiences are goal-oriented when consuming media. Individuals actively choose specific media to satisfy particular needs. As an example, a person might use social media to seek information or choose to engage in it for entertainment purposes. Consequently, when using TikTok, young adults potentially prioritize entertainment over searching for information or social interactions, independent of their NFC or extraversion level, respectively. This might decrease the relevance of credibility or social cues that could be utilized to evaluate the trustworthiness of content. In line with the uses and gratifications theory (Katz et al., 1974), extraverted people might engage with TikTok to specifically fulfill their entertainment needs as well as their social needs (Bowden-Green et al., 2020). Osatuyi & Dennis (2025) found that extraverted people were more likely to share fake news as their social motivation might supersede their need to believe in content. When using TikTok, their motivation to fulfill their social needs might override their need to trust. This might explain why no significant association between extraversion and trust was found.

Additionally, theories on cognitive capacities suggest that when a user is in a state of cognitive fatigue, even high NFC users default to using social media for entertainment purposes. Users then engage in endless scrolling to not engage in further activities that require cognitive capacities (Abbasi et al., 2025). Endless scrolling describes the behavior of users browsing through social media for lengthy periods without a goal in mind, which might encourage a less thorough evaluation and decreased questioning of information (Lora et al., 2024; Rixen et al., 2023). As TikTok is designed to engage users in endless scrolling, the association between personality factors like NFC or extraversion and trust might be decreased. This might indicate that there are other possible factors influencing trust. More research is needed to explore the possibility of other personality traits or prior experience with misinformation that are associated with trust formation on TikTok.

An additional finding was the correlation between age and trust, suggesting that younger users trust TikTok more. Younger users possibly have a familiarity with the app, environment, and the algorithm, as they are exposed to social media from a young age and consume less traditional media, e.g., newspapers (Vázquez-Herrero et al., 2022).

It is important to consider alternative factors beyond the direct sender and receiver characteristics that could have been associated with trust and impacted the associations examined in the current research. The type or niche of content consumed on TikTok might act as a third variable. For instance, the relevance of a verification badge might differ significantly between a verified news source and a verified entertainment creator due to the values and expectations that the user holds towards the content. Similarly, TikTok's algorithm may prioritize verified content, which could enhance the perceived trustworthiness of this content. Lastly, research would benefit from investigating the intentions of using TikTok to gain an understanding of the needs users aim to fulfill.

Media Literacy and Trust

No support was found for the expectation that high media literacy would be significantly associated with decreased trust in TikTok content. The same reasoning as for the sender and receiver characteristics can be applied here. Limited cognitive capacity may lead media-literate users to process information peripherally, decreasing the impact of initial media literacy skills and grounding their judgments on visual, pre-defined cues (Petty et al., 1986; Lang, 2000; Pittman & Haley, 2023).

The findings show a dissonance between users' self-reported media literacy, stating that they are able to evaluate content, and their actual behavior, which indicates trusting content based on heuristics. Here, similar reasoning can suffice as for NFC by referring to the uses and gratifications theory (Katz et al., 1974). When the user's goal is to receive information on a topic, media-literate individuals possibly examine the content and its sources in more depth compared to when they intend to use social media for entertainment. Here, political orientation or interest could be examined as possible moderators or factors involved in the correlations, potentially also being associated with trust and perceived trustworthiness (Fawzi et al., 2021; Ruak, 2023; Lan & Tung, 2024).

Contrary to the initial expectation that extensive exposure to social media cultivates critical assessment and media literacy skills, media literacy was not associated with trust and did not moderate any associations. One possible explanation for the current findings could be that the normalization of receiving information via social media does not lead to critical evaluation of content (Appel et al., 2020). This may result from passive engagement in social media and low-effort processing, both of which are reinforced by algorithmically driven feeds (Pennycook & Rand, 2021).

Practical and Theoretical Implications

Even though not all initial expectations regarding the association between the sender, receiver characteristics, and trust in TikTok content were supported, this study provided

theoretical and practical implications. The findings highlight the need for increased critical evaluation on social media platforms by demonstrating users' primary reliance on superficial cues, specifically the verification badge. The gained insights will likely inform platform design, policymakers, and educators.

In order to combat misinformation on social media platforms, policymakers and the platforms themselves are obligated to provide a transparent definition of verification and clearly state the criteria for obtaining a verification badge. As verification badges are often used as a heuristic cue for trust evaluations on TikTok, it is crucial to educate users not only about the process of receiving a verification badge but also that the badge only authenticates the owner of the account and does not imply that the presented information has been fact-checked. This can be done by implementing pop-ups that explain the function of the verification badge or by implementing an information block in the settings section. Therefore, prior to implementation, policymakers need to set clear guidelines for receiving a verification badge, such as who is eligible. Clear guidelines would then inform the possible implementation of a statement for each verified user stating the reason for their verification. This could possibly help users to critically evaluate whether they take the verification badge into account when judging the trustworthiness of a creator.

As the reliance on heuristics was displayed in the findings of this research, it is important to shift the focus from assessing heuristics that seemingly indicate credibility to encourage more critical evaluation of content to combat misinformation spread. To support users to navigate through the vast amount of content and thoroughly evaluate content to decrease the impact of misinformation, platforms should integrate prompts and notifications such as "Take a minute and think about the content you just saw," or "Before sharing, ask yourself: Is this information true? Do I know where the information comes from?". These would instigate users to rethink their judgments or evaluate the following content more

critically. Similar interventions and prompts could be used to address cognitive overload. Notifications like “You have been scrolling for a while, maybe take a break,” or “You have been scrolling for a while, are you still actively looking for specific content or information?” would break the endless scrolling cycle and encourage more conscious usage of social media. This could potentially lead to a more critical assessment of content and not believing misinformation. Additionally, educational programs on media literacy skills should focus on understanding how platform design, algorithms, and the presentation of content can relate to perceptions of information. This deepened understanding encourages and enables users to re-evaluate credibility and assess content more critically.

The findings further inform the adaptation of the theories applied here. Firstly, media literacy frameworks need to consider the unique environmental factors that might constrain users from making use of their media literacy skills. It further should account for the fast-paced nature of TikTok, which might be associated with the likelihood of users making a deliberate decision to either apply or not apply their media literacy skills. Regarding the ELM, it should be recognized that when processing information in social media environments, the processing routes might be unique due to the constraints and opportunities in social media, e.g., examining the number of followers might cause processing via the peripheral route but within the environment more cognitive capacity is needed to investigate this metric. The model should recognize that not all heuristics (e.g., verification and number of followers) have an equally strong effect, as their visibility and accessibility within the platform might play a role.

