

Article



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Why Do People Share Political Information and Misinformation Online? Developing a Bottom-Up Descriptive Framework

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Abstract

Social media users are key actors in the spreading of misleading or incorrect information. To develop an integrative parsimonious summary of social media users' own accounts of motives for sharing political information, we conducted: (I) a literature review of motives for personally sharing false information as reported by social media users and (2) qualitative research concerning these motives using an innovative, ecologically valid method. Based on our findings, we developed a pool of items evaluating social media users' motives for sharing false political information, which we then tested and analyzed the dimensionality of in (3) a pre-registered questionnaire-based study to identify key clusters of users' own accounts of motives for sharing both true and false political information. The current findings show that there are distinct sets of motives people report for their misinformation sharing behavior: prosocial activism, attack or manipulation of others, entertainment, awareness, political self-expression, and fighting false information. Also, these sets of motives are associated with variables known to predict sharing misinformation, and some of these sets predict social media users' self-reports of having shared misinformation in the past. Our findings highlight and elaborate on users' motives that reflect a concern with "making things better" and acting in a manner that is beneficial to society as a whole, and suggest that different interventions may be required to combat misinformation sharing driven by different motives. A potential set of 18 items that could be used in questionnaires measuring motivations for sharing political news online is described.

Keywords

misinformation, social media, motives, mixed-methods, political, review

False political information on social media is widespread (Moore et al., 2023; Vosoughi et al., 2018) and has the potential to severely harm individuals and society (House of Commons et al., 2019; Tucker et al., 2018; Zimmermann & Kohring, 2020). Social media users are key actors in the spreading of misleading or incorrect information, broadly termed *misinformation* (Caled & Silva, 2022). Over 40% of US adult Twitter users report sharing political information on Twitter (Bestvater et al., 2022). Inevitably, some of this information will be false: earlier research (Barthel et al., 2016) suggested that 23% of Americans had shared a false political news story, whether knowingly or unknowingly.

Researchers have proposed and studied a wide range of factors that potentially underlie decisions to share misinformation online (S. Chen, Xiao, et al., 2023; Metzger et al., 2021; Van Bavel et al., 2021). However, research in this area is complicated by the fact that when an individual shares a

piece of false information online, it is often done in the mistaken belief that it is true. At other times, however, people may share false material knowing that it is not true (Barthel et al., 2016). People's motives for sharing in these situations are likely to differ. For a fuller understanding of the range of sharing motives, an integrative perspective concerning social media users' firsthand experience (Borkman, 1976) of misinformation sharing is needed.

The purpose of the mixed-methods research (Clark & Ivankova, 2015) reported herein is to develop an integrative

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perspective concerning social media users' own accounts of motives for sharing political information and misinformation online. While our primary interest is in motives for sharing false information, the fact that people often believe the false information to be true means that we need also need to consider political material that is shared in good faith. We report three studies. Study 1 is a literature review that addresses the research question: What motives do social media users report for personally sharing information on social media? For Studies 2–3, we used a sequential qualitative then quantitative design and a connecting approach to integrate their findings. Study 2 is a qualitative study that used an innovative, ecologically valid method to addresses the research question: What motives do social media users report for sharing false political information online on their own social media accounts? Study 3 is a quantitative questionnaire-based study that addresses the research question: What are the key clusters of users' own accounts of motives for sharing both true and false political information online? Based on the findings of Studies 1–2, we developed a pool of items evaluating social media users' motives for sharing political information online. We analyzed the dimensionality of these motives in pre-registered Study 3, to identify key clusters of users' own accounts of motives for sharing both true and false political information. Our approach is consistent with guidance for scale development (Carpenter, 2018) and measurement research (Kipnis et al., 1980).

Reasons for Sharing Misinformation

People may share misinformation for multiple reasons (S. Chen, Xiao, et al., 2023). For example, factors that relate to the story itself—including perceiving the information to be new and eye-catching (X. Chen et al., 2015), accurate, and interesting-if-true (Altay et al., 2022; X. Chen, Pennycook, et al., 2023)—and to its visual presentation (Peng et al., 2023; Weikmann & Lecheler, 2022) may shape sharing decisions. Also, characteristics of the individual user, including age, political orientation (Morosoli, Van Aelst, Humprecht, et al., 2022), trust in information platform (Talwar et al., 2019), attention (Pennycook et al., 2021), and personality traits (Buchanan & Benson, 2019; Buchanan & Kempley, 2021; Morosoli, Van Aelst, Humprecht, et al., 2022) may play a role.

