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## Trust but verify? Examining the role of trust in institutions in the spread of unverified information on social media

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#### ABSTRACT

This study aims to investigate the association between trust in institutions and the reasons for sharing unverified information on social media. Specifically, this study explores the role of perceived self-efficacy in detecting misinformation and the motivation to authenticate information in online contexts. We draw on a sample of 2600 respondents, mainly Generation Z and Millennials (ages between 15 and 30). The findings show a blinding side of trust, revealing a positive association between trust in institutions on social media and reasons for sharing unverified information. Trust in institutions is positively associated with perceived self-efficacy in detecting misinformation. We suggest that the positive correlation between trust in institutions and perceived self-efficacy in detecting misinformation implies an overconfidence effect - i.e., individuals may overestimate their ability to assess information based on their belief that a source (institution) is trustworthy. This arguably represents a tendency to divert attention away from the accuracy of the information and explains the positive indirect association between trust and the likelihood of sharing unverified content. Moreover, trust is negatively associated with individuals' motivation to authenticate information, suggesting that individuals may rely on information utility rather than engage in critical thinking and verification. This study contributes to understanding the spread of misinformation on social media by highlighting the role of trust in institutions and its association with individuals' reasons for sharing unverified information. It also emphasizes the importance of perceived self-efficacy in detecting misinformation and the motivation to authenticate information as mediating mechanisms.

Today's online information environment is rife with unverified information. In many cases, such information can be classified as disinformation, and concerns about disinformation are spiking with the prevalence of fake news (Herrero-Diz et al., 2020) and misinformation (Chen et al., 2015b; Chen et al., 2015a). The problem of false or inaccurate information is not new, but the quantity and widespread availability of such information has led the World Economic Forum to classify the spread of such information as a global threat to humanity (Laato et al., 2020). Indeed, there is no shortage of false and inaccurate information (Weeks & Gil de Zúñiga, 2021). In recent years, there has been increasing concern about the proliferation of false and misleading information on social media (Pennycook et al., 2021).

Research suggests that social media have given rise to a "post-truth" era where ideology trumps facts and wrongful information often travels faster than truths (Altay et al., 2022). The taxonomy of fake news provided by Derakhshan and Wardle (2017) provides a glimpse of the scope of the information challenges faced by social media users as they sort

through information disorder, including false connections, false context, misleading content, imposter content, manipulated content, clickbait, and propaganda (for an overview see Derakhshan & Wardle, 2017). Arguably, the strength of social media in providing an online platform for users to generate and exchange information with limited oversight and a potentially unlimited audience is also its greatest weakness. Hence, examining the antecedents and reasons for sharing unverified information is of great importance to understanding the proliferation of such information in our media environment.

While social media is often heralded for allowing users to communicate, share information, and collaborate (Anttiroiko & Savolainen, 2011), inaccurate information is rampant on social media (Chen, Conroy, & Rubin, 2015). Research has demonstrated that individuals are not particularly diligent in evaluating information on social media (Kim & Sin, 2011). While not necessarily ill-intended, social media users often spread unverified information for various reasons. This problem is further exacerbated by the absence of quality control mechanisms and

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various social media affordances that facilitate the effortless sharing of others' content (Herrero-Diz et al., 2020; Krafft & Donovan, 2020). Hence, this study seeks to understand the prevalent spread of misinformation by understanding the reasons why young individuals (15–30 years old) share unverified information on social media.

Many studies have sought to address individual motivations for the diffusion of misinformation on social media (e.g., Khan & Idris, 2019; Laato et al., 2020; Lewandowsky et al., 2017; Shin et al., 2018; Talwar et al., 2019). This study specifically investigates the relationship between trust in institutions and the reasons for sharing unverified information on social media. Notably, trust in institutions is in stark decline, in part due to the increased spread of fake news (Bago et al., 2020; Chambers, 2021), disinformation (McKay & Tenove, 2021), the spread of conspiracy theories (Hosking, 2019; Xiao et al., 2021), and the rise of populism more broadly. Contemporary "post-truth" media environments erode trust in facts and reality to the extent that facts are no longer acknowledged to exist (Lewandowsky et al., 2017). However, ironically, research on misinformation sharing has also demonstrated that trust in online sources is a pertinent contributor to sharing unverified information (Khan & Idris, 2019; Laato et al., 2020; Talwar et al., 2019). For instance, in the context of the COVID-19 pandemic, Laato et al. (2020) demonstrated that online information trust increased the sharing of unverified information. Similarly, Talwar et al. (2019) suggested that online trust was more likely to increase fake news sharing as trusting individuals are likely to lend more support to information shared with them. Research has demonstrated that individuals may be less likely to authenticate information from sources they trust (Talwar et al., 2019). In addition, studies on the sharing of unverified information repeatedly call for media and digital literacy programs to improve individuals' ability to navigate the misinformation era (e.g., Fendt et al., 2023; Jo et al., 2022; Scherer & Pennycook, 2020). We study to what extent perceived self-efficacy in detecting misinformation and motivation for information authentication mediate the relationship between trust and reasons for sharing unverified information.

