Impact of social media influencers on consumers’ well-being and purchase intention: a TikTok perspective
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Abstract
Purpose – Extending the elaboration likelihood model (ELM), this study investigates the impact of social media influencers (SMI) on consumer well-being (CW) as well as the influence of CW on purchase intention.
Design/methodology/approach – A between-subjects experiment (macro- vs mega-influencer) was conducted to assess the proposed hypotheses. A total of 190 consumers participated in the experiment, and SmartPLS 3.3 was used for multigroup analyses.
Findings – Overall, argument quality (AQ), source’s credibility (SC) and influencer’s kindness positively predict CW, and CW predicts purchase intention. It was also found that SC is more important when information comes from a mega-influencer, whilst kindness is essential for a macro-influencer.
Practical implications – The results of this study imply that CW should be an essential component of influencer marketing strategy. Marketing managers should hire credible and kind influencers who can produce quality arguments. Additionally, the selection of SMI (macro- vs mega-influencer) should be aligned with the marketing objective and type of persuasion required.
Originality/value – This is one of the early attempts to extend ELM by introducing influencer kindness as a peripheral cue. Moreover, the study offers novelty by examining the effects of influencer characteristics (AQ, SC and kindness) on CW and comparing these effects across macro- and mega-influencers.

Keywords Social media influencer, Argument quality, Source’s credibility, Kindness, Consumer well-being, Elaboration likelihood model

1. Introduction
Social media influencers are the consumers on social media who (1) regularly post content on social media, (2) have a large fan base and (3) are used by brands for marketing communications (Reinkainen et al., 2020). The SMIIs embody an inexpensive third-party advocate (Malik et al., 2023) and are more accessible and enticing due to social media’s persuasiveness (Appel et al., 2020). Recent statistics show that fifty per cent of consumers on social media trust SMI’s recommendations, whilst 40% of them go on to purchase the product (DigitalMarketingInstitute, 2021). Therefore, marketers invest in SMIIs to develop favourable consumer attitudes towards their brands (Cheung et al., 2022). In this regard, studies have been conducted on Facebook (Winter, 2020), Twitter (Britt et al., 2020), Instagram (Janssen et al., 2022) and YouTube influencers (Jamil and Qayyum, 2021). Whether these findings and
theories hold similarly across other platforms like TikTok? The question remains primarily unanswered (Vrontis et al., 2021).

Despite researchers’ focus on SMIs, influencer marketing literature has theoretical gaps. For example, previous studies heavily utilised credibility theory, attribution theory, persuasion knowledge and social comparison theory, neglecting dual-process models (Jamil and Qayyum, 2021; Vrontis et al., 2021). Dual-process theories explain that individuals process information through two routes. Motivated individuals opt for the central/systematic route, whilst non-motivated ones choose the peripheral/heuristic route (Xiao et al., 2018). The elaboration likelihood model (ELM) (Petty and Cacioppo, 1986) is a key dual-process theory that states that consumers process information through central or peripheral routes. The central route relies on careful information quality assessment, whereas the peripheral route relies on positive or negative cues. Dual-process theories are more suitable in the influencer marketing context as they can uncover consumers’ emotional and attitudinal reactions (Jamil and Qayyum, 2021).

The present study extends ELM to elaborate on the SMIs’ persuasion. The majority of previous studies employed argument quality (AQ) as a fundamental cue (central) and the source’s credibility (SC) as a peripheral cue (Bhattacherjee and Sanford, 2006; Jamil and Qayyum, 2021; Leong et al., 2019). In contrast, the impact of social media influencers’ (SMIs) kindness on consumer attitudes and behaviours has been ignored by researchers (Vrontis et al., 2021). Kindness is an important trait resulting in well-being, happiness, cognitive functioning and positive intentions (Ciocarlan et al., 2018; Erdinger, 2019; Jasielska, 2020; Jin et al., 2021). Therefore, this study provides a novel contribution to the SMI and ELM literature by empirically validating influencer kindness as a peripheral cue to information persuasion.

Building upon the dual-process models, studies on influencer marketing examined numerous consumer outcomes regarding AQ and SC. For example, AQ and SC have been examined to influence information usefulness (Bhattacherjee and Sanford, 2006; Jamil and Qayyum, 2021), crowdfunding attitude (Kim and Petrick, 2021), and product usefulness evaluation (Zhu et al., 2016). However, consumer well-being (CW) as an outcome of SMI persuasion has not received due attention (Vrontis et al., 2021). Social media exposure to attractive influencers, luxurious lifestyles, and upward social comparison has caused health problems (Jin and Ryu, 2020; Jang et al., 2016). Alternatively, SMIs can contribute to CW through congruity and familiarity (Kim and Kim, 2020). Recognising the significance of CW in the SMI context, we set to validate the impact of influencer characteristics on CW empirically.

Finally, this study employed an experimental design to compare the effects of SMI characteristics across influencer types (macro vs mega). A macro-influencer has 100,000 to 1 million followers, whilst a mega-influence has more than 1 million followers (Janssen et al., 2022). Recent research claims that most findings and theories in influencer marketing literature are irrelevant (Kay et al., 2020; Ladhari et al., 2020) because they fail to recognise the importance of influencer categorisation (e.g. macro- and mega-influencers) (Campbell and Farrell, 2020). It is necessary to address disparities between different influencer types and understand the underlying mechanism of their influence (Boerman, 2020; Voorveld, 2019).