Social media users are active agents, who make choices about what they wish to share online. One key interest in research concerning users' characteristics is that of psychological motives. Several reviews have described evidence driven by researchers' ideas about users' sharing motivations (Aïmeur et al., 2023; S. Chen, Xiao, et al., 2023; Metzger et al., 2021), overall providing a useful overview of top-down knowledge concerning a wide range of motivations for misinformation sharing. These include motivations relating to political identification (Morosoli, Van Aelst, Humprecht,

et al., 2022; Osmundsen et al., 2021), interpersonal beliefs and goals (Balakrishnan et al., 2021; Talwar et al., 2019), social costs (Altay et al., 2023; Lawson et al., 2023), moral judgments (Joyner et al., 2023), anger toward the government (Wintterlin et al., 2023), third-person perceptions of misinformation (Yang & Horning, 2020), entertainment, and self-expression (X. Chen et al., 2015).

However, the scale and speed of research in this field has led to a situation where we have multiple accounts of potential reasons, some of which overlap, or may use different terminology to describe similar concepts. To clarify the picture, one step forward for misinformation research is to use methods that can identify underlying dimensions or clusters among the reasons that have been described. The application of dimension reduction techniques in several studies provides parsimonious accounts of motives for sharing information online (Chadwick et al., 2018, 2022; X. Chen & Sin, 2013; Liu et al., 2020). In these studies, motives put forward by researchers were analyzed and led to identification of, for example, motivational clusters labeled persuading/informing, debating, and entertaining/trolling, all of which predicted self-reported misinformation sharing behaviors (Chadwick et al., 2018). Thus, clusters of motives derived from theory-driven approaches can certainly provide valuable insights. However, unless they also incorporate bottomup approaches grounded in data derived from social media users' own explanations for their behavior, the sets of motives identified risk providing an incomplete picture (Haig, 2013).

Research inviting input from social media users has yielded important knowledge concerning users' psychological motives for misinformation sharing. Qualitative evidence suggests that motives that, for example, relate to social duty and moral principles (Duffy & Tan, 2022; Madrid-Morales et al., 2020), authentication of information (Duffy & Tan, 2022; Mahdi et al., 2022), and status-seeking (Mahamad et al., 2021; Mahdi et al., 2022) can affect users' misinformation sharing. As with the theory-driven work, to obtain a comprehensive yet parsimonious picture of user-reported motives for sharing information online, integration of the findings of such research is needed.

An additional consideration is that research that analyses input from social media users to date has included methods, such as discussions or interviews about online news sharing (e.g., Duffy et al., 2020), or presentation of mock or modified news feeds (e.g., Geeng et al., 2020). Critically, however, to our knowledge, people's motives for sharing false information online have not been studied "in the wild"; that is, when looking at what individuals have actually shared on their own social media accounts. This ecological validity limitation poses a boundary on the generalizability of misinformation research to actual everyday life (Kihlstrom, 2021). To advance the identification of bottom-up clusters of motives for sharing information online, ecologically valid qualitative investigations of users' sharing motives are needed.

The Current Project

In this project, we aim first of all to identify distinct motives that have been discovered by previous bottom-up research. We then aim to supplement this with data from social media users about why they themselves have actually shared false information. The list of motives resulting from these two approaches will then be consolidated using dimension reduction techniques, with the aim of producing a parsimonious yet comprehensive set of reasons why people share political information online.