Limitations and Future Research

While this study revealed an important association between TikTok's feature of verification and trust judgements, more research is needed to better understand how receiver and sender characteristics, media literacy, and trust correlate in social media environments, as

the current data cannot establish causal relationships. The data reveals how the elected variables are associated within the measured context. The focus of this study, to examine receiver and sender characteristics, was motivated by prior ELM and LC4MP research, which highlights its importance in social media environments. However, its limitations also suggest directions for future research.

First of all, the sample was not randomized and focused mainly on the German population, which decreases the generalizability of the findings. A more nationally diverse sample should be examined in the future, as this might unveil cultural differences in TikTok use and how trust is perceived and established online.

Another limitation of this study is that it relied on self-reported questionnaire data, which efficiently captures users' perceptions and enables the first inspection of the relationships between sender, receiver, and trust, but may be influenced by social desirability biases. This could limit the validity of the data and the correlations between reported and actual behavior. To examine which factors users focus on when judging the trustworthiness of a sender, future studies should focus on the factors applied here by conducting a behavioral experiment. A behavioral experiment could mimic real-life social media habits as well as identify which heuristics users look at when scrolling through, e.g., TikTok. While the present study offers first insights into the effect of verification on trust, behavioral experiments and data could unveil whether other factors, e.g., emotional arousal of content, likes, comments, or personal characteristics of the sender, have an impact on how people trust content. An experimental research design would further contribute to the scientific discourse on trust in social media environments and combat misinformation. Using a behavioral experiment, attitude-behavior gaps, along with media literacy's impact on platforms that focus on visual content, could be investigated. Via eye-tracking studies, this could identify which visual

elements are considered for evaluation and are connected to media literacy skills in social media environments.

Additionally, no attention check was applied during the survey. Embedding an element like this within the survey would ensure that participants do not rush through the survey and answer the items thoroughly. Future research would benefit from introducing an attention check to improve the reliability of the answers. Future research should also investigate whether trust development differs between social media platforms, e.g., comparing TikTok to Instagram. This would enable the identification of possible key differences, the specific aspects that are associated with how users trust content, along with how the platform design moderates the impact of media literacy.

Conclusion

This study aimed to address the research question: "*How are sender characteristics (verification, number of followers) and receiver characteristics (need for cognition, extraversion) associated with trust in TikTok content among young adults (age 18-29), and to what extend is this relationship moderated by media literacy?".* Even though no evidence was found that receiver characteristics were associated with trust in TikTok content, this research contributed to the current discourse of misinformation and trustworthiness in digital media by identifying that the sender characteristic, relevance of verification, was associated with the perceived trustworthiness of TikTok content.

The findings imply that within TikTok's environment, trust in content and creators is less associated with the user's characteristics and more with the interface design and heuristics. This may be due to the environment not facilitating systematic processing, owing to its algorithmic entertainment, which induces a high cognitive load. Thereby, a challenge in combating misinformation is posed for policymakers, platform designers, and educators, as users place greater trust in default cues rather than considering source information.

Reference List

Abbasi, P. N., Gillani, S. A., & Rashid, A. (2025). From Perceived Ostracism to Mental Exhaustion: Illuminating the Link of Doomscrolling and Digital Detox. *Pakistan Social Sciences Review*, *9*(1), 575-591. DOI: https://doi.org/10.35484/pssr.2025(9-I)45

Abdullahi, M., & Mohammed, I. (2024, July). Perceived Credibility of Social Media Verified Accounts Feature of Facebook amongst Nigerian Academics. In *PROCEEDINGS*. Retrieved on 25.03.2025 from: Perceived Credibility of Social Media Verified Accounts Feature of Facebook amongst Nigerian Academics | PROCEEDINGS

Ahmed, S., & Tan, H. W. (2022). Personality and perspicacity: Role of personality traits and cognitive ability in political misinformation discernment and sharing behavior. *Personality and Individual Differences*, *196*, 111747. https://doi.org/10.1016/j.paid.2022.111747

Ahmed, S., & Rasul, M. E. (2022). Social Media News Use and COVID-19 Misinformation Engagement: Survey Study. *Journal of Medical Internet Research*, *24*(9), e38944. https://doi.org/10.2196/38944

Appel, G., Grewal, L., Hadi, R. *et al.* The future of social media in marketing. *J. of the Acad. Mark. Sci.* **48**, 79–95 (2020). DOI: https://doi.org/10.1007/s11747-019-00695-1

Aufderheide, P. (1993). Conference Report, National Leadership Conference On Media Literacy, Washington, DC: Aspen Institute.

Bailey, B. P., Gurak, L. J., & Konstan, J. A. (2003). Trust in cyberspace. *Human factors and Web development*, 311-21. Retrieved on 15.04.2025 from: Microsoft Word - bailey-lea-trust.doc

Bandura, A. (1986). Social foundations of thought and action. *Englewood Cliffs, NJ*, *1986*(23 28), 2. Retrieved on 22.06.2025 from: The Health Psychology Reader - Google Books

Barman, D., & Conlan, O. (2021, August). Exploring the links between personality traits and susceptibility to disinformation. In *Proceedings of the 32nd ACM Conference on Hypertext and Social Media* (pp. 291-294). DOI: https://doi.org/10.1145/3465336.3475121

Bennett, W. L., & Livingston, S. (2018). The disinformation order: Disruptive communication and the decline of democratic institutions. *European Journal of Communication*, *33*(2), 122-139. DOI: https://doi.org/10.1177/0267323118760317

Berlo, D. K. (1960). The process of communication: An introduction to theory and practice. *Holt, Rinehart and Wiston*.

Blandi, L., Sabbatucci, M., Dallagiacoma, G., Alberti, F., Bertuccio, P., & Odone, A. (2022). Digital information approach through social media among Gen Z and Millennials: The global scenario during the COVID-19 pandemic. *Vaccines*, *10*(11), 1822. DOI: https://doi.org/10.3390/vaccines10111822

Bowden-Green, T., Hinds, J., & Joinson, A. (2020). How is extraversion related to social media use? A literature review. *Personality and Individual Differences*, *164*, 110040. DOI: https://doi.org/10.1016/j.paid.2020.110040

Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. *Journal of personality and social psychology*, *42*(1), 116. DOI: https://dx.doi.org/10.1037/0022-3514.42.1.116

Cacioppo, J. T., Petty, R. E., & Morris, K. J. (1983). Effects of need for cognition on message evaluation, recall, and persuasion. *Journal of Personality and Social Psychology, 45*(4), 805–818. https://doi.org/10.1037/0022-3514.45.4.805