In response, the studies that examined effects across influencer types produced conflicting findings. For example, some studies argue that influencers with more followers are better (Alassani and Göretz, 2019; Ladhari et al., 2020), whilst others support vice versa (Janssen et al., 2022; Park et al., 2021). On the other hand, Boerman (2020) demonstrated that the type of influencer has no bearing on the consumer response to the message or the brand. These outcomes suggest that the effectiveness of influencers (low vs high followers) depends upon their characteristics. Mixed findings and previous studies warrant further investigation.
Therefore, we compared the effects of influencer characteristics on CW and purchase intention across macro- and mega-TikTokers.

Based on the above discussion, this study has identified multiple gaps in the influencer marketing literature. First, despite the numerous studies on the subject matter, theoretical underpinnings are underutilised to explain how SMIs (specifically TikTokers) affect consumers. Likewise, an influencer’s kindness has not received due attention, although it could serve as a critical peripheral signal, shaping consumer attitudes. Moreover, CW has recently gained much attention from researchers, yet little is known in the context of influencer marketing. Finally, mixed findings regarding influencer type (macro vs mega) warrant further inquiry. To address these gaps, this study proposes three research questions: (1) Do characteristics (AQ, SC and kindness) of TikTok influences affect CW? (2) Does CW affect purchase intention? (3) Is there any difference in the outcomes when mega-influencers deliver messages compared to macro-influencers?

The rest of the paper is organised as follows: Section 2 reviews the literature on AQ, SC, kindness, CW and their association with purchase intention. Section 3 details the study’s methodology, whilst Section 4 demonstrates the results. Finally, Section 5 discusses the findings, implications, limitations and direction for future research.

2. Literature review
2.1 Argument quality and consumer well-being
AQ is “the persuasiveness of arguments within an informational message” (Bhattacherjee and Sanford, 2006). The literature on dual-process models emphasises that AQ is one of the most critical central paths to consumer persuasion and material helpfulness (Zhu et al., 2016). Additionally, it has been supported that AQ is an effective parameter of SMIs, developing consumer perception and positive attitudes (Jamil and Qayyum, 2021; Leong et al., 2019).

Despite the enormous research on dual-process models, little is known about the association between AQ and CW. Castellacci and Tveito (2018) contended that access to more information on the internet boosts consumer decision satisfaction and well-being. Similarly, Tien et al. (2019) found that the quality of arguments during online information exchange inculcates positive consumer attitudes. The literature generally supports the positive outcomes of AQ (Cheung et al., 2008; Sussman and Siegal, 2003). However, in the case of social media and influencer marketing, there are mixed findings. For example, Winter (2020) found that social media had weaker persuasiveness than websites or newspapers. Furthermore, Jamil and Qayyum (2021) added that the influence of AQ on consumer attitudes was weaker for SMIs versus electronic word of mouth. The varied findings indicate the need for more research on the impact of AQ in the influencer marketing context.

H1a. AQ has a positive effect on CW.

Extant literature supports that influencer recommendations are persuasive, fostering positive consumer attitudes (Cheung et al., 2022). A comparative study on the effects of influencer type (micro vs mega) by Jin and Muqaddam (2021) yielded that consumers responded differently to each influencer alternative. In this regard, the popularity level of an influencer is also important. For example, Alassani and Göretz (2019) argued that influencers with a higher fanbase are more effective on social media than influencers with a lower fanbase. Moreover, stronger consumer perceptions are built when endorsed brands are supported by influencers with a higher fanbase (Park et al., 2021).

H1b. Compared to macro-influencers, the influence of AQ of mega-influencers will be stronger on CW.
2.2 Source credibility and consumer well-being

In some cases, customers cannot absorb or process compelling information, thus indicating low elaboration likelihood. In these cases, the part of outlying signals becomes crucial (Sussman and Siegal, 2003). Literature on dual-process models shows that SC (i.e. the recipient’s perception that the message source is competent, believable and trustworthy) is one of the most commonly cited peripheral cues (Bhattacherjee and Sanford, 2006). SC fosters a parasocial relationship between influencers and their followers, generating believability (Leung et al., 2022; Yuan and Lou, 2020), positive attitudes (Bi and Zhang, 2022) and behaviours (Koay et al., 2021).

Recently, researchers have shown interest in the relationship between SC and CW. For example, Mundel et al. (2022) found that credible influencer marketing lowers social media anxiety and boosts CW. Similarly, Chetioui et al. (2022) reported that congruity, attractiveness and credibility are precursors of consumer attitudes towards Instagram health and well-being influencers.

H2a. SC has a positive effect on CW.

The stature and popularity of SMIs are essential when they promote brands. It has been elaborated recently that the popularity of influencers determines product recommendations and purchase decisions on social media (Ladhari et al., 2020). The brands often hire famous SMIs to gain popularity and boost product sales (Jin and Muqaddam, 2021). Moreover, Janssen et al. (2022) added that endorsers with a greater fanbase are more credible, generating positive attitudes and intentions. Hence, it can be argued that the effect of influencers with a greater fanbase (mega-influencers) will be higher than an influencer with comparatively lesser followers (macro-influencers).