In doing so, this study seeks to make several contributions. First, this study provides empirical evidence of a positive relationship between trust in institutions on social media and reasons for sharing unverified information. It confirms that individuals with higher trust in institutions report stronger reasons for sharing unverified information, shedding light on the role of trust in contributing to the prevalence of misinformation on social media. Second, the findings of this study shed light on two important mediating mechanisms. Perceived self-efficacy in detecting misinformation and motivation for information authentication partially mediate the relationship between trust and reasons for sharing unverified information. This highlights the importance of individuals' confidence in their ability to identify false information as a factor influencing reasons for sharing unverified information. Conversely, when individuals trust institutions on social media, they may be less motivated to authenticate the information they encounter critically, likely leading to a higher propensity for sharing unverified content.

#### 1. Theory

#### 1.1. Trust and reasons for sharing unverified information

The prevalence of misinformation on social media raises questions about users' reasons to share such information. A burgeoning body of research studies what motivates or deters individuals from sharing unverified information or downright fake news (Metzger et al., 2021). For instance, studies relied on the Uses and Gratification Theory to suggest that people may share fake news to pass the time, gratify socialization, entertainment, or to gratify altruistic needs (Apuke & Omar, 2021). In addition, Talwar et al. (2019) draw on Social Comparison Theory and Rational Choice Theory to suggest that self-disclosure, fear of missing out, and social media fatigue are drivers and deterrents of sharing fake news online. This study expands on this work by focusing on the relationship between trust in institutions on social media and individuals' reasons for sharing unverified information (Harjule et al., 2023).

Trust is a useful concept for understanding how individuals interact with each other and the content on social media (Gretry et al., 2017). Trust may build and decrease on social media as an outcome of information exchanges. The sharing of misinformation is inextricably linked to trust (Di Domenico et al., 2021). For instance, Altay et al. (2022) argued that sharing fake news may decrease trust in the sources who share such information. When it comes to institutions and organizations, the harmful effect of trust has also been noted as problematic (Canel & Luoma-aho, 2019), but what remains unclear are its links with underlying reasons for sharing unverified information, especially in the social media context.

Trust in institutions is typically viewed as the trustworthiness or confidence an individual has towards generalized others, such as the police or government (Paxton, 1999; Warren et al., 2014). In that sense, institutional trust might be conceptualized as generalized trust (Lounsbury, 2023). Trust in institutions likely follows from dispositional trust, which is the general willingness of individuals to trust others even if they have not interacted together before (Moin et al., 2015). Social media are important information vehicles enabling institutions to share information with the public (Hsieh-Yee, 2021). Institutions such as educational institutions, public authorities, governments, non-profit organizations, and supranational organizations represent core institutions for governance and information exchange in society (Hsieh-Yee, 2021; Van Zoonen, 2012; Warren et al., 2014). Typically, the creation and validation of new knowledge is entrusted to such institutions, possessing the power and resources to inform society (Gil de Zúñiga & Kim, 2022).

Most institutions depend on people trusting their facts and outcomes to be relevant, impartial, and replicable; "in other words, they [*the public*] expect the information coming out of these institutions to be true" (Van Zoonen, 2012, p. 57). In the context of assessing information on social media, these trusting beliefs mean that users will consider whether the posting institution is honest and whether to trust their information and message (Hsieg-Yee, 2021). Notably, especially on social media, individuals may tend to rely on social categorizations, reputations, wishful thinking, and institutional roles in deciding whether to trust and share information found on social media (Hsieg-Yee, 2021).

Interestingly, Pennycook and Rand (2021) suggested that evaluation of the accuracy of news is often impaired by recipients' heuristic-based processing of (dis)information. Moreover, Boulianne and Humprecht (2023) suggested that prior institutional trust can reduce the perceived exposure to misinformation. This may increase the risk of spreading unverified information as information shared by trusted, authoritative institutions are believed to be true or accurate. While the relationship between institutional trust and reasons for sharing unverified information has garnered relatively little attention, research on trust and social media use more broadly offers support for the notion that individuals who receive fake news from sources they trust are more likely to pass on and share such information to others in their social networks (Metzger et al., 2021).

Research on message, brand, and interpersonal trust provides further evidence that trust represents an important marker in an individual's social media content consumption and production. For instance, in the context of COVID-19 information sharing, Lu et al. (2021) suggested that individuals were more likely to share information from institutional sources they trusted, even if they lacked sufficient knowledge of the issue. In addition, several studies demonstrated that trust in other users on social media was a predictor of fake news perceptions (Halpern et al., 2019) and fake news sharing (Talwar et al., 2019). Moreover, reduced trust in the message and perceptions of deceptive intent were found to decrease the sharing of misinformation on social media (Di Domenico et al., 2021). Talwar et al. (2019) argued that trust encourages people to provide more social support and take risks in sharing information. Their study finds that individuals who have high trust in information and news shared on social media are more likely to share fake news with others and are less likely to verify information before sharing it online. Hence, institutional trust may reduce perceptions of misinformation (Boulianne & Humprecht, 2023), increase reliance on institutional roles and reputation (Hsieg-Yee, 2021), and, therefore, amplify reasons for sharing unverified information (Metzger et al., 2021; Talwar et al., 2019). Thus, we hypothesize that.

**H1**. Trust in institutions on social media is positively related to reasons for sharing unverified information on social media.