Chen, X. (2024). Misinformation and Personality: Big-5 Trait Related to Misinformation Believing and Sharing. *Communications in Humanities Research*, *47*, 25-29. DOI: https://doi.org/10.54254/2753-7064/47/20242385

Cohen, A. R., Scotland, E., & Wolfe, D. M. (1955). An experimental investigation of need for cognition. Journal of Abnormal and Social Psychology, 51, 291–294. DOI: https://dx.doi.org/10.1037/h0042761

Costa, P. T., & McCrae, R. R. (1999). A five-factor theory of personality. *Handbook of personality: Theory and research*, *2*(01), 1999. Retrieved on 15.04.2025 from: researchgate.net/profile/Paul-Costa/publication/247880369_The_five_factor_model_of_personality_Theoretical_Perspective/links/54ebec200cf2ff89649ed02f/The-five-factor-model-of-personality-Theoretical-Perspective.pdf

Danner, D., Rammstedt, B., Bluemke, M., Treiber, L., Berres, S., Soto, C., & John, O. (2016). Die deutsche Version des Big Five Inventory 2 (BFI-2). Zusammenstellung sozialwissenschaftlicher Items und Skalen. DOI: 10.6102/zis247

De Veirman, M., Cauberghe, V., & Hudders, L. (2017). Marketing through Instagram influencers: the impact of number of followers and product divergence on brand attitude. *International Journal of Advertising*, *36*(5), 798–828. https://doi.org/10.1080/02650487.2017.1348035

Dumas, J. (2021). The importance of a checkmark: an investigation into the perceptions of social media verification and its effects on consumer trust. Retrieved from: The Importance of a Checkmark: An Investigation Into the Perceptions of Social Media Verification and Its Effects on Consumer Trust

Dumas, J. E., & Stough, R. A. (2022). When influencers are not very influential: The negative effects of social media verification. *Journal of Consumer Behaviour*, *21*(3), 614-624. https://doi.org/10.1002/cb.2039

Ekström, E., & Eriksson, F. (2024). Building Trust in the Digital Age: Key Concepts Influencing Consumer Trust in User-Generated Content. DOI: Retrieved on ?? from: https://www.diva-portal.org/smash/get/diva2:1894772/FULLTEXT01.pdf

Fawzi, N., Steindl, N., Obermaier, M., Prochazka, F., Arlt, D., Blöbaum, B., ... & Ziegele, M. (2021). Concepts, causes and consequences of trust in news media–a literature review and framework. *Annals of the International Communication Association*, *45*(2), 154 -174. DOI: https://doi.org/10.1080/23808985.2021.1960181

Fletcher, R., & Park, S. (2017). The impact of trust in the news media on online news consumption and participation. *Digital journalism*, *5*(10), 1281-1299. DOI: https://doi.org/10.1080/21670811.2017.1279979

Friestad, M., & Wright, P. (1994). The persuasion knowledge model: How people cope with persuasion attempts. *Journal of consumer research*, *21*(1), 1-31. DOI: https://doi.org/10.1086/209380

Furinto, A., Tamara, D., Maradona, C., & Gunawan, H. (2023). How TikTok and Its relationship with narcissism and bandwagon effect influenced conspicuous consumption among Gen Y and Gen Z. In *E3S Web of Conferences* (Vol. 426, p. 01101). EDP Sciences. DOI: https://doi.org/10.1051/e3sconf/202342601101

Gökaliler, E., Alikılıç, Ö., & Alikılıç, İ. (2022). Trust and Media: Reflection of the Big Five Factor Personality Traits on COVID-19 Pandemic Communication. *Türkiye İletişim Araştırmaları Dergisi*, (40), 64-81. DOI: https://doi.org/10.17829/turcom.1050601

Hallaq, T. G. (2013). *Evaluating online media literacy in higher education: Validity and reliability of the digital online media literacy assessment (DOMLA)*. Idaho State University. Retrieved on 23.03.2025 from: *Evaluating Online Media Literacy in Higher Education: Validity and Reliability of the Digital Online Media Literacy Assessment (DOMLA)

İnan, T., & Temur, T. (2017). Examining media literacy levels of prospective teachers. *International Electronic Journal of Elementary Education*, *4*(2), 269–285. Retrieved on 10.04.2025 fromhttps://www.iejee.com/index.php/IEJEE/article/view/199

Heinström, J. (2003). Five personality dimensions and their influence on information behaviour. *Information research*, *9*(1), 9-1. Retrieved on 15.04.2025 from: Five personality dimensions and their influence on information behaviour

Hobbs, R. (2010). Digital and media literacy: A plan of action (A white paper on the digital and media literacy recommendations of the Knight Commission on the Information Needs of Communities in a Democracy). The Aspen Institute, Communications and Society Program. https://files.eric.ed.gov/fulltext/ED523244.pdf

Jackob, N. G. E. (2010). No alternatives? The relationship between perceived media dependency, use of alternative information sources, and general trust in mass media. *International Journal of Communication*, *4*, 18. DOI: 1932–8036/20100589

Jin, S. A. A., & Phua, J. (2014). Following Celebrities' Tweets About Brands: The Impact of Twitter-Based Electronic Word-of-Mouth on Consumers' Source Credibility Perception, Buying Intention, and Social Identification With Celebrities. *Journal of Advertising*, *43*(2), 181–195. https://doi.org/10.1080/00913367.2013.827606

John, O. P., & Srivastava, S. (1999). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. Retrieved on 25.04.2025 from : john.pdf

Jones-Jang, S. M., Mortensen, T., & Liu, J. (2021). Does media literacy help identification of fake news? Information literacy helps, but other literacies don't. *American behavioral scientist*, *65*(2), 371-388. DOI: https://us.sagepub.com/en-us/journals-permissions

Karnowski, V., Kümpel, A. S., Leonhard, L., & Leiner, D. J. (2017). From incidental news exposure to news engagement. How perceptions of the news post and news usage

patterns influence engagement with news articles encountered on Facebook. *Computers in Human Behavior*, *76*, 42-50. DOI: https://doi.org/10.1016/j.chb.2017.06.041

Katz, E., Blumler, J. G., & Gurevitch, M. (1973-1974). Uses and gratifications research. *Public Opinion Quarterly, 37*(4), 509–523. DOI: https://doi.org/10.1086/268109

Klug, D., Qin, Y., Evans, M., & Kaufman, G. (2021, June). Trick and please. A mixed-method study on user assumptions about the TikTok algorithm. In *Proceedings of the 13th ACM web science conference 2021* (pp. 84-92). DOI: https://doi.org/10.1145/3447535.3462512

Kohring, M. (2019). Public trust in news media. *The international encyclopedia of journalism studies*, 1-6. DOI: https://doi.org/10.1002/9781118841570.iejs0056