Study I: State of Evidence in the Existing Literature

We conducted a search of the literature based on the principles of restricted systematic reviews (Plüddemann et al., 2018). In this review, our main interest is to identify studies that have provided evidence on social media users' personal accounts for sharing information online. This is for the purpose of creating a pool of items concerning users' motives for personally sharing information on social media, which will then be reduced to form meaningful clusters of userreported motives. Our research question is: What motives do social media users report for personally sharing information on social media? To ensure coverage of evidence from areas of psychology, social science, political science, media and communication, and human-computer interactions, we selected two major databases: Web of Science (WoS; Clarivate) and Scopus (Elsevier). We searched these databases on 20.06.22 for a combination of (1) misinformation, (2) social media, (3) motives, and (4) sharing terms (Online Appendix 1) in titles and abstracts using text words in academic journal publications. To capture a wider range of sharing motives, we did not restrict our search to political information. There were no restrictions for language or publication period. We located additional papers based on authors' knowledge and via the ancestry and descendancy approach (Johnson & Eagly, 2000), that is, backward and forward referencing of included papers and searching the references of a review paper (Metzger et al., 2021). The inclusion criteria were: (1) paper reports new evidence—whether obtained by qualitative or quantitative methods—of public social media user-reported accounts of motives for personally sharing information on social media (e.g., Facebook, Twitter) and (2) published in a peer-reviewed academic journal. Screening was conducted by a single reviewer with expertise in the design and conduct of full systematic reviews (RP). A second reviewer (TB) provided partial ($\geq 20\%$) verification across stages (i.e., abstract and title screening, full text screening, data extraction). Disagreements were settled by discussion. Our Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) figure can be found in Online Appendix 2.

We identified 16 papers meeting our criteria, shown in Table 1 alongside their characteristics and motives identified. To maximize the inclusion of potential motives in our pool, we took a broad approach for identifying motives in review data. Specifically, we extracted motives reported for both self-sharing behaviors and other-sharing behaviors from the papers included in Table 1 based on their labeling in the paper. We also reviewed all quotes in these papers and extracted motives reported in direct quotes of users. Across the 16 studies, 59 separate motives were identified. While these spanned a range of topics (e.g., from debunking to retaliation), there were some themes that emerged across a number of studies (e.g., references to entertainment, and warning/informing others). This observation reinforces our argument that synthesis across studies is required. Thus, this exercise led to the generation of 83 items for our pool of motives, detailed in Study 3.

Study 2: Reasons Given by Twitter Users for Sharing False Political Information on Their Own Accounts

Study 2 used an innovative, ecologically valid methodology to explore social media users' motives for sharing false information. We identified Twitter users who had shared, whether knowingly or unknowingly, false¹ political information on their accounts, and asked them about why they had shared those specific stories. We then used a qualitative content analysis to identify key themes in the motives described. Given the afore-mentioned limitations of existing methods in this field, we reasoned this had potential to identify previously unreported sharing motives.

Methods

Participants. We individually invited 2,300 Twitter users who had shared false political information on their profile in the previous 2 months to take part in exchange for a £10/US\$10 gift online voucher. Of these, 60 (2.6%) users took part. Following exclusion of one participant who was accidentally approached concerning an older post, the analytic sample comprised 59 Twitter users, each of whom had shared one of 23 distinct false stories.

Procedure and Recruitment. We identified political information posted between January 2022 to May 2022 that had been contested by fact-checking websites, namely, snopes.com, politifact.com, fullfact.org, and factcheck.org. Eligible posts typically involved recent (<2 months) stories (see Online Appendix 3 for details of the stories, which spanned the range of political partisanship). Next, we approached via public messages on Twitter users who shared (re-tweeted or quote re-tweeted) a contested post. Based on guidance provided by Atlantic Council's Digital Forensic Research Lab

Table 1. Characteristics of Studies Included in Our Literature Review (N=16).