H2b. Compared to macro-influencers, the influence of SC of mega-influencer will be stronger on CW.

2.3 Kindness and consumer well-being

Kindness is being warmhearted, compassionate, humane and empathetic to others (Comunian, 1998). Influencer marketing is a relatively new phenomenon, lacking sufficient literature on influencer kindness. As an exception, Vrontis et al. (2021) suggested that influencer kindness could be an essential determinant of influencer persuasion, fostering positive outcomes. A satisfactory experience with a service provider generally results in CW (Su et al., 2022).

Contrary to influencer marketing, social and psychological research provides sufficient evidence of the relationship between kindness and well-being. Erdinger (2019) demonstrated that acts of kindness, affection and intimacy positively affect well-being. Furthermore, the kindness and generosity of information sources enhance happiness, well-being and positive intentions amongst the audiences (Ciocarlan et al., 2018; Jasielska, 2020). In an experimental study, Perkins et al. (2022) found that kindness is a key determinant of cognitive functioning and well-being. Moreover, kindness helps maintain positivity and well-being during stressful situations (Jin et al., 2021). Therefore, it can be argued that an influencer’s kindness could reduce consumer online scepticism, inducing well-being and positive intentions.

H3a. Influencer kindness has a positive effect on CW.

Despite the general understanding that influencers with more followers are more effective, some contexts offer contrasting explanations. For example, micro-influencers are more authentic in generating hedonic pleasures (Park et al., 2021) and hedonism predicts CW (Kumagai and Nagasawa, 2022). Micro-influencers are also better at building interpersonal and intimate connections with followers (Britt et al., 2020). These findings suggest that small-
scale influencers (nano and micro) are relatively new, having most of their follower from proximity, resulting in closer personal ties. Thus, consumers trust and relate more to small-scale influencers, resulting in a devoted fan base (Janssen et al., 2022).

Regarding kindness, it is an interperson phenomenon focussed on building reciprocal relationships, intimacy and affection (Comunian, 1998; Erdinger, 2019). Thus, we can argue that macro-influencers (having fewer devoted and closely related followers than mega-influencers) are better positioned to develop personal ties. Therefore, macro-influencer’s kindness should have more influence on CW than mega-influencers.

\[ H3b. \] Compared to mega-influencers, the influence of kindness of macro-influencer will be stronger on CW.

2.4 Consumer well-being and purchase intention

Recently, CW has gained popularity and importance (Sirgy, 2021), particularly in influencer marketing (Vrontis et al., 2021). Broadly, adverse health consequences have been found in response to upward social comparison on social media (Jang et al., 2016). Similarly, Jin and Ryu (2020) argued that exposure to attractive SMIs and their luxurious lifestyles impair CW. Browsing SMI profiles leads to materialism and compulsive buying (Jin and Muqaddam, 2021). In contrast, a sense of acquaintance and congruity with an influencer enhances consumer’s well-being and commitment (Kim and Kim, 2020).

Research on the influence of CW on purchase intention is limited. However, existing knowledge regarding consumer attitudes and online shopping suggests that attitudes predict behavioural intentions (Andronie et al., 2021; Musova et al., 2021; Nica et al., 2022). According to ELM and dual-process theories, positive consumer attitudes predict favourable intentions and behaviours (Cheung et al., 2008; Jamil and Qayyum, 2021). Moreover, CW relates to loyalty, commitment (Kim and Kim, 2020) and happiness (Sirgy, 2021). At the same time, consumer happiness has been linked to purchase intention (Kim and Lee, 2020). Therefore, we argue that CW should inculcate positive outcomes, including purchase intention.

\[ H4a. \] CW has a positive effect on purchase intention.

The popularity of influencers on social media significantly affects consumer purchase decisions (Ladhari et al., 2020). Consumers with a mindset of material acquisition prefer product promotions from famous (high fanbase) personalities (Jin and Muqaddam, 2021). In support, Janssen et al. (2022) added that consumers develop positive attitudes towards the product if it is endorsed by a famous influencer (having more followers) than other types (with a lesser number of followers), comparatively.

\[ H4b. \] Compared to macro-influencers, the influence of CW on purchase intention will be stronger for mega-influencers.

Table 1 summarises the recent key literature regarding the effects of SMIs on consumer attitudes and intentions.

A proposed conceptual framework has been derived from the above literature, reporting the hypothesised relationships (see Figure 1).