Kohring, M., & Matthes, J. (2007). Trust in News Media: Development and Validation of a Multidimensional Scale. *Communication Research*, *34*(2), 231-252. DOI: https://doi.org/10.1177/0093650206298071

Koc, M., & Barut, E. (2016). Development and validation of New Media Literacy Scale (NMLS) for university students. *Computers in Human Behavior*, *63*, 834-843. DOI: https://doi.org/10.1016/j.chb.2016.06.035

Kožuh, I., & Čakš, P. (2021). Explaining news trust in social media news during the COVID -19 pandemic—The role of a need for cognition and news engagement. *International Journal of Environmental Research and Public Health*, *18*(24), 12986. DOI: https://doi.org/10.3390/ijerph182412986

Lai, K., Xiong, X., Jiang, X., Sun, M., & He, L. (2020). Who falls for rumor? Influence of personality traits on false rumor belief. *Personality and Individual Differences*, *152*, 109520. https://doi.org/10.1016/j.paid.2019.109520

Lan, D. H., & Tung, T. M. (2024). Exploring fake news awareness and trust in the age of social media among university student TikTok users. *Cogent Social Sciences*, *10*(1). DOI: https://doi.org/10.1080/23311886.2024.2302216

Lang, A. (2000). The limited capacity model of mediated message processing. *Journal of communication*, *50*(1), 46-70. DOI: https://doi-org.ezproxy2.utwente.nl/10.1111/j.1460-2466.2000.tb02833.x

Leding, J. K., & Antonio, L. (2019). Need for cognition and discrepancy detection in the misinformation effect. *Journal of Cognitive Psychology*, *31*(4), 409-415. https://doi.org/10.1080/20445911.2019.1626400

Liao, C. H., Hsieh, J.-K., & Kumar, S. (2023). Does the verified badge of social media matter? The perspective of trust transfer theory. *Journal of Research in Interactive Marketing*. https://doi.org/10.1108/jrim-10-2023-0339

Lora, S. K., Purba, S. A., Hossain, B., Oriana, T., Seum, A., & Sharmin, S. (2024). Infinite Scrolling, Finite Satisfaction: Exploring User Behavior and Satisfaction on Social Media in Bangladesh. DOI: *https://doi.org/10.48550/arXiv.2408.09601*

McKnight, D. H., Cummings, L. L., & Chervany, N. L. (1998). Initial Trust Formation in New Organizational Relationships. *Academy of Management Review*, *23*(3), 473-490. https://doi.org/10.5465/amr.1998.926622

Metzger, M. J., & Flanagin, A. J. (2013). Credibility and trust of information in online environments: The use of cognitive heuristics. *Journal of pragmatics*, *59*, 210-220. DOI: https://doi.org/10.1016/j.pragma.2013.07.012

Miltsov, A. (2022). Researching TikTok: Themes, methods, and future directions. Retrieved from: Researching-TikTok-Themes-Methods-and-Future-Directions.pdf

Montag, C., Yang, H., & Elhai, J. D. (2021). On the psychology of TikTok use: A first glimpse from empirical findings. *Frontiers in public health*, *9*, 641673. DOI: https://doi.org/10.3389/fpubh.2021.641673

Morris, M. R., Counts, S., Roseway, A., Hoff, A., & Schwarz, J. (2012, February). Tweeting is believing? Understanding microblog credibility perceptions. In *Proceedings of the ACM 2012 conference on computer supported cooperative work* (pp. 441-450). DOI: https://doi.org/10.1145/2145204.2145274

Muhammed T, S., Mathew, S.K. The disaster of misinformation: a review of research in social media. *Int J Data Sci Anal* **13**, 271–285 (2022).
DOI: https://doi.org/10.1007/s41060-022-00311-6

Muhammad, R. F., & Kasahara, S. (2024). Agent-based simulation of fake news dissemination: the role of trust assessment and big five personality traits on news spreading. *Social Network Analysis and Mining*, *14*(1), 75.
DOI: https://doi.org/10.1007/s13278-024-01235-8

O'Day, E. B., & Heimberg, R. G. (2021). Social media use, social anxiety, and loneliness: A systematic review. *Computers in Human Behavior Reports*, *3*, 100070. DOI: https://doi.org/10.1016/j.chbr.2021.100070

Osatuyi, B., & Dennis, A. R. (2025). The Role of Personality in Fake News Sharing on Social Media: Reducing Extraverts' Proclivity to Share Fake News. *Information Systems Frontiers*. DOI: https://doi.org/10.1007/s10796-025-10613-2

Pavlou, P. A., & Gefen, D. (2004). Building effective online marketplaces with institution-based trust. *Information systems research*, *15*(1), 37-59. DOI: 10.1287/isre.1040.001

Petty, R. E., Cacioppo, J. T., Petty, R. E., & Cacioppo, J. T. (1986). *The elaboration likelihood model of persuasion* (pp. 1-24). Springer New York. DOI: doi:10.1016/S0065-2601(08)60214-2

Pennycook, G., & Rand, D. G. (2021). The Psychology of Fake News. *Trends in Cognitive Sciences*, *25*(5), 388-402. https://doi.org/10.1016/j.tics.2021.02.007

Pittman, M., & Abell, A. (2022). More Trust in Fewer Followers: Diverging Effects of Popularity Metrics and Green Orientation Social Media Influencers. *Journal of Interactive Marketing*, *56*(1), 70-82. DOI: https://doi.org/10.1016/j.intmar.2021.05.002

Pittman, M., & Haley, E. (2022). Cognitive Load and Social Media Advertising. *Journal of Interactive Advertising*, *23*(1), 33–54. DOI: https://doi.org/10.1080/15252019.2022.2144780

Rasi, P., Vuojärvi, H., & Ruokamo, H. (2019). Editorial. Media education for all ages. Journal of Media Literacy Education, 11(2), 1–19. https://digitalcommons.uri.edu/jmle/vol11/iss2/1

Rixen, J. O., Meinhardt, L.-M., Glöckler, M., Ziegenbein, M.-L., Schlothauer, A., Colley, M., Rukzio, E., & Gugenheimer, J. (2023). The Loop and Reasons to Break It: Investigating Infinite Scrolling Behaviour in Social Media Applications and Reasons to Stop. *Proceedings of the ACM on Human-Computer Interaction*, *7*(MHCI), 1-22. DOI: https://doi.org/10.1145/3604275

Rotter, J. B. (1967). A new scale for the measurement of interpersonal trust. Journal of Personality, 35(4), 651–665. DOI: https://psycnet.apa.org/doi/10.1111/j.1467-6494.1967.tb01454.x