#### 1.1.1. Perceived self-efficacy in detecting misinformation

Research suggests that the veracity of headlines has little impact on an individual's choices to share information on social media despite having a large impact on an individual's judgment of accuracy (Pennycook et al., 2021). While research highlights the importance of fostering internet users' information literacy in mitigating the spread of misinformation (Fendt et al., 2023), misinformation is often framed persuasively inviting subsequent dialogue (Scheibenzuber et al., 2023). Interestingly, research on motivations for sharing misinformation often assumes that individuals share misinformation unintentionally, for instance, because they are unable to detect whether the information is false (Metzger et al., 2021). Pennycook et al. (2021) conclude that individuals often share misinformation because their attention is focused on factors other than accuracy. In such cases, individuals may (un) intentionally share misinformation out of unawareness, motivated by self-expression or utilitarian needs (Chen, Conroy, & Rubin, 2015) or the need to build and maintain social relationships (Duffy et al., 2020). We suggest that trust in institutions on social media limits an individual's self-efficacy in detecting misinformation by diverting an individual's attention away from the accuracy of the information.

Contrary to previous predictions that suggest that self-efficacy in detecting misinformation would reduce the probability of being misled and spreading misinformation (Khan & Idris, 2019; Kumar & Geethakumari, 2014), we argue that trust may lead to a higher perceived self-efficacy, which lowers individuals' attention for the accuracy of the information and in turn is positively related to reasons for sharing unverified information. Self-efficacy refers to an individual's confidence that they possess the ability to perform a certain action (Bandura, 1977), here detecting false information (Khan & Idris, 2019). Khan and Idris (2019) suggested that trust in information is positively related to perceived self-efficacy in detecting misinformation. In addition, Hocevar et al. (2014) indicated that social media self-efficacy was positively associated with the perceived trustworthiness of information. Hence, trust in institutions may serve as a reliable cue for verifying information (source-heuristic). When individuals trust institutions on social media, they may be more likely to believe the information provided as the source seems credible and reputable, inflating the perception of their ability to identify misinformation more accurately.

In turn, while self-efficacy is often assumed to help curb misinformation sharing (Hopp, 2022), Serra-Garcia and Gneezy (2021) remind us to think about the 'overconfidence effect.' The overconfidence effect holds that if individuals are adept at detecting misinformation (for instance, because they trust the source), they might feel more confident in sharing their judgments without verifying the information. As such, "overconfidence in detecting lies could help lies spread." (Serra-Garcia & Gneezy, 2021, p. 3160). Some studies go even further by suggesting that incompetent individuals are more likely to act based on misinformation because they are more often exposed to it, less able to discern correct and false information, and frequently overestimate their ability to do so (Kartal & Tyran, 2022), also known as the Dunning-Kruger effect (Kruger & Dunning, 1999). Similarly, in the context of journalism studies, Martinez-Costa and colleagues (2022) draw on similar principles proposing the "nobody-fools-me perception." This refers to a cognitive bias involving individuals becoming overconfident in their abilities to detect false information and the perception of being

relatively immune to the threat of misinformation.

Hence, the concept of overconfidence may explain why the perceived self-efficacy in detecting misinformation may partially mediate the relationship between trust and reasons for sharing unverified information on social media (Talwar et al., 2019). As such, we hypothesize.

**H2.** The positive association between trust and reasons for sharing unverified information is partially explained through perceived self-efficacy in detecting misinformation.

#### 1.1.2. Motivation for authentication

Tandoc Jr and colleagues (2018) noted that "individual users are motivated to authenticate—that is, before they attend to any news article they come across on social media, they engage in some forms of authentication, no matter how brief and basic" (p. 259). However, the proverb of 'trust but verify' is challenged in the context of misinformation on social media. In comparison, Schul et al. (2008) reflected on the positive outcomes of distrust by suggesting that distrust may result in people being more careful about their environment. The alternative may be equally true; people who trust their sources may care less about, or be less motivated to, authenticate information. In the context of COVID-19 pandemic related information sharing, Apuke and Omar (2020) noted that individuals driven to be the first to share news about the virus are less motivated to authenticate information they feel might be useful.

Pennycook and Rand (2021) suggested that people often fail to discern truth from fiction because they fail to reflect on the accuracy of information. Moreover, Talwar et al. (2019) noted that when individuals have high levels of trust in institutions on social media, they are less likely to authenticate the information from those sources. Similarly, Aoun Barakat et al. (2021) found that trust in social media as an information channel decreases verification behavior. Drawing on research on information processing heuristics, we suggest that trust in institutions on social media may relate to reasons for sharing unverified information on social media through a reduced motivation to authenticate information (Pennycook & Rand, 2021). Hence, individuals may rely on source credibility cues, reducing critical thinking and motivation to authenticate the information.

Indeed, Metzger et al. (2010) suggested that individuals are likely to rely on peripheral or heuristic cues for evaluating the trustworthiness of online information when the motivation or ability to judge the quality of information is low. Cognitive heuristics constitute information processing strategies that ignore information to make decisions more quickly and with less effort (Metzger & Flanagin, 2013). In online and information-abundant environments, individuals may assume that information is correct when many others seem to think so (i.e., ad populum fallacy; Sundar, 2008, pp. 73-100). Similarly, individuals may deploy a self-confirmation heuristic, which is the tendency to view information as more credible when it confirms their pre-existing beliefs (Metzger et al., 2010) or comes from sources they deem trustworthy. Hence, in the presence of trust in institutions on social media, individuals may be less motivated to authenticate information and simply rely on the information from the institutions they trust, foregoing more thorough verification of the information those institutions share (Torres et al., 2018).