3. Methodology

3.1 Study platform

TikTok was selected for this experimental investigation in Pakistan for several reasons. First, TikTok has one billion active monthly users who can create and share 15-s videos on various topics. Second, Pakistan had over 18.26 million TikTok users in early 2022 (Kemp, 2022), making it a significant proportion of the international community, with Pakistanis
<table>
<thead>
<tr>
<th>Study</th>
<th>Country/context</th>
<th>Key variables</th>
<th>Analytical approach</th>
<th>Key findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chetioui et al. (2022)</td>
<td>Instagram health and well-being influencers</td>
<td>Health and well-being, consumer attitudes, gender, purchase intention</td>
<td>Structural equation modelling</td>
<td>Health and well-being influencers on Instagram positively shape consumer attitudes and purchase intention. Gender moderates the outcomes such that the physical attractiveness of the influencer will likely result in stronger effects among females.</td>
</tr>
<tr>
<td>Cheung et al. (2022)</td>
<td>Malaysian Instagram, Facebook, YouTube, and Weibo</td>
<td>Consumer brand engagement, entertainment, information seeking, social interaction, reward</td>
<td>PLS-SEM</td>
<td>Different consumer gratifications (entertainment, information seeking, social interaction, reward) affect brand engagement through observational learning.</td>
</tr>
<tr>
<td>Jamil and Qayyum (2021)</td>
<td>Pakistani YouTube influencers</td>
<td>Argument quality, source credibility, information language, information usefulness, purchase decision</td>
<td>Co-variance based SEM</td>
<td>Argument quality, source credibility, and information language are key predictors of consumer decisions on YouTube.</td>
</tr>
<tr>
<td>Janssen et al. (2022)</td>
<td>Dutch Instagram users</td>
<td>Product-influencer fit, number of followers, credibility, identification, consumer attitudes</td>
<td>ANOVA, Hayes PROCESS</td>
<td>Product-influencer fit and number of followers affect consumer attitudes mediated via credibility and identification.</td>
</tr>
<tr>
<td>Leung et al. (2022)</td>
<td>General Online influencer marketing (OIM), marketing communications</td>
<td></td>
<td>Literature review</td>
<td>The study endeavoured to define online influencer marketing, benefits and threats to OIM, and strategies for effective marketing communications.</td>
</tr>
<tr>
<td>Malik et al. (2023)</td>
<td>USA social media users</td>
<td>Escapism, self-improvement, fun, glamour, connectedness, image</td>
<td>SEM</td>
<td>Consumers follow SMI for escapism and self-improvement. Moreover, glamour, fun, and connectedness influence the perceived image.</td>
</tr>
<tr>
<td>Yuan and Lou (2020)</td>
<td>General social media users</td>
<td>Source credibility, fairness, parasocial relationship, product interest</td>
<td>Co-variance based SEM</td>
<td>Source credibility and fairness predict product interest mediated via parasocial relationships.</td>
</tr>
<tr>
<td>Zafar et al. (2021)</td>
<td>Pakistani Facebook influencers</td>
<td>Authenticity, sentiment polarity, observational learning, impulse buying</td>
<td>PLS-SEM</td>
<td>Sentiment polarity and observational learning positively predicated impulse buying. The moderating role of authenticity was insignificant.</td>
</tr>
</tbody>
</table>

Table 1. Summary of recent key literature (continued)
amongst the top 10 users of TikTok worldwide (Ecwid, 2022). Third, countries with the most social media users are typically developed economies (Dixon, 2023). Pakistan is an underdeveloped economy (Raja et al., 2018) and oddly ranked amongst the top social media users. Finally, many brands in Pakistan are turning to SMIs for marketing and promotions (Zafar et al., 2021). Thus, studying TikTok in the Pakistani context should offer key insights for comparing and contrasting the international literature on SMIs based on developed/underdeveloped economies.

Second, despite the platform size, researchers have paid little attention to TikTok influencers (Vrontis et al., 2021), leaving knowledge voids in influencer marketing literature. Moreover, there is an apparent lack of research on TikTok, which focuses on more transient interactions (Sokolova and Kefi, 2020) and a rapidly expanding influencer marketing platform (Taylor, 2020). As a result, TikTok is a promising social media platform deserving further examination.

<table>
<thead>
<tr>
<th>Study</th>
<th>Country/context</th>
<th>Key variables</th>
<th>Analytical approach</th>
<th>Key findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zha et al. (2018)</td>
<td>Chinese social media blogs: Sina Microblog, ScienceNet blog, and Baidu Know Information quality, source credibility, reputation, social media usage</td>
<td>PLS-SEM</td>
<td>Reputation is a stronger predictor compared to information quality and credibility</td>
<td></td>
</tr>
<tr>
<td>This study</td>
<td>Pakistani TikTok influencers</td>
<td>Argument quality, source credibility, kindness, consumer well-being, purchase intention</td>
<td>PLS-SEM, Multigroup analysis</td>
<td>Argument quality, source credibility, and influencer’s kindness positively influence consumer well-being, predicting purchase intention. The experimental manipulation shows that source credibility is more important when information comes from a mega-influencer, whilst kindness is essential for a macro-influencer</td>
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Table 1. Source(s): Created by authors

Figure 1. Conceptual framework Source(s): Created by authors
3.2 Preliminary focus group dialogue

A preliminary focus group dialogue (FGD) was held with university students (n = 55) to determine their favourite TikTok influencers and stimulus product. Previous experimental studies recommended conducting a preliminary FGD for stimuli and product selection (Jamil et al., 2022). For the stimuli selection in an experimental inquiry, Jamil and Qayyum (2021) did a preliminary focus group discussion with individuals who were not the main study participants. We employed a similar approach to provide preliminary insights into consumer perceptions and select experimental stimuli.