Ruak, F. (2023). The Impact of TikTok on Combating and Filtering Hoax News: A Mixed Methods Study. *Kampret Journal*, *3*(1), 22-32. Retrieved on 12.04.2025 from: 8638fd2d6fa7e45c8aef4d445cea65c9dc6a.pdf

Sindermann, C., Schmitt, H. S., Rozgonjuk, D., Elhai, J. D., & Montag, C. (2021). The evaluation of fake and true news: on the role of intelligence, personality, interpersonal trust, ideological attitudes, and news consumption. *Heliyon*, *7*(3). DOI: https://doi.org/10.1016/j.heliyon.2021.e06503

Schreiner, M., Fischer, T. & Riedl, R. Impact of content characteristics and emotion on behavioral engagement in social media: literature review and research agenda. *Electron Commer Res* **21**, 329–345 (2021). DOI: https://doi.org/10.1007/s10660-019-09353-8

Statista. (Year, Month Day). *TikTok - statistics & facts*. Retrieved April 22, 2025, from https://www.statista.com/topics/6074/tiktok/

Stewart, K.J. (2003), "Trust transfer on the world wide web", Organization Science, Vol. 14 No. 1, pp. 5-17. DOI: https://doi.org/10.1287/orsc.14.1.5.12810

Strömbäck, J., Tsfati, Y., Boomgaarden, H., Damstra, A., Lindgren, E., Vliegenthart, R., & Lindholm, T. (2020). News media trust and its impact on media use: toward a framework for future research. *Annals of the International Communication Association*, *44*(2), 139-156. https://doi.org/10.1080/23808985.2020.1755338

SurveyCircle. (n.d.). *SurveyCircle – Online surveys made easy*. Retrieved on 03.05.2025 from: https://www.surveycircle.com/de/

Tafesse, W., & Wood, B. P. (2021). Followers' engagement with instagram influencers: The role of influencers' content and engagement strategy. *Journal of retailing and consumer services*, *58*, 102303. DOI: https://doi.org/10.1016/j.jretconser.2020.102303

Tamara, D., Rafly, R., & Mersi, A. (2021). Attractiveness, Trustworthiness and Purchase Intention in Social Media Instagram: The Moderating Role of The Number of Followers. *Syntax Idea*, *3*(8), 1824-1833. DOI: https://doi.org/10.46799/syntax-idea.v3i8.1453

Tandoc, E. C., Lim, Z. W., & Ling, R. (2017). Defining "Fake News": A typology of scholarly definitions. *Digital Journalism*, *6*(2), 137–153. DOI:https://doi.org/10.1080/21670811.2017.1360143

TikTok. (n.d.). *Verified accounts on TikTok*. TikTok Help Center. Retrieved on 20.04.2025 from:Verified accounts on TikTok

Tsfati, Y., & Cappella, J. N. (2003). Do People Watch what they Do Not Trust? Exploring the Association between News Media Skepticism and Exposure. *Communication Research*, *30*(5), 504-529. DOI: https://doi.org/10.1177/0093650203253371

Vaidya, T., Votipka, D., Mazurek, M. L., & Sherr, M. (2019, May). Does being verified make you more credible? Account verification's effect on tweet credibility. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems* (pp. 1-13). DOI: https://doi.org/10.1145/3290605.3300755

Vázquez-Herrero, J., Negreira-Rey, M. C., & Sixto-García, J. (2022). Mind the gap! Journalism on social media and news consumption among young audiences. *International Journal of Communication*, *16*, 21. Retrieved on 25.05.2025 from: Mind the Gap! Journalism on Social Media and News Consumption Among Young Audiences | Vázquez-Herrero | International Journal of Communication

Weismueller, J., Harrigan, P., Wang, S., & Soutar, G. N. (2020). Influencer endorsements: How advertising disclosure and source credibility affect consumer purchase intention on social media. *Australasian marketing journal*, *28*(4), 160-170. DOI: https://doi.org/10.1016/j.ausmj.2020.03.002

Williams, A. E. (2012). Trust or Bust?: Questioning the Relationship Between Media Trust and News Attention. *Journal of Broadcasting & Electronic Media*, *56*(1), 116–131. https://doi-org.ezproxy2.utwente.nl/10.1080/08838151.2011.651186

Woods, H. C., & Scott, H. (2016). # Sleepyteens: Social media use in adolescence is associated with poor sleep quality, anxiety, depression and low self-esteem. *Journal of adolescence*, *51*, 41-49. DOI: https://doi.org/10.1016/j.adolescence.2016.05.008

Zips, S., & Holendová, J. (2023). An In-Depth Analysis of Generation Z Selected Motives for Active Tiktok Usage. *Acc Journal*, *29*(2), 112-124. DOI: 10.2478/acc-2023-0009

Appendix

Appendix A

Qualtrics Questionnaire

The following shows survey as exported from Qualtrics and presented to the participants.

Trust in TikTok content

Start of Block: Block 1

Introduction

Dear participant,

You are invited to take part in the study titled: “Exploring Trust in TikTok Content”. The purpose of this research study is to examine the factors that influence the trust users have in TikTok content. It will take approximately 5 minutes to participate and complete the online questionnaire. This study is conducted by a third-year communication science student from the University of Twente. The collected data and findings of this study will be used exclusively for academic purposes, specifically for the completion of my Bachelor Thesis. Participation in this study is entirely voluntary and you can withdraw, without giving a reason, at any time. Further, your participation is anonymous and only your participant number will be used for further analysis. Additionally, your answers are only visible and accessible for the researcher and the supervisor for the given timeframe. The data will be used for the completion of a bachelor thesis report and will be deleted on August 1, 2025. The researcher believes that there are no known risks associated with this research study, however, as with online related activity, the risk of breach is always possible. To the best of our ability your answers in this study will remain confidential. We will minimize risks by storing the answers on a secured laptop, only accessible for the research team and supervisors and delete it within the given time frame. You can further request your data to be deleted at any time by sending an E-Mail to the responsible researcher. If you have any questions or would like to know more about this project you can also send an E-Mail to the below mentioned contact details.

Please click the yellow button on each page to continue with the survey until it says "Thank you for participation".

Thank you for your efforts.

Kind Regards,

Noa Boroch

n.m.boroch@student.utwente.nl

Q1informed consent After reading the information above, do you understand and agree to participate in this study?

- ○ Yes, I agree to participate in this study. (1)
- ○ No, I do not agree to participate in this study. (2)

Skip To: End of Survey If After reading the information above, do you understand and agree to participate in this study? = No, I do not agree to participate in this study.