		Motives for personally sharing information on social media	Social media platform	Participants	Data collection methodology	Location of participants
Stud	dy					
I	Ardèvol-Abreu et al. (2020)	Freedom of speech Truth is provisional	Facebook	31 participants, no gender information	Focus groups	Tenerife
2	Duffy et al. (2020)	Keep up with friends News was entertaining News was fun News generated feelings of outrage News had a high emotional content News could be used to inform loved ones News relevant to friends who receive it Warn Protect friends from harm	Various, including Facebook and Twitter	88 social media users	Focus groups	Singapore
3	Duffy & Ling (2020 ^a)	Relevant to others Warn/maintain relationship	Various, including Facebook and Twitter	88 people who routinely share news on social media	Focus groups	Singapore
4	Duffy & Tan (2022)	Social connection/group cohesion Entertainment Self-presentation Showing good intentions Collective sense-making	Various, including Facebook	66 students, 44 women, 22 men	Focus groups	Singapore
5	Hermansyah et al. (2021)	Debunking Concern for the experience of others	Various, including Facebook and Instagram	41 pharmacists, 31 females, 10 males	Focus groups	Indonesia
6	Houlden et al. (2021)	Others should know for their own good Others would be interested	Various, including Facebook and Instagram	18 individuals who had engaged with COVID-19 information online, 12 female, 6 male.	Semi-structured interviews	Canada
7	Geeng et al. (2020)	Taking content at face value/alignment with political views	Twitter and Facebook	25 social media users	Semi-structured interviews, and a think-aloud session	US
8	Madrid-Morales et al. (2020)	To create awareness Civic duty combined with a "just in case" attitude Alignment with political views Spark debate Humor or use of parody To poke fun at those in power	Various, including Facebook and Twitter	94 university students (52% men)	Focus groups	Kenya, Nigeria, Ghana, South Africa, Zambia, Zimbabwe
9	Mahamad et al. (2021)	Not paying attention to content First messenger Social duty Lack of knowledge	Various, including Twitter and Facebook	15 social media users, 5 male, 10 female	Semi- structured interviews	Malaysia
10	Mahdi et al. (2022)	Duty Retaliation Authentication Status-seeking	Various, including Facebook	80 social networking sites consumers and experts	Semi-structured interviews	Not specified

Table I. (Continued)

		Motives for personally sharing information on social media	Social media platform	Participants	Data collection methodology	Location of participants
II	Rohman (2022)	To help raise funds To warn or alert others To let others know To share information about products	Not specified, including Facebook	100 adults (58 women)	Interviews	Vietnam
12.	Swart (2021)	Raising awareness Fostering sociability and connection with others/ warn others	Various, including YouTube, Instagram, Facebook, and Twitter	36 young people, 19 female, 17 male	Semi-structured interviews	The Netherlands
13	Syam & Nurrahmi (2020)	Fun Attract wider audiences No reason	Various, including Instagram, Facebook, YouTube, and Twitter	28 university students, 14 male, 14 female	Focus groups	Indonesia
14	Urakami et al. (2022)	Warning or educating friends and family about it Reporting it to the platform Searching for additional information sources		15 social media users, 5 men, 10 women	Focus groups	Japan, UK, and Canada
15	Waruwu et al. (2020)	Entertainment Consensual validation from group members that share one's ideology Warning/social duty Collective authentication	Various	30 social media users	Focus groups	Singapore
16	Wong & Burkell. (2017)	To inform To entertain Maintaining connection Changing minds Distinguishing oneself Being part of the crowd	Not specified, including Facebook	18 students	Focus groups and semi-structured interviews	Canada

aln addition to the two motives extracted in this table, this article reports a 16-item questionnaire assessing motives for sharing news online that was developed based on users' input. We treat the items in this questionnaire as a separate addition to our pool of items (Study 3).

(2017), we implemented a bot detecting procedure (Online Appendix 4) to optimize the identification of real-life individuals. We used a predetermined interview schedule with two main questions (Online Appendix 5). Participants were asked (1) why they chose to share a particular post and (2) whether they thought the information presented in the post was correct at the time of sharing it. All interviews were completed via private messages.

Data Analysis. To understand the range of motives for sharing false political information online as reported by social media users, we conducted a qualitative content analysis without preconceived categories (Hsieh & Shannon, 2005). We considered this inductive analytic approach, which involves a bottom-up process in which categories, labels, and insights emerge from the data (Schreier, 2012), to be appropriate given the limited literature concerning knowledge relating to the direct lived experience (Borkman, 1976) of social media

users who have shared false material. Answers to our two main questions were pooled for analysis as participants' answers tended to address both. All authors contributed to the development of initial codes, group discussions, and refinement of the coding frame. Two coders (RP and LJ) independently applied the coding frame to the data, and resolved any disagreements concerning themes, definitions, and data charting by discussion. This procedure was used to identify motives for sharing false political information and people's beliefs concerning the accuracy of the information shared at the time of sharing (additional details concerning our procedure are presented in Online Appendix 6).