Importantly, blind news consumption (i.e., consuming news without verifying the source) may lead individuals to assume news to be credible and allow fake news to prevail (Choi & Lim, 2019). This suggests that when individuals are no longer motivated to authenticate information, the reasons for sharing unverified information may increase. Hence, drawing from the reasoning above, we propose that trust in institutions on social media operates as an important cognitive heuristic influencing individuals' motivation to authenticate information. When trust in institutions is high, individuals may be less motivated to critically evaluate or verify information from these sources, including misinformation. As such, reasons for sharing unverified information may prevail, undermining the information ecosystem. In other words, trust in institutions may increase the reasons for sharing unverified information and

perpetuate false narratives because trusting individuals are less motivated to authenticate information. Hence, we hypothesize.

**H3.** The positive association between trust and reasons for sharing unverified information is partially explained through reduced motivation for information authentication.

#### 2. Methods

#### 2.1. Sample

Data were collected from 2600 young individuals between 15 and 30 years old. The data were collected from individuals in four countries: Australia, Finland, Singapore, and the United States. As such, the sample encompasses a diverse range of geographical, cultural, technological, and sociopolitical contexts enhancing the external validity of the findings and contributing to a broader understanding of the reasons for sharing unverified information among young individuals on social media. We specifically targeted individuals from Generation Z and Millennials, who are often labeled "digital natives" and consistently shown to use social media most frequently (e.g., PewResearch Center, 2021). To investigate Generation Z's and Millennial individuals' experiences across four diverse countries, we engaged the services of a proficient market research and data collection partner, Innolink. The authors designed the questionnaire tailored to the study's objectives. Programming and administrating the online questionnaire were entrusted to Innolink based on their expertise conducting surveys with this target population. The research partner distributed the online questionnaire through their established network of panelists in Finland, Singapore, Australia, and the United States.

All individuals in our sample indicated that they used some social media channels, with 73.6% indicating they used them multiple times per day and another 23.6% indicating daily use. Individuals indicated that YouTube, Instagram, Facebook, and TikTok were most frequently used, whereas Jodel, Signal, and Clubhouse were the least used social media channels. The average age in the sample was 23.5 years old (SD = 4.17), and most respondents identified as female (52.2%). Of the respondents, 44.5% reported obtaining a college or university degree, and another 48.2% indicated having a high school diploma and some degree in vocational education. The respondents predominantly indicated working full-time or part-time (54.1%) or being full-time or part-time students (29%). Most respondents lived in big cities (between 100k and 999k inhabitants) 31.2% or major cities (above 1M inhabitants) 30.8%.

#### 2.2. Measures

Table 1 reports all measurement items with corresponding factor loadings and standard errors. The results of the CFA are reported below and in Table 2.

#### 2.2.1. Trust

Trust was measured using five statements. Trust in institutions refers to the trustworthiness or the confidence an individual has in information of "generalized others," including the police or governments (Paxton, 1999; Warren et al., 2014). Hence, trust can be viewed as a general belief and feeling of confidence that institutions will perform actions that will result in positive outcomes (Anderson & Narus, 1990; Gefen et al., 2003; Pappas, 2017). We measure trust as the frequency with which individuals feel confident that institutions can be trusted (Morrone et al., 2009). Following Warren et al. (2014), respondents were asked to indicate to what extent they trusted the following sources on social media: "educational institutions (e.g., schools and universities)," "public authorities (e.g., health services, police, etc.)," "the government," "non-profit organizations (e.g., Greenpeace)," and "Supranational organizations (e.g., World Health Organization WHO)." These institutions

#### Table 1

Survey items latent constructs measurement model.

Item	Mean (SD)	R <sup>2</sup>	St. Factor loading	Unst. Factor loading <sup>a</sup>	Se					
Trust in institutions on social media										
I trust information from	3.69	.52	.719	$1.000^{b}$						
educational institutions (e.g., schools and universities)	(1.05)									
I trust information from public	3.69	.65	.808	1.186	.03					
authorities (e.g., health services, police)	(1.11)									
I trust information from the	3.48	.50	.708	1.107	.04					
government	(1.18)									
I trust information from	3.52	.45	.669	1.012	.03					
supranational organizations	(1.15)									
(e.g., World Health										
Demonstration)	tina misin	format	ion							
It is easy for me to spot	2 5 2	101 mat	663	1.000 <sup>b</sup>						
information that is not true	(1,01)	.44	.005	1.000						
Lam confident that I will not be	2 42	45	667	1.058	04					
persuaded by information	(1.06)	.45	.007	1.038	.04					
that is not true										
Thanks to my knowledge, I can	3.57	.56	.750	1.171	.04					
recognize information that is not true	(1.05)									
Thanks to my experience, I	3.61	.53	.724	1.120	.04					
know how to recognize	(1.04)									
information that is not true										
Motivation for authentication										
As long as information is useful to me:										
I don't care who wrote it	2.89	.42	.644	$1.000^{b}$						
	(1.25)									
I don't care if information	3.03	.38	.618	0.928	.04					
contains sponsored or paid collaborations	(1.20)									
I don't care if I do not know the	2.68	.69	.831	1.269	.04					
source of the information	(1.23)									
I don't care if the content is true	2.43	.46	.678	1.099	.04					
or not	(1.30)									
Reasons for sharing unverfied	informatio	n								
I share unverified information because:										
The information comes from	3.06	32	563	1.000 <sup>b</sup>						
authoritative sources	(1.27)	.02	1000	11000						
The information is consistent	3.14	.56	.748	1.273	.05					
with my beliefs/assumptions	(1.22)									
The information is new and eve-	3.17	.65	.803	1.371	.05					
catching	(1.22)									
The information can be a good	3.27	.58	.763	1.308	.05					
topic for conversation	(1.23)									
By sharing I can help others	3.13	.55	.744	1.283	.05					
even though I would not get	(1.23)									
uny benefits in return	0.15	50	769	1 000	05					
<i>i jeel enjoyment when sharing</i> such information	3.15 (1.23)	.59	./08	1.323	.05					