End of Block: Block 1

Start of Block: Demographics

Q2 The first set of questions is about you as a person. The information cannot be used to identify you, so please answer honestly.

Q3 What is your age? (in numbers)

_____

_____

_____

_____

_____

Q4 What is your nationality?

- ○ German (1)
- ○ Dutch (2)
- ○ Other, please specify (3) _____

Q5 Gender What gender do you identify with?

- ○ female (1)
- ○ male (2)

- ○ non-binary (3)
- ○ prefer not to say (4)

Q6 TikTokUse Do you use TikTok? (Please click the yellow arrow button to continue.)

- ○ Yes. (1)
- ○ No. (2)

End of Block: Demographics

Start of Block: social media use

Q8 The next set of questions is about your social media habits. Please answer honestly.

Q9 What best describes the frequency of your social media usage (if you use TikTok only indicate your TikTok usage)?

- ○ less than once a week (1)
- ○ 1-2 times a week (2)
- ○ 3-4 times a week (3)
- ○ 5-6 times a week (4)
- ○ every day (5)

Q10 How many hours do you use social media on a typical day (if you use TikTok only indicate your TikTok usage)?

- ○ less than an hour (1)
- ○ 1-2 hours (2)
- ○ 2-3 hours (3)
- ○ 3 hours (4)
- ○ 4 or more hours (5)

End of Block: social media use

Start of Block: Block 10

Q7 In the following you will be presented with 5 blocks of statements about your social media usage and statements about you as a person. Please respond honestly to the statements by indicating whether you agree or disagree.

End of Block: Block 10

Start of Block: Media Literacy

Q11 The next set of statements is about your knowledge and skills. Please indicate to what extent the statements apply to you.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I know how to use search tools to get the information I need in the media. (1)	○	○	○	○	○
I am good at catching up with the changes in the media. (2)	○	○	○	○	○
It is easy for me to make use of various media environments to reach information. (3)	○	○	○	○	○
I realize explicit and implicit media messages. (4)	○	○	○	○	○
I notice media contents containing mobbing and violence. (5)	○	○	○	○	○
I understand political, economical and social	○	○	○	○	○

dimensions of media contents. (6)					
I perceive different opinions and thoughts in the media. (7)	○	○	○	○	○
I can distinguish different functions of media (communication, entertainment, etc.). (8)	○	○	○	○	○
I am able to determine whether or not media contents have commercial messages. (9)	○	○	○	○	○
I manage to classify media messages based on their producers, types, and purposes. (10)	○	○	○	○	○
I can compare news and information across different media environments. (11)	○	○	○	○	○
I can combine media messages with my own opinions. (12)	○	○	○	○	○
I consider media rating symbols to choose which media content to use (e.g. age	○	○	○	○	○

restrictions, trigger warnings). (13)					
It is easy for me to make decisions about the accuracy of media messages. (14)	○	○	○	○	○
I am able to analyze positive and negative effects of media contents on individuals. (15)	○	○	○	○	○
I can evaluate media in terms of legal and ethical rules (copyright, human rights, etc.). (16)	○	○	○	○	○
I can assess media in terms of credibility, reliability, objectivity and currency. (17)	○	○	○	○	○
I manage to fend myself from the risks and consequences caused by media contents. (18)	○	○	○	○	○
I can explain how users obtain a verification badge. (Please click the yellow arrow button to continue.) (19)	○	○	○	○	○

End of Block: Media Literacy

Start of Block: NFC

Q12 The next set of questions is about you as a person. For each statement listed below, indicate the extent to which you feel it is characteristic of you.

	not at all like me (1)	not too much like me (2)	uncertain (3)	somewhat like me (4)	a lot like me (5)
I would prefer complex to simple problems. (1)	○	○	○	○	○
It's enough for me that something gets the job done; I don't care how or why it works. (2)	○	○	○	○	○
I usually end up deliberating about issues even when they do not affect me personally. (3)	○	○	○	○	○
Thinking is not my idea of fun. (4)	○	○	○	○	○
I really enjoy a task that involves coming up with new solutions to problems. (5)	○	○	○	○	○
Learning new ways to think doesn't excite me very much. (6)	○	○	○	○	○

I prefer my life to be filled with puzzles that I must solve. (7)	○	○	○	○	○
I only think as hard as I have to. (8)	○	○	○	○	○
I find satisfaction in deliberating long and hard for hours. (9)	○	○	○	○	○

End of Block: NFC

Start of Block: Extraversion

Q13 The following statements are about your personality. Please indicate how well the statements apply to you.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I see myself as someone who is talkative. (1)	○	○	○	○	○
I see myself as someone who is reserved. (2)	○	○	○	○	○
I see myself as someone who is full of energy and generates a lot of enthusiasm. (3)	○	○	○	○	○
I see myself as someone	○	○	○	○	○

who tends to be quiet. (4)					
I see myself as someone who has an assertive personality. (5)	○	○	○	○	○
I see myself as someone who is sometimes shy, inhibited. (6)	○	○	○	○	○
I see myself as someone who is outgoing, sociable. (7)	○	○	○	○	○

End of Block: Extraversion

Start of Block: NB Followers

Q15 The next set of statements is about your habits on TikTok. Please indicate your agreement on the following statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I always check the number of followers a creator has when looking at content. (1)	○	○	○	○	○
I am more likely to engage with content where the creator has a large	○	○	○	○	○

following. (2)					
It is important to me that a creator has a large following. (3)	○	○	○	○	○

End of Block: NB Followers

Start of Block: Verification

Q14 The next set of statements is about your habits on TikTok. Please indicate your agreement on the following statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I always check whether a creator is verified when browsing through TikTok. (1)	○	○	○	○	○
I am more likely to engage with content when the creator is verified. (2)	○	○	○	○	○
It is important to me that a creator is verified. (3)	○	○	○	○	○

End of Block: Verification

Start of Block: Media Trust

Q16 The following statements are about your feelings toward TikTok and its contents. Please indicate to what extent the statements apply to you.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I trust the information that I get from TikTok. (1)	○	○	○	○	○
Individuals posting content on TikTok are helpful to others. (2)	○	○	○	○	○
Individuals posting content on TikTok can be trusted. (3)	○	○	○	○	○
TikTok as a social media platform can be trusted. (4)	○	○	○	○	○
TikTok as a social media platform can help solve social problems. (5)	○	○	○	○	○