Results

Participants shared stories believing them to be true (n=43), false (n=6), that degree of truth does not matter (n=6), or provided no/inconclusive information (n=5).

We identified six themes in our analysis of motives for sharing political information online: (1) *Worldviews* (using content to express opinions or stance on an issue/current event); (2) *Humor*, including general amusement, dark humor, irony, mockery; (3) *Negative emotions* (explicitly notes experience of any negative emotional reactions, such as disgust, anger, and frustration); (4) *Presentation features*

(driven by features of the post, such as the appeal of/striking visuals or tone); (5) *Social motives* (relating to management/maintenance and satisfaction of social relationships); and (6) *Online activism* (an underlying intention to drive change via call-for-action). Themes, categories, definitions, frequencies, and examples are shown in Table 2. Additional supporting quotes are provided in Online Appendix 7.

Table 2. Themes and Categories of Motives for Sharing False Information Online (n = 59).

Theme		Category		Example	n (%)	
Label	Definition	Label Definition				
Worldviews	Using content to express opinions or stance on an issue/current event	Group processes and political beliefs	Noting group identification/ support/opposition, and/ or political beliefs including ideology/geo-politics/ system of governance, and political figures	"I'm anti trump"	37 (64)	
		Moral stance	Relating to principles of right and wrong in behavior, including informing others of potential risks, supporting moral behaviors, and fact checking	"People need to know that Sundown towns are a thing that's still happening"	24 (41)	
		Inconsequential	No wrongdoing, minimizing harm of sharing potentially false information	"I thought it was correct, but that if it wasn't correct, it wasn't that heinous a sharing of fake information"	11 (19)	
		Technological/ information system	Refers to the mechanisms of technology and information platforms and companies	" My retweeting of this post if my small attempt to provide parity against the mainstream media biases"	6 (10)	
		Personal history	Explicitly noting events of personal relevance or personal significance in one's lifetime, including in connection to post content	"I am actively involved with Ukraine since I first went there in 1990 to work on projects connected to Chernobyl"	4 (7)	
		Conspiracy beliefs	Interprets post in terms of secret plots by powerful and malevolent groups	"To emphasise that there is a Golden Circle operating in business and politics"	3 (5)	
Humor	Humor including general amusement, dark humor, irony, mockery			"I found it amusing"	16 (28)	
Negative emotions	Explicitly notes experience of any negative emotional reactions, such as disgust, anger, and frustration			"The fact that segregation and bigotry exists in the country is disgusting"	8 (14)	
Presentation features	Driven by features of the post, such as the appeal of/striking visuals or tone			"I was struck by the incongruity of the image: a very pretty lady holding a gun, dressed in fatigues"	5 (9)	
Social motives	Relating to management/ maintenance and			"My followers would be interested in such news"	5 (9)	
	satisfaction of social relationships			"My younger son had sent me a tiktok of the same incident"	2 (3)	

Table 2. (Continued)

Theme		Category		Example	n (%)	
Label	Definition	Label	Definition			
Online activism	An underlying intention to drive change via call-for-action			"I frequently retweet political messages to encourage people to work for and vote for progressive candidates and issues"	4 (7)	
Unspecified	Other/too little information				2 (3)	

Note. Individual responses mapped onto ≥ I theme/category.

Discussion

We analyzed motives reported by 59 Twitter users for actually sharing false political information and identified six themes (Table 2). In part, our findings enhance understanding the content dimensions of people's prosocial sharing orientations (we discuss this in detail in the "General Discussion" section). In addition, our analysis corroborates motives identified in our literature review (Table 1), including group cohesion, social duty, and the provisional value of truth. We used a novel methodological approach that taps into user's actual sharing experience on social media such that our findings support the generalization of a range of sharing motives to actual everyday life (Kihlstrom, 2021).

These strengths notwithstanding, this approach still relies on post hoc self-reports from users as to their motivations, which may be subject to incomplete recall or selective self-presentation. We targeted users who shared stories in English and offered rewards in US and UK currency, and it is possible that these practical recruitment strategies impose a constraint on generalizability. The sample size is limited, due to the labor- and time-intensive recruitment technique we adopted.