 $^{\rm a}$  All factor loadings are significant at p < .05  $^{\rm b}$  Unit loading indicator constrained to 1. Composite Reliabilities are reported in bold.

were selected as they represent core institutions in governance and information and knowledge production. Since these institutional actors frequently provide information and trust may fluctuate, individuals may find it easier to reflect on their interactions and experiences with institutions in terms of frequency. As such, we follow Wang and Handy (2014) in asking individuals to rate how often they trust information from such sources on social media using (1) never to (5) always response options.

#### 2.2.2. Perceived self-efficacy in detecting misinformation

Perceived self-efficacy was measured using four statements adopted from (Khan & Idris, 2019). Perceived self-efficacy in detecting misinformation is defined as an individual's confidence in their ability to

#### Table 2

#### Validity and Reliability statistics.

Variable	M (SD)	CR	AVE	MSV	MaxR(H)	1	2	3	4	5	6
1 Trust	2.77 (0.90)	.82	.53	.19	.83	.73					
2 Perceived self-efficacy	3.53 (0.82)	.80	.49	.19	.80	.36	.70				
3 Motivation for authentication	2.76 (0.97)	.79	.49	.15	.82	.15	.16	.70			
4. Reasons for sharing unverified information	3.15 (0.96)	.88	.54	.15	.88	.26	.24	.33	.74		
5. Age	23.53 (4.17)	-	-	-	-	02	.05	03	02	-	
6. Gender	1.54 (0.52)	-	-	-	-	03	06	.20	16	.03	-
7. Social Media use	3.70 (0.52)	-	-	-	-	.14	.08	05	.01	.02	.07

*Notes.* CR = Composite Reliability; AVE = Average Variance Extracted; MSV = Maximum Shared Variance; MaxR(H) = Maximum Reliability. Square Root of the AVE is reported on the diagonal. Correlations coefficients greater than (-).05 are significant*p*< .05.

detect false and untruthful information (Bandura, 1977; Khan & Idris, 2019). Sample items include: "It is easy for me to spot information that is not true." and "Thanks to my knowledge, I can recognize information that is not true." Respondents rated the statements on a five-point Likert-type scale ranging from (1) strongly disagree to (5) strongly agree.

#### 2.2.3. Motivation for authentication

Motivation for authentication was measured by developing four statements for this study. These statements are based on the notion that individuals are motivated to engage in efforts to authenticate the information they encounter on social media (Talwar et al., 2019; Tandoc Jr et al., 2018). Respondents were prompted with the statement: "As long as the information is useful to me [...]," followed by statements like "[...] I don't care who wrote it." And "[...] I don't care if the content is true or not." Respondents rated their agreement or disagreement on a five-point Likert-type scale. Motivation to authenticate was coded such that higher scores indicate less motivation to consider underlying factors of information for authentication behavior, as they demonstrate a willingness to consider information based on personal utility, irrespective of source credibility, sponsored content, source knowledge, or content accuracy.

#### 2.2.4. Reasons for sharing unverified information

Reasons for sharing unverified information were measured by adopting six items from Harjule et al. (2023). Respondents indicated the extent to which the items matched their reasons for sharing unverified information on social media (Apuke & Omar, 2021; Chen, Conroy, & Rubin, 2015; Talwar et al., 2019). Respondents were asked to indicate their agreement or disagreement with statements including: "I share unverified information because the information is consistent with my beliefs/assumptions" and "I share unverified information because the information is new and eye-catching." We first performed an Exploratory Factor Analysis (EFA) to examine the factor structure without a priori specifying the factor structure. The results indicate that the statements load on one factor (EV = 3.69,  $R^2$  = 61.44%, average  $\lambda$  = .781). We replicated this result in the confirmatory factor analysis reported below. This suggests that the statements represent an overall construct representing motivations for sharing unverified information. Higher scores on reasons for sharing unverified information on social media indicate a stronger motivation for sharing unverified information.

#### 2.3. Analytical approach

Structural equation modeling using IBM AMOS 25 supported the analysis of our hypothesized model. First, we conducted a confirmatory factor analysis to examine the reliability and validity of the measurement instrument. Subsequently, we examined the structural regression model to examine our hypotheses. The models were estimated using a maximum likelihood estimator. Model parameters were obtained through bootstrapping, extracting 5000 bootstrap samples. Model fit was evaluated through various model fit indices. First, we report the chi-square/df ratio; values below 5 are typically considered to indicate good

model fit (Hu & Bentler, 1999). However, this measure is known to be sensitive to sample size. In addition, we examined two incremental and two absolute fit indices: Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR). For the TLI and CFI values greater than 0.90 indicate good model fit. For the RMSEA and SRMR, values less than 0.08 indicate a good model fit (Hair et al., 2010; Hu & Bentler, 1999).