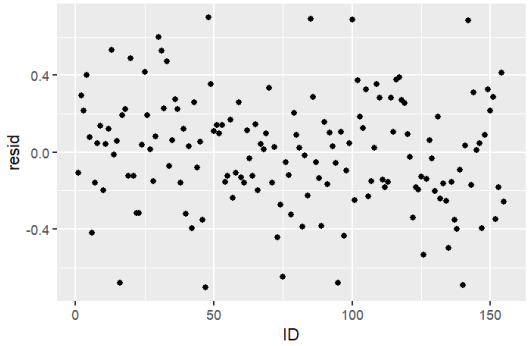
End of Block: Media Trust

Appendix B

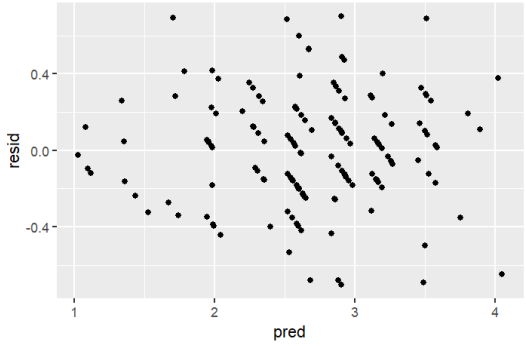
Assumption tests for the multiple linear regression

The following plots show the outcomes of the four assumption tests done for the multiple linear regression model. This includes the name of the assumption and a note whether the assumption was violated or not, and an explanation if necessary.

Assumption of Independence

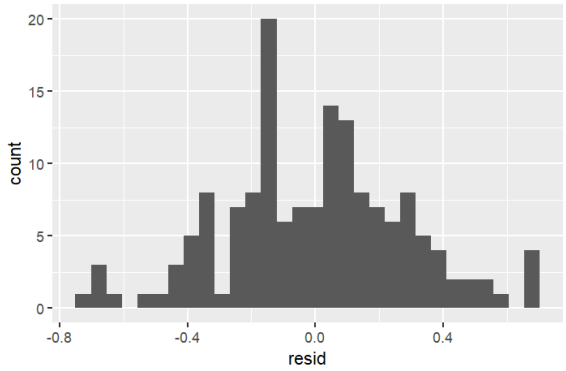


Assumption of linearity and equal variance



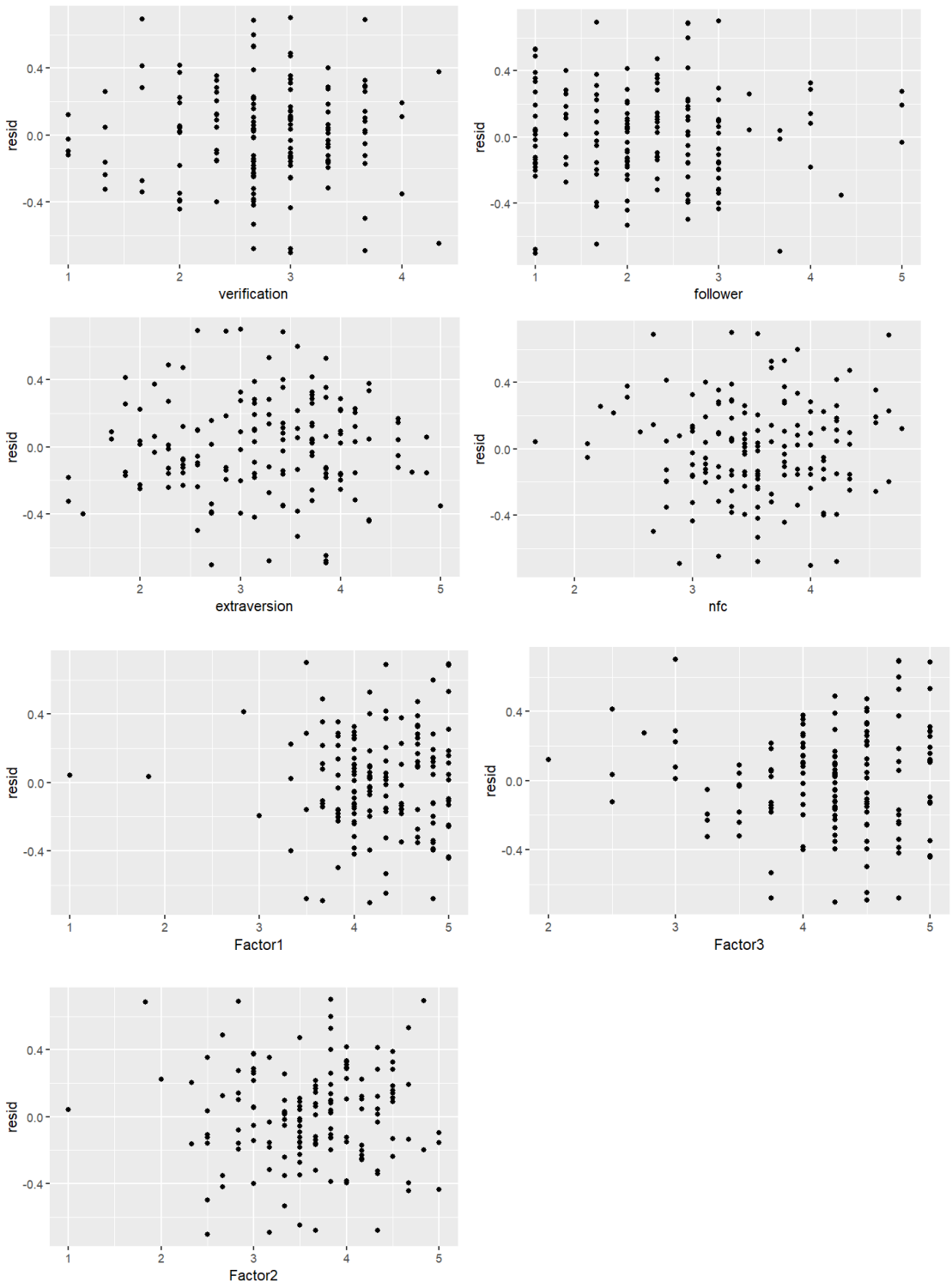
Note. No violation can be observed here, as the residuals are randomly scattered

Assumption of normality of the residuals



Note. Visual inspection revealed a slight skew in the normality plot; however, this did not substantially violate the assumption due to the sample size.