However, our sample size of 59 users exceeds that of most of the studies in our literature review (Table 1) and likely has enabled capturing a range of important motivations. Indeed, the low number of re-occurring themes we identified attests to the robustness of our procedure. We do not treat these motives as standalone findings but rather incorporate them, along with data from the literature review, into the basis of the materials for Study 3.

Study 3: Clusters of Motives that Social Media Users Report for Sharing Political Information Online

The goal of Study 3 was to identify common themes or clusters among the motives we collated in the literature review and Study 2, and identified in other sources, to develop a parsimonious bottom-up framework for describing why people choose to share political information and misinformation.

We developed a large set of items incorporating the findings summarized in Tables 1 and 2. We used this set in a cross-sectional survey asking people why they chose to share political information online. We did not specify whether the material being shared was true or false, given that on many occasions false material is shared in the belief that it is true. We then used a data reduction technique to identify key clusters among these motives. Our survey also included background and other social-media-related measures to explore the predictive validity and bivariate associations of these clusters.

Methods

Development of Item Pool. We developed a pool of questionnaire items based on our: (1) literature review (83 items) and (2) qualitative research (53 items)—derived from themes and categories identified in Study 2. We also added three items based on motives reported by social media users in a separate survey-based study conducted by our research team (Perach et al., 2023) that were not captured in the literature review or Study 2. Data extraction procedures mirrored those reported in Study 2. Finally, we added 16 items drawn from an existing questionnaire assessing motives for sharing news online that was developed based on users' input (Duffy & Ling, 2020). Overall, the above procedures led to the compilation of a list of 155 motives for sharing political information and misinformation based on users' own accounts. We removed two obvious duplicates, removed or integrated conceptually overlapping items, and amended wording. This led to a pool of 94 items.

Pre-Test. We pre-tested our 94-item questionnaire (Online Appendix 8) for clarity and user feedback. We revised 26 items (28%) rated as unclear by at least one sixth of the participants for grammar and readability, and removed two unclear items that overlapped in meaning with another item, resulting in a revised 92-item questionnaire (Online Appendix 9). Additional pre-test information is available in Online Appendix 10.

Participants and Procedure. Participants were users of Prolific who are US residents, politically interested, and share political material on social media. We recruited our sample in two stages (preregistration: https://osf.io/adtxz/?view_only=f6e0 94b421f940e2a8ac3093c106e97d) to ensure that our sample did not include people who never shared political material. First, we conducted a pre-selection study, n=2003, using pre-screeners embedded in Prolific in which US residents who voted in the 2020 presidential elections completed a single item on sharing political material on social media (Buchanan & Kempley, 2021). Of the 1,970 participants who passed our preregistered data quality checks, 1,244 (63%) reported a nonzero score on our sharing political material item, indicating a degree of sharing. Based on guidance for sample size in factor analysis (MacCallum et al., 1999), we estimated that an analytic sample of 500 would be appropriate and exceeded this quota to allow for exclusions during data screening. We recruited 551 Prolific users via inviting those who indicated a degree of sharing political information, and satisfied the above pre-screeners, to take part in our main study in which we tested our 92-item questionnaire. Based on our pre-registered criteria, we excluded 79 participants (14%) who did not pass data quality checks, resulting in a sample of 472 users. Finally, we excluded two participants with incomplete data on the motives' questionnaire, leaving an analytic sample of 470. This was slightly lower than our target, but exceeds the threshold that MacCallum et al. (1999) described as being generally considered "more than acceptable" (p. 92) and likely to enable good recovery of population factors under all but the worst of conditions. Participants were US residents, aged 19-75 ($M_{\text{age}} = 33.29$, $SD_{\text{age}} = 11.25$), 49% reported male gender, 43% educated to some college or university, and on average had a left-center political orientation, M=2.62, SD=1.73 (on a 1 [left] through 4 [center] to 7 [right] scale).

Measures. Motives for sharing political information and misinformation on social media were assessed using our 92-item questionnaire (Online Appendix 9).

Deliberate sharing of false information, accidental sharing of false information, other social-media-related (Buchanan & Kempley, 2021), and background measures are detailed in Online Appendix 10.