We employed Janssen et al. (2022) criteria to categorise macro- and mega-influencers. Accordingly, the influencers having 100k–1 M followers were considered macro-influencers, whilst those with more than 1 M followers were mega-influencers. Thus, participants were initially briefed about the study and the difference between macro- and mega-influencers. Then they were asked to rate their favourite macro- and mega-influencers. The participants responded with Hira Bleeh (n = 39) as a macro-influencer and Romaisa Khan (n = 36) as a mega-influencer. In February 2022, Hira Bleech had 735.5 K, whilst Romaisa Khan had 5.5 million TikTok followers (see profile links in Appendix). Next, participants were asked about the most promoted product on TikTok; they identified that Daraz was the most commonly promoted product by these TikTokers in recent times.

To ensure ecological isomorphism between selected influencers, the researchers deliberated to find realistic, externally valid and comparable videos. The videos were deemed comparable since both influencers promoted the same product (i.e. Daraz sale of 11.11 sale event). Researchers and focus group members also agreed that both influencers’ speech, facial features, voice tone and clothing (western) were similar.

3.3 Population and experimental procedure

An online experiment was performed with consumers who were TikTok users. The participants were recruited through social media platforms via an invitation link. Those who clicked the link were briefed about the study, followed by random assignment to one of two experimental manipulations. Participants were randomly assigned to watch a macro-influencer or mega-influencer promotional video (links to videos are in Appendix). Once the participants finished watching the promotional video, they were asked to complete the survey on AQ, SC, kindness, CW and purchase intention.

A total of 190 consumers volunteered for the experiment. Eighty-four participants were exposed to a macro-influencer video, whilst one hundred and six watched a mega-influencer video after a random assignment. The experimental studies that employ voluntary participation and random assignment are considered sufficient (Jin et al., 2019). Data were collected during March 2022 and randomly selected participants were presented with customised gifts to boost response quality. Table 2 shows the demographic distribution of participants.

3.4 Measures

All the measures were borrowed from previous research, carefully modified to fit the needs of the present study and then validated. The measures of AQ and SC were adapted from Bhattacharjee and Sanford (2006), comprising four-item each. The kindness scale was adapted from Comunian (1998), based on three items. A three-item scale of CW was adapted from Grzeskowiak and Sirgy (2007). Finally, the three-item purchase intention scale was adapted from Dodds et al. (1991). All data were collected on a 5-point Likert scale.

4. Data analysis and results

Data were analysed using partial least squares structural equation modelling (PLS-SEM) through SmartPLS 3.3. Many researchers prefer the PLS-SEM method because it allows them
to estimate complex models with many constructs, indicator variables and structural routes without making assumptions about the data distribution. PLS-SEM is a causal-predictive method of statistical model estimation that emphasises prediction (Hair et al., 2021). The PLS-SEM approach relies on the assessment of measurement and structural models (Hair et al., 2019).

4.1 Assessment of measurement model
The study employed multiple parameters to assess the measurement model: internal consistency, convergent validity and discriminant validity (Hair et al., 2019). Additionally, we examined Dijkstra–Henseler’s $\rho_A$, variance inflation factor (VIF) and standardised root mean square residual (SRMR) for model fitness.

Cronbach alpha tested internal consistency reliabilities of the measuring items, and all values were above 0.70. Convergent validity is assessed using composite reliability (CR) and average variance extracted (AVE). The CR ranges from 0 to 1, with acceptable values over 0.70 (Graciola et al., 2020). For all the constructs, CR scores ranged from 0.87 to 0.95, indicating satisfactory values. Likewise, the AVE should be higher than 0.5 (Hair et al., 2021). We found that AVE scores ranged from 0.64 to 0.87, hence acceptable. Collectively, CR and AVE verified the convergent validity of measures. Moreover, Dijkstra–Henseler’s $\rho_A$ was examined for construct reliability. For the present study, $\rho_A$ values ranged from 0.77 to 0.93, above the acceptable value of 0.7 (Dijkstra and Henseler, 2015). Table 3 summarises all the details of scale refinement.

One frequently used indicator to assess the collinearity of the formative indicators is the VIF. Regarding this, Hair et al. (2021) guided that VIF scores should be less than 5, whilst higher values suggest serious collinearity concerns. All items had VIF scores below 5, indicating no multicollinearity concerns (see Table 3).

Discriminant validity refers to the extent to which a construct is empirically distinct from other constructs in the structural model (Hair et al., 2019). The AVE of each construct should be compared to the squared inter-construct correlation of that construct and all other reflectively assessed constructs in the structural model (Fornell and Larcker, 1981). Table 4 presents the discriminant validity estimates.

In addition to the AVE-based approach, Hair et al. (2019) suggested using the heterotrait-monotrait (HTMT) ratio of correlations to assess discriminant validity. The HTMT is more trustworthy for assessing discriminant validity (Hair et al., 2021) and values less than 1.00 are

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cases (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>90 (47.4%)</td>
</tr>
<tr>
<td>Female</td>
<td>100 (52.7%)</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>Less Than 20</td>
<td>38 (20.0%)</td>
</tr>
<tr>
<td>20–30</td>
<td>73 (38.4%)</td>
</tr>
<tr>
<td>31–40</td>
<td>60 (31.6%)</td>
</tr>
<tr>
<td>Above 40</td>
<td>19 (10.0%)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Bachelors</td>
<td>92 (48.4%)</td>
</tr>
<tr>
<td>Masters</td>
<td>61 (32.1%)</td>
</tr>
<tr>
<td>Doctoral</td>
<td>37 (19.5%)</td>
</tr>
</tbody>
</table>