#### 3. Results

#### 3.1. Measurement model

The model demonstrated adequate model fit:  $\chi 2/df = 3.689$ , CFI = .95, TLI = .94, RMSEA = .02, SRMR = .06. Table 2 reports the validity and reliability statistics for the measurement model. The confirmatory factor analysis demonstrated that the measures were sufficiently reliable as the composite reliabilities ranged between 0.76 and 0.88. Furthermore, the reliability coefficient H ranged between 0.78 and 0.89, again confirming adequate reliability (Hair et al., 2010). In addition, discriminant validity was established as the maximum shared variance (MSV) across constructs was smaller than the within-construct explained variances. In addition, it should be noted that the square root of the average variance extracted was greater than the correlations between constructs. Hence, discriminant validity assumptions were met. Finally, the model demonstrated convergent validity, though it should be noted that the average variance extracted for perceived self-efficacy (0.49) and motivation for authentication (0.49) just fall short of the threshold of 0.50 (Hair et al., 2010; Malhotra & Dash, 2011). However, as the average variance extracted is a conservative measure, and the reliability coefficients exceed 0.70, Malhotra and Dash (2011) argue that convergent validity can still be assumed (see also Fornell & Larcker, 1984). Additionally, since the data were self-reported on a single occasion, common method bias was examined through Harman's Single Factor test. The results indicated that a single factor explained 28.4% of the variance, suggesting that common method variance is not of substantial concern in this dataset. Next, we move on to investigating the structural model.

#### 3.2. Structural model

The structural model indicated good model fit:  $\chi 2/df = 3.689$ , CFI = .95, TLI = .94, RMSEA = .02, SRMR = .06. The unstandardized and standardized model parameters associated with the hypotheses are presented in Table 3. Fig. 1 represents a simplified structural model with standardized regression weights. Below we report the unstandardized solution.

#### 3.2.1. Direct effect

Hypothesis 1 reflects the assumption that trust in institutions on social media may be positively associated with reasons for sharing unverified information. The results indicate that trust is positively associated with reasons for sharing unverified information (B = .150,

#### Table 3

Results of Hypotheses testing.

	Relationship	BC 95% CI						
		Beta	SE	В	Lower	Upper	Р	Result
H1	Trust $\rightarrow$ reasons for sharing unverified information sharing	.151	.026	.150	.092	.199	.013	Supported
H2	Trust $\rightarrow$ perceived self-efficacy $\rightarrow$ reasons for sharing unverified information	.069	.014	.061	.036	.088	.014	Supported
H3	Trust $\rightarrow$ motivaiton for authentication $\rightarrow$ reasons for sharing unverified information	.034	.007	.046	.030	.067	.009	Supported

B represents unstandardized regression weights; beta indicates standardized regression weights. BC 95% CI indicates the 95% bias-corrected confidence intervals associated with the regression weights.



Fig. 1. Simplified Structural Model with standardized regression weights (N = 2600).

CI95% [0.092; 0.199], p = .013). Hence, these results support hypothesis 1.

#### 3.2.2. Indirect effects

Hypothesis 2 posits that the relationship between trust and reasons for sharing unverified information is partially mediated by perceived self-efficacy in detecting misinformation. The results indicate that trust in institutions on social media is positively related to perceived selfefficacy in detecting misinformation (B = .389, CI95% [0.331; 0.460], p = .007). In addition, perceived self-efficacy in detecting misinformation is positively related to reasons for sharing unverified information on social media (B = .157, CI95% [0.097; 0.224], p = .011). These results imply a significant and positive indirect relationship (B = .061, Sobel's Z = 4.33, p = .014), supporting the reasoning reflected in hypothesis 2.

Hypothesis 3 articulates the assumption that the association between trust and reasons for sharing unverified information is carried by motivation for authentication. The results indicate that trust and motivation for authentication are positively associated (B = .151, CI95% [0.099; 0.207], p = .006), suggesting that when trust is higher, individuals are less motivated to authenticate the source or message on social media. In addition, we found that people less motivated to authenticate information on social media report stronger reasons for sharing unverified information (B = .306, CI95% [0.264; 0.372], p = .003). Again, these results imply a significant and positive indirect effect (B = .046, Sobel's Z = 4.94, p = .009) supporting hypothesis 3.

#### 4. Discussion

The findings illuminate the relationship between trust in institutions on social media and sharing unverified information on social media. The findings demonstrate that trust in institutions on social media is positively associated with reasons for sharing unverified information. This finding suggests that individuals could develop "blind" trust, leading them to share information without questioning its veracity, increasing the likelihood of sharing unverified information. We further add that trust in institutions may create a sense of self-efficacy in detecting wrongful information. The partial mediation through perceived selfefficacy supports an overconfidence effect, where individuals feel adept at detecting misinformation, lowering their attention to wrongful information. In addition, the findings suggest that when individuals have high trust in institutions, they may be less motivated to authenticate the information from those sources. As such, the findings indicate that when people stop caring about authenticating information before they share it, this will positively correlate with reasons for sharing unverified information.