Results

Factor Structure. Principal components analysis (PCA) was used to identify clusters among the 92 items comprising our questionnaire in SPSS 28 based on guidelines provided by Tabachnick and Fidell (2013). Procedures leading to our PCA solution are detailed in Online Appendix 11. PCA with Promax rotation and six fixed factors yielded an interpretable solution accounting for 51.21% of the variance (see Online Appendix 12 for the complete item loadings). The sampling adequacy index was high, Kaiser–Meyer–Olkin

(KMO)=.947, Bartlett's chi-square test confirmed that there is scope for data reduction, χ^2 (4,186)=29,361.67, p < .001. We removed any items with substantive cross-loadings (loadings of more than .32 on more than one component). We then removed any items with component loadings of less than .45—we applied this threshold for *fair* loadings (Comrey & Lee, 1992), higher than the threshold of .32 in our preregistration, to optimize the interpretability of the components. Item loadings are presented in Table 3. In this solution, all components were defined by at least three variables, and internal consistencies of each component were acceptable or higher (range of Cronbach's α for the set of items identified as loading on each component: .74-.94) thus meeting our preregistered threshold of ≥.7. Communalities (h^2) —an index of the variance in each variable accounted for by the extracted factor—were medium-to-high, range: .53– .81 (Table 3).

The first component, labeled "prosocial activism," was defined by 14 items that reflected a desire to educate, inform, or mobilize other people in ways intended to benefit them or society. It included sentiments about driving social change, critical thinking, morality, and political accountability, as well as informing people. It generally reflected a proactive use of social media to achieve political or social goals regarded as positive by the individual, and not involving tactics, such as attacking others.

The second component, which we labeled "attack or manipulation of others" reflected a cynical, antisocial, and manipulative use of social media. It was defined by 12 items that generally reflected a desire to achieve one's own ends with a disregard for the truth or the welfare of others. Some of the items included dealt with self-enhancement. Others dealt with actively doing harm to others. Overall, the sentiments reflected in this cluster were either directly opposed to those expressed in the first component, or treated them as irrelevant.

The third component, which we labeled "entertainment," was defined by a coherent set of four items. These all reflected the desire to entertain oneself or others, be funny, or alleviate boredom. This is a motive that has been frequently identified in past research, including the work reviewed in Study 1 (Table 1) and our own Study 2 (Table 2, labeled "humor").

The fourth component was poorly defined in our solution, having only one item with a substantive loading, plus two with weaker loadings. As a group, the cluster of items appeared to revolve around making people aware of information or transparency, so that, we labeled it "awareness." Despite being poorly represented in our dataset/item pool, it is suggestive of a valid cluster of coherent motives. Participants endorsing these items probably consider they reflect "good" reasons for sharing information, and that they are acting in a way that will benefit society. However, it differs from Component 1, in that, these items appear to be tinged with suspicion, and may be indicative of conspiracist

Table 3. Item Selection Obtained with Principal Component Analysis with Promax Rotation and Six Fixed Factors (n = 470).

No.	Label	Item	Component						M (SD)	Cronbach's α	s h ²
			I	2	3	4	5	6			
ī	Prosocial	62. To inform people	0.878						3.81 (1.06)	.94	.72
	activism	45. To educate my community	0.862						3.52 (2.00)		.67
		90. To warn or educate people	0.859						3.44 (1.19)		.74
		40. To create awareness of an issue or an event	0.830						3.87 (1.03)		.68
		68. To let people know about important political issues	0.759						3.60 (1.15)		.69
		 To make others think more critically about certain issues 	0.753						3.51 (1.19)		.67
		63. To inform people of different viewpoints	0.655						3.44 (1.27)		.61
		48. To encourage people to do the "right" thing	0.638						3.31 (1.21)		.66
		47. To encourage people to be socially or politically active	0.607						3.14 (1.24)		.64
		44. To drive social change	0.593						3.25 (1.27)		.63
		10. To stand up for what is "right"	0.537						4.03 (.97)		.57
		59. To hold governments accountable	0.525						2.99 (1.33)		.56
		81. To protect people	0.493						2.96 (1.34)		.66
		15. Because the material is relevant to others	0.486						3.73 (1.02)		.55
2	Attack or manipulation of	28. Because the truth does not matter		0.847	7				1.24 (.68)	.90	.64
	others	72. To manipulate a situation		0.807	7				1.38 (.83)		.64
		73. To manipulate what people think		0.759	7				1.40 (.845)		.64
		41. Because I want to create chaos or panic		0.736					1.22 (.655)		.68
		58. As a kind of camouflage against people who may threaten me if they identified my real interests		0.702	2				1.37 (.84)		.64
		20. Because doing so makes me popular online		0.657	7				1.47 (.865)		.65
		42. To destroy other people		0.626	5				1.22 (.66)		.64
		18. Because doing so makes me feel better than other people		0.62	l				1.57 (.93)		.62
		46. to encourage others to buy products		0.605	5				1.45 (.89)		.66
		60. To impress others		0.560)				1.54 (.90)		.63
		By mistake, because I did not understand it correctly		0.526					1.33 (.70)		.65
		32. As a way of asking others to donate		0.515	5				1.83 (1.14)		.53