Table 2. Demographics of the participants

Source(s): Created by authors
TikTok’s impact on consumers’ well-being

Table 3. Scale refinement

<table>
<thead>
<tr>
<th>Variable</th>
<th>Fornell-larcker criterion</th>
<th>HTMT ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AQ</td>
<td>CW</td>
</tr>
<tr>
<td>Argument quality (AQ)</td>
<td>0.80</td>
<td></td>
</tr>
<tr>
<td>Consumer well-being (CW)</td>
<td>0.70</td>
<td>0.88</td>
</tr>
<tr>
<td>Kindness (KN)</td>
<td>0.62</td>
<td>0.66</td>
</tr>
<tr>
<td>Purchase intention (PI)</td>
<td>0.57</td>
<td>0.46</td>
</tr>
<tr>
<td>Source credibility (SC)</td>
<td>0.79</td>
<td>0.77</td>
</tr>
</tbody>
</table>

* Respondents saw either Hira Bleeh or Romaisa Khan subject to their randomly assigned experimental video.
deemed satisfactory (Henseler et al., 2015). We did not observe discriminant validity issues in the present study since all the observed HTMT estimates were less than 1.00 (see Table 4).

Finally, the overall model fit was assessed through the SRMR criterion. To prevent model misspecification, PLS-SEM recommends employing the SRMR as a goodness-of-fit measure (Henseler et al., 2015). A value less than 0.10 is considered a good fit (Ringle et al., 2022). We observed an SRMR value of 0.08, indicating adequate model fit.

4.2 Assessment of structural model

When formative constructs are incorporated into the structural model, PLS-SEM is the preferable method. Hair et al. (2019) suggested that the relevance of the indicator weights, indicator collinearity and statistical significance are used to evaluate formative measurement models. Besides the $p$-value and alpha levels, it is essential to look for the effect sizes ($f^2$ or $f^2$) (Graciola et al., 2020). According to (Hair et al., 2019), any values of $f^2$ above 0.35 are considered vital, whilst those above 0.02 are acceptable. Table 5 shows the $f^2$ scores of each hypothesised relationship.

Regarding the hypotheses testing, H1a proposed a positive effect of AQ on CW. The results show that the impact of AQ on CW was significant ($t = 2.69, p < 0.05$), supporting H1a. Similarly, H2a proposed that a positive effect of SC on CW was also supported ($t = 4.86, p < 0.01$). H3a proposed a positive effect of influencer kindness on CW. This hypothesis was also supported ($t = 2.84, p < 0.05$). Finally, the results also showed a positive effect of CW on purchase intention ($t = 3.21, p < 0.00$), lending support to H4a. Table 5 presents the results of hypothesis testing in response to path analysis.

Figure 2 reflects the structural model indicating hypothesised relationships and corresponding beta estimates.

A multigroup analysis using SmartPLS was performed to investigate whether the effects were different across types of influencers (macro vs mega-influencers). In this regard, H1b proposed that compared to macro-influencers, the influence of AQ of mega-influencers will be stronger on CW. Contrary to expectations, data analysis did not support H1b (see Table 6 for details). H2b stated that compared to macro-influencers, the influence of SC of mega-influencers would be stronger on CW. Data analysis confirmed that SC’s effect on CW was stronger for mega-influencers ($t = 4.76, p < 0.000$) than macro-influencers ($t = 3.10, p < 0.000$). Thus, H2b was supported. Similarly, H3b proposed that compared to mega-influencers, the influence of kindness of macro-influencers will be stronger on CW. The results showed that the effects of macro-influencers ($t = 0.24, p < 0.05$) were stronger compared to mega-influencers ($t = 0.21, p < 0.10$), supporting H3b. Finally, H4b proposed that the influence of CW on purchase intention will be stronger for macro-influencers than macro-influencers. However, it was not supported as data analysis did not show significant effects.

<table>
<thead>
<tr>
<th>Paths</th>
<th>Standard beta</th>
<th>$t$ value</th>
<th>$f^2$</th>
<th>$p$</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a: AQ $\rightarrow$ CW</td>
<td>0.21</td>
<td>2.69</td>
<td>0.04</td>
<td>**</td>
<td>Supported</td>
</tr>
<tr>
<td>H2a: SC $\rightarrow$ CW</td>
<td>0.45</td>
<td>4.86</td>
<td>0.17</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H3a: KN $\rightarrow$ CW</td>
<td>0.22</td>
<td>2.84</td>
<td>0.07</td>
<td>**</td>
<td>Supported</td>
</tr>
<tr>
<td>H4a: CW $\rightarrow$ PI</td>
<td>0.27</td>
<td>3.21</td>
<td>0.27</td>
<td>***</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Table 5. Path coefficients

**Note(s):** **$p < 0.05$; ***$p < 0.001$; AQ = argument quality; CW = consumer well-being; KN = kindness; SC = source credibility; PI = purchase intention

**Source(s):** Created by authors
5. Discussion

Building upon ELM, this study examined the effects of central (AQ) and peripheral (SC and kindness) cues on CW and purchase intention. Additionally, employing the experimental design, we compared the influence of macro- and mega-TikTok influencers. Therefore, the following sections discuss the results of the overall model, followed by the findings across influencer types.