#### 4.1. Theoretical implications

The findings of this study present several theoretical implications. First, this study contributes to understanding the relationship between trust in institutions on social media and reasons for sharing unverified information. This aligns with previous studies that suggested that trust is related to sharing fake news on social media (Halpern et al., 2019). We extend this notion by empirically demonstrating that a) trust in institutions is positively associated with reasons for sharing unverified information and b) perceived self-efficacy in detecting misinformation and reduced motivation for authentication of information play a mediating role in this relationship. Specifically, we demonstrate that trust in institutions on social media may be positively related to reasons for sharing unverified information, partly because it increases the perceived ability to detect such information, and partly because it simultaneously reduces the motivation to authenticate information.

This is an important contribution, also considering previous studies that have suggested that trust in institutions has been gradually declining for decades (e.g., Lenard, 2005; Van Zoonen, 2012). Our findings are important because we propose a different figure-ground relationship between trust in institutions and misinformation. While research suggested that trust in institutions that publish reliable information may shield against the spread of disinformation (Humprecht, 2023), this study offers an alternative perspective suggesting that trust

in institutions may contribute to the spread of misinformation. This is important because studies have often considered misinformation to be at the root of hollowing trust in (democratic) institutions (e.g., Bennett & Livingston, 2018; van de Walle et al., 2008), problematizing the prevalence of fake news, disinformation, and the rise of populism (Carrapico & Farrand, 2021).

Expressly, while many studies caution the ways in which misinformation may undermine trust in public institutions, politics, and democracy at large (e.g., Boulianne & Humprecht, 2023; Limaye et al., 2020; Metzger et al., 2021; Van Zoonen, 2012), we highlight that trust in information from institutions on social media is positively associated with reasons for sharing unverified information on social media. Hence, paradoxically, individuals with higher trust in online sources are also more likely to share unverified information. In other words, misinformation may result in the decline of trust in the core institutions of democracy. However, trusting these institutions is positively associated with reasons for sharing the type of information that may lead to declining trust.

We have further unpacked the relationship between trust and reasons for sharing unverified information on social media by looking into the role of perceived self-efficacy in detecting misinformation and reduced motivation for information authentication. Interestingly, our findings suggest that greater trust in institutions is associated with greater self-efficacy in detecting misinformation, which, in turn, is positively associated with reasons for sharing unverified information on social media. This finding challenges the assumption that higher selfefficacy is a protective factor against sharing misinformation and highlights the potentially detrimental effects of trust associated with overconfidence (Kartal & Tyran, 2022). The overconfidence effect we propose here suggests that individuals who feel more adept at detecting misinformation because they trust sources may, ironically, help spread misinformation (Serra-Garcia & Gneezy, 2021). As such, we suggest that to understand individuals' reasons for sharing unverified information, we need to consider the role of individuals' confidence in their ability to detect misinformation (Fendt et al., 2023).

Furthermore, this study considered how motivation for information authentication played a role in the relationship between trust in institutions and reasons for sharing unverified information on social media. Our findings present empirical evidence that trust may serve as an important heuristic cue mitigating the motivation for authentication. There are several reasons why individuals may take cognitive shortcuts (Metzger & Flanagin, 2013). For instance, information abundance on social media may make it less feasible to vet all information thoroughly (e.g., time constraints, Talwar et al., 2019). Our findings confirm that if information comes from trusted sources, individuals may have low motivation to judge the quality of the information shared by such sources (Metzger et al., 2010), which is positively correlated with sharing unverified information on social media. This finding underscores the need for promoting critical thinking and information verification, especially among individuals who trust specific sources on social media and may be prone to having low motivations for authentication.

Taken together, the indirect associations through perceived selfefficacy in detecting misinformation and motivation for information authentication may also suggest the presence of echo chambers. When individuals have a high level of trust in certain institutions, they may be more inclined to accept information from those sources without critically evaluating it. The findings suggest that this may be due to a heightened sense of confidence and ability (i.e., self-efficacy in detecting misinformation) and a reduced motivation (i.e., reduced motivation for authentication of information). This can create echo chambers, where individuals share and reinforce unverified information within their social circles, further amplifying its spread.

#### 4.2. Practical implications

The findings of the study have important practical implications. The findings suggest that young individuals may use heuristic cues such as trust in institutions to inform their reasons for sharing unverified information. This is partly explained by perceived self-efficacy and motivation to authenticate information before sharing. First, this suggests an important responsibility lies with the institutions that share information on social media. Cognizant that audiences who have placed their trust in the institution become less likely to scrutinize information and may uncritically spread unverified information, institutions have a responsibility to ensure the information they share is truthful and encourage their audiences to remain critical of their information. Providing greater transparency about the information and its origin will allow users to follow up and verify online content more easily, even when they may be less motivated to authenticate information. Furthermore, social media organizations need to provide corrections to misinformation and point out that information may be wrong or misleading.