Assumption test for equal variance of the separate independent variables relevance of verification, relevance of number of followers, extraversion, NFC, and factor 1, 2, 3 () of media literacy



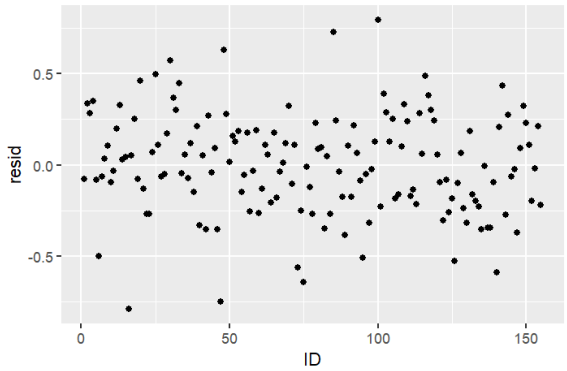
Note. No systematic patterns or unequal variance across groups, thus no violations were observed

Appendix C

Assumption tests for the multiple linear regression with an interaction term

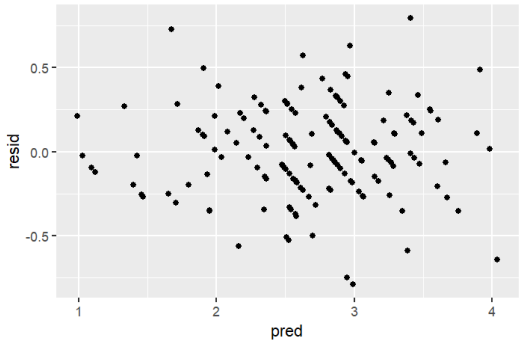
The following plots show the outcomes of the four assumption tests done for the multiple linear regression model. This includes the name of the assumption and a note whether the assumption was violated or not, and an explanation if necessary.

Assumption of independence

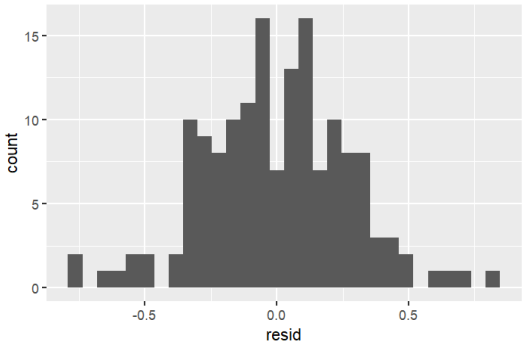


Note. No violation can be observed here as the residuals are randomly scattered

Assumption of Linearity and equal variance

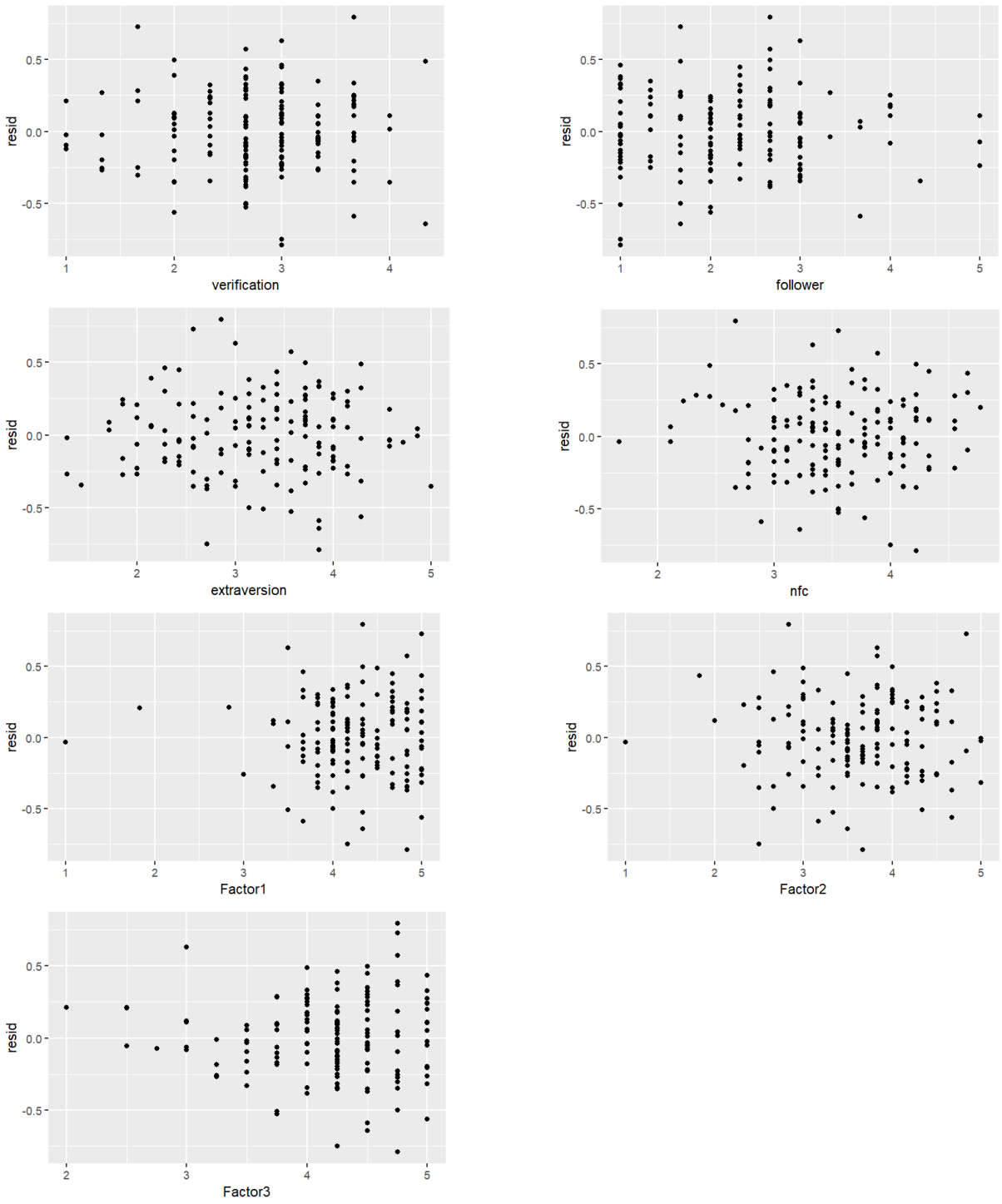


Assumption of Normality of the residuals



Note. No assumption was violated here

Assumption test for equal variance of the separate independent variables relevance of verification, relevance of number of followers, extraversion, NFC, and factor 1, 2, 3 () of media literacy



Note. No systematic patterns or unequal variance across groups, thus no violations were observed

Appendix D

Artificial Intelligence Use Statement

The following statement declares (non-) usage of Artificial Intelligence (AI) tools.

“During the preparation of this work the author used deepseek and Google Gemini in order to construct Codes for R Studio and shorten paragraphs within the introduction, theoretical framework, and discussion. Further Grammarly was used to correct grammar and spelling. After using these tools, the author reviewed and edited the content as needed and takes full responsibility for the content of the work.”