5.1 Findings of the overall model

Overall, AQ positively influenced CW (H1a). Consumers perceive high-quality messages as factually correct, inducing positive attitudes. These findings corroborate the previous studies (Jamil and Qayyum, 2021; Leong et al., 2019; Zhu et al., 2016) on dual-process models, confirming that influencers’ AQ is an important predictor of consumer attitudes and intentions. Although there is insufficient empirical evidence on the association between AQ and CW, based on the present study’s findings, we can imply that AQ inculcates positive attitudes (well-being) among consumers. Additionally, access to more information on the Internet results in greater decision satisfaction and CW (Castellacci and Tveito, 2018).

The effect of SC on CW was also significant (H2a). Consumers who lack the ability or motivation to process the information rely on peripheral cues to develop attitudes (Sussman and Siegal, 2003). The positive effect of SC on CW supports the previous studies on dual-process models (Jamil and Qayyum, 2021), affirming the significance of peripheral cues to persuasion. The intangibility and anonymity of social media create anxiety and scepticism.
amongst consumers. Arguably, the credibility of influencers plays a vital role in reducing anxiety and ensuring CW (Chetioui et al., 2022; Mundel et al., 2022).

Kindness positively influenced CW (H3a), providing empirical evidence in an area with limited prior research. These findings align with dual-process models suggesting that peripheral cues generate positive attitudes (Xiao et al., 2018). In general, kindness has been linked with reduced anxiety (Jin et al., 2021), cognitive functioning (Perkins et al., 2022) and well-being (Ciocarlan et al., 2018). The kindness of an influencer can develop a harmonious environment on social media. Likewise, Su et al. (2022) demonstrated that a satisfactory experience with a service provider enhances CW. Therefore, the findings of this study support proposition of Vrontis et al. (2021) that influencer kindness, as a peripheral cue, fosters positive attitudes, including CW.

Finally, H4a confirmed that CW positively influences purchase intention. In this regard, ELM and other dual-process theories agree that positive consumer attitudes predict favourable intentions and behaviours (Cheung et al., 2008; Jamil and Qayyum, 2021; Sussman and Siegal, 2003). Consumer health and well-being are related to reduced anxiety, better commitment, loyalty and happiness (Kim and Kim, 2020; Sirgy, 2021). At the same time, consumer happiness has been linked to purchase intention (Kim and Lee, 2020). Therefore, purchase intention as an outcome of CW is no surprise.

5.2 Findings across influencer type
In addition to overall effects, we compared the effects across influencer types (macro vs mega-influencer). Recently, numerous studies observed that findings and theories on influencer marketing are inapplicable if they ignore incorporating the influencer types (Kay et al., 2020; Ladhari et al., 2020). Moreover, the studies adopting the influencer categorisation generated inconclusive results. For example, some studies argue that influencers with more followers are better (Alassani and Göretz, 2019; Ladhari et al., 2020), whilst others support that influencers with lesser followers are influential (Janssen et al., 2022; Park et al., 2021). On the other hand, Boerman (2020) found that influencer type has no difference in consumers’ response to the message and brand. We concluded that rather than a general rule of thumb, the effectiveness of influencer type (low vs high follower) is subject to the influencer’s characteristic under discussion.

H1b proposed that the AQ of mega-influencers will have a stronger influence on well-being compared to macro-influencers. To our surprise, there is no difference in the effects of AQ on CW for macro- and mega-influencers. These outcomes are similar to Boerman (2020) findings, showing no difference in the impact of influencer type (low vs high fanbase) on message and brand. It is essential to mention here that only the effect of the macro-influencer was significant. These outcomes could be attributed to the changing preference of consumers from mega-influencers to small-scale influencers. Regarding this, Britt et al. (2020) elaborated that brands are shifting towards small-scale influencers as they garner emotion-laden and interpersonal relationships.

As expected, the influence of SC on CW was stronger for mega-influencers than macro-influencers (H2b). The popularity of influencers is like a credibility signal in brand promotions. In this regard, Janssen et al. (2022) demonstrated that consumers consider influencers with a higher fanbase more credible, resulting in positive attitudes. Similarly, the number of likes, comments, shares and followers determine the popularity of a SMI, building trust and intentions (Ladhari et al., 2020). Therefore, the findings of this study reaffirm the existing knowledge that consumers consider influencers with higher fanbases more credible.

The effect of influencer kindness on CW was stronger for macro-influencers than for mega-influencers (H3b). These outcomes are aligned with our expectations, as kindness is an
interpersonal phenomenon that fosters relationships and reciprocity. Since the small-scale influencers are usually new users having most of their followers from real-life (friends, acquaintances, or proximity), the role of kindness becomes imperative. Existing studies, such as Britt et al. (2020) and Janssen et al. (2022), argued that small-scale influencers are more effective when consumers want to relate to and develop interpersonal connections with influencers. Thus, macro-influencers with kind attitudes are more persuasive than mega-influencers.

In contrast to our expectations, the influence of CW on purchase was not stronger for mega-influencers than macro-influencers (H4b). These findings align with Boerman (2020), who showed no difference in outcomes based on influencer types. Like the influence of AQ on CW (H1b), the effects were significant only for macro-influencers, supporting the shift in consumer preferences towards small-scale influencers (Britt et al., 2020; Park et al., 2021).