Second, the findings highlight the importance of media literacy education (Chen et al., 2022; Fendt et al., 2023). These media literacy programs should promote critical thinking skills and provide concrete strategies and techniques individuals can deploy for fact-checking and verifying information. Furthermore, such programs should pay attention to the dangers of unquestioningly trusting known sources and uncritically attributing that trust to the content of the information offered on social media. Cautionary remarks related to the dangers of overconfidence should be included. In addition, public awareness campaigns can emphasize the risks of spreading unverified information and highlight the importance of staying cautious, critical, and responsible when communicating on social media. Finally, younger individuals may be immunized against psychological deception strategies prominent in misinformation campaigns by pre-emptively exposing them to a weaker form of threat in a safe environment (Fendt et al., 2023). Together, these efforts may contribute to curbing the spread of misinformation. Overall, these implications offer concrete opportunities to mitigate the negative effects of blind trust in institutions on social media and promote a more informed and responsible online environment.

#### 4.3. Limitations and future research

This study comes with several limitations that need to be acknowledged. First, the data underlying this study are cross-sectional and selfreported. As such, no inferences can be made about the directionality of the relationships. Future studies may benefit from longitudinal inquiry to establish directionality and scrutinize temporal dynamics. Arguably, trust in institutions may promote the sharing of unverified information. However, this kind of information may eventually lead to a deterioration of trust. Second, motivation for authentication used a stem statement that refers to the usefulness of information. As such, the motivation for authentication was measured by explicitly addressing the motivation to prioritize utility over other authentication sources such as transparency and veracity. Future research may consider more direct measures that cover a broader spectrum of motivations for authentication. In addition, more neutral phrasing, such as "regarding the information I encounter on social media," might allow a more direct measurement of the overall inclination to authenticate information before sharing.

Another limitation lies in measuring the construct "reasons for sharing unverified information." While our findings suggest one unifying factor representing a general motivation for sharing unverified information, it is important to acknowledge that our measure does not capture the full spectrum of underlying reasons. Other reasons, such as time constraints (e.g., Talwar et al., 2019) or political motivations (Pennycook et al., 2018; Pennycook & Rand, 2021), may exist but were not included in our battery of questions. Therefore, our measure likely underrepresents the true complexity of reasons for sharing unverified

information on social media. Similarly, it is important to acknowledge that various conceptualizations of misinformation include underlying reasons for doing so (e.g., Chen et al., 2015a; Talwar et al., 2019), while others distinctively focus on measuring the behavioral component of the act of sharing unverified information (Hu & Apuke. 2023; Islam et al., 2020). These results and limitations provide several future research avenues. First, there is an urgent need for more validated measurement instruments to measure complex phenomena such as reasons for sharing unverified information and the act of sharing unverified information. Second, the burgeoning body of research on misinformation sharing, disinformation sharing, fake news sharing, and unverified news sharing is fragmented. The development of a coherent body of knowledge is impaired by inconsistent labeling and conceptualizations. A thorough meta-analytical study helps synthesize the fragmented field of research. In addition, future research may expand the methodological repertoire for studying trust and misinformation. Mixed-method designs combining content analysis of social media posts with survey or interview techniques would enable a deeper understanding of the nature of misinformation and the role of trust by reconstructing specific sharing occasions. Individuals may be asked to reflect more deeply on their motivations for sharing specific messages.

Additionally, a caveat of this study is the absence of information regarding whether and how individuals interacted with content originating from institutional sources on social media. A more comprehensive investigation into the actual engagement patterns with institutional sources with varying levels of trustworthiness would provide valuable insights into the direct relationship between institutional content consumption and misinformation-sharing behaviors and motivations. Hence, future research could benefit from including data that captures individuals' interactions with content from trusted and less trusted sources to elucidate the dynamics of information dissemination better.

Furthermore, recent research suggested that while the problem and prevalence of misinformation is rising globally, there may be differences across countries that may explain variations in individuals' reasons for sharing unverified information (Humprecht, 2020). For instance, Humprecht et al. (2023) examined the willingness to disseminate disinformation across six Western countries (Belgium, France, Germany, Switzerland, the U.K., and the U.S.). However, the present study is limited in making detailed cross-country comparisons since we did not collect data on respondents' cultural backgrounds or social environments. Future research may examine which socio-cultural factors contribute to sharing or withholding unverified information. A global perspective seems fruitful here; perhaps future studies could investigate whether and in what ways globally differing socio-cultural factors tie into the relationship between trust in institutions and the sharing of unverified information on social media by Generation Z and Millennial participants.

Finally, we explored the implications of trust in institutions on social media and the extent to which this is associated with reasons for sharing unverified information on social media. In future studies, it would be worthwhile to further unpack the trust dynamics. For instance, how do trust relationships within social networks impact information sharing and, specifically, the diffusion of false information? This may also include investigating individual characteristics and differences, including the role of emotions elicited by misinformation and perceptions of responsibility and ethical considerations by individuals sharing such information. While there is still much work to be done, this study contributes to understanding how misinformation may spread in social networks. The finding that trust in institutions may contribute to reasons for sharing unverified information through ability - i.e., an overconfidence effect - and motivation - i.e., motivation for authentication provides an important springboard for future research into the prevalence of misinformation.

#### Credit author statement

Ward van Zoonen: Conceptualization, methodology, formal analysis, writing – original draft, writing – review & editing. Vilma Luoma-Aho: Conceptualization, writing – original draft Resources, Project Administration. Matias Lievonen: Conceptualization, writing – original draft.

#### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

#### Data availability

Data will be made available on request.

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