6. Conclusion
In conclusion, the study contributes to discipline by illuminating the factors that influence CW and purchase intention in the context of influencer marketing. These findings offer valuable insights into AQ, SC and influencers’ kindness in shaping consumer attitudes and intentions. The results also emphasise the varying roles of mega-influencers and macro-influencers. Whilst SC is crucial for information originating from mega-influencers, kindness becomes a more significant factor when considering macro-influencers. Thus, marketers can improve influencer selection strategies based on the target audience and desired outcomes. The following sections present the theoretical and practical implications. Finally, the study acknowledges major limitations and suggests future research direction.

6.1 Theoretical implications
This study offers three significant theoretical implications. First, it extends influencer marketing literature and ELM by introducing influencer kindness as a peripheral cue. With the growing popularity of SMIa, the number of consumers aspiring to become influencers is also increasing. Hence, AQ and SC characteristics might not be enough to distinguish better influencers from ordinary ones. Under these circumstances, the influencers with a kind attitude should be able to develop close bonds and intimacy with the followers, resulting in higher persuasion. In the present study, kindness as a peripheral cue was related to a positive outcome, supporting its significance in dual-process theories and influencer marketing.

Second, CW has been examined as an outcome of influencers’ characteristics (AQ, SC and kindness). Although CW is closely related to influencer persuasion, it has not been investigated as a major variable in the influencer marketing domain. It has been previously noted that SMIa could adversely affect CW (Jang et al., 2016; Jin and Ryu, 2020). Therefore, CW is a significant variable that should not be ignored whilst investigating the effects of SMIa. This study, therefore, extends CW to the influencer marketing field.

Third, the study highlights the role of influencer characteristics in determining the differential effects across influencer types. The researchers acknowledge that influencers’ persuasion varies subject to the number of followers, yet no consensus has been achieved on whether more followers are better or vice versa. In this regard, we argued that there is no rule of thumb regarding the influence based on followers (low vs high fanbase). Instead, we proposed and empirically validated that the effects of influencer type are subject to influencer characteristics (AQ, SC and kindness) under investigation, setting a path for future inquiry.
6.2 Practical implications
The study offers important practical implications. As more consumers aspire to become influencers, brands need influencers who are credible as well as different. Even though AQ and influencer credibility are vital, the addition of kindness will be an augmented factor. For instance, most technology brands in Pakistan collaborate with Bilal Munir (an SMI, a.k.a videowalisarkar) because he is credible, tech-savvy and kind towards his followers. Likewise, Marques Brownlee (a.k.a MKBHD) is a globally famous SMI, approached by top brands since he preaches kindness and compassion towards followers. This implies that SMIs should engage in acts of kindness, such as supporting social causes or showing empathy, to influence CW positively. Likewise, online marketers should hire influencers with a kind attitude to strengthen their brand promotion strategy.

This study identifies influencers’ characteristics as key drivers of CW, providing practical guidance for influencer marketing. Consequently, marketers should care about CW. Notably, in an online context, intangibility and anonymity create doubts in consumers’ minds. For instance, influencers’ luxurious lifestyles and attractive physical appearances create an upward social comparison, causing consumer stress and anxiety. Therefore, marketers should carefully employ influencers who can provide quality arguments and are kind and credible, resulting in better CW. In conclusion, a happy and healthy consumer is more inclined to purchase.

Regarding influencer type, marketers should carefully choose the influencers for their brand promotion. The selection of influencers should be aligned with the marketing objective and type of persuasion needed. When the objective is to build trust and positive attitudes through credibility, mega-influencers should be employed. For example, OctaFX (an online trading platform) employed Arsalan Naseer (a mega-influencer) to build trust in online trading amongst Pakistani consumers. Similarly, BOSS collaborated with Khaby Lame (The no. 1 TikToker worldwide) to generate favourable consumer responses for the newly launched clothing brand. In contrast, with their kind attitude, macro-influencers should develop closer bonds and interpersonal relationships more effectively. For instance, online communities often promote food brands and restaurants via personal recommendations. In response, many food brands are hiring Junaid Akram (a macro-influencer) for his kind attitude to encourage followers with closer personal ties. Likewise, Jennifer Messina, a well-known macro-influencer, promotes cryotherapy brands to instil well-being amongst followers. Thus, the selection of influencers should be tailored to fit the marketing strategy.

6.3 Limitations and future directions
First, the present study made a novel effort to investigate influencer kindness (as a peripheral cue) on CW. However, other influencer characteristics like intimacy, sensitivity, or humour could influence CW, opening avenues for further inquiry. Furthermore, the study was conducted in the context of TikTok and Pakistan, which may limit the generalisability. Future studies may explore other social media platforms and cross-cultural examinations to enhance understanding and generalisability.

References


**Appendix**

Link to macro-influencer TikTok profile (Hira Bleeih)
https://www.tiktok.com/@hirableeh?lang=en

Link to mega-influencer TikTok profile (Romaisa Khan)
https://www.tiktok.com/@romaisa.khan.?lang=en

Link to macro-influencer video
https://www.youtube.com/shorts/APV3PBtQ2tU

Link to mega-influencer video
https://www.youtube.com/shorts/d8eOD-6VkaY

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TikTok’s impact on consumers’ well-being