Table 3. (Continued)

No.	Label	ltem	Component						M (SD)	Cronbach's α	h ²
			I	2	3	4	5	6	=		
3	Entertainment	36. To be funny			0.815				2.44 (1.325)	.86	.72
		49. To entertain myself			0.801				2.10 (1.26)		.79
		50. To entertain others			0.801				2.13 (1.20)		.77
		30. Because I am bored			0.685				1.83 (1.08)		.62
4	Awareness	27. Because there is no harm in hearing people's opinions				0.748			2.64 (1.32)	.74	.66
		25. Because people should know about secret plots planned against them				0.587			1.81 (1.22)		.73
		33. To balance the bias in the media				0.548			2.13 (1.28)		.58
5	Political self- expression	52. To express my political beliefs					0.746		3.48 (1.18)	.85	.81
		43. To discuss or comment on politics					0.727		3.26 (1.26)		.68
		53. To express myself or my personal beliefs					0.682		3.46 (1.18)		.76
		76. To participate in a wider discussion					0.543		2.92 (1.24)		.68
6	Fighting false information	74. To minimize its spread by discrediting it						0.72	1.75 (1.06)	.76	.65
		77. To point out this material is false or misleading						0.678	2.54 (1.31)		.69
		79. To prevent others from acting based on false information						0.667	2.71 (1.31)		.70
		75. To mock the material						0.456	2.01 (1.15)		.68

ideation, given endorsement of views about media bias and secret plots.

The fifth component, which we labeled "political self-expression," was defined by four items that revolved around the expression of political views and participation in political debate. It is distinct from the first component in that this cluster of items is very much politically focused, and lacks the "activism" element that characterizes the first component. People endorsing these items want to *talk* about politics; the items do not include sentiments related to bringing about political change.

The sixth component was again poorly defined in terms of item loadings, but comprised four items that were thematically consistent with the label we assigned of "fighting false information." It included sentiments about combating misinformation and minimizing its harm, so that, generally reflects social responsibility in the political misinformation domain. One might predict that individuals endorsing these items would try to debunk false information (even if inadvertently spreading it further while doing so).

Predictive Validity. We then sought to establish whether the six components explained any variance in self-reported news sharing behavior. We ran two binary logistic regressions to explore whether the clusters of motives (indexed as regression component scores produced in our PCA) predict self repots of whether participants had ever (1) deliberatly and (2) accidentally shared false political information. This preregistered analysis showed that three of the components were significant positive predictors of deliberate and accidental sharing of false political information (Table 4). A one-point increase in "attack or manipulation of others" was associated with 1.82 increase in the odds of deliberate sharing of false information, and 1.56 increase in the odds of accidental sharing of false information. A one-point increase in "entertainment" was associated with 1.75 increase in the odds of deliberate sharing of false information, and 1.36 increase in the odds of accidental sharing of false information. A 1-point increase in "awareness" was associated with 1.51 increase in the odds of deliberate sharing of false information, and 1.30 increase in the odds of accidental sharing of false information. Overall, this analysis demonstrated the relevance

Table 4. Binary Logistic Regressions Predicting Deliberate and Accidental Sharing of False Information.

		B (SE)	95% CI for o	odds ratio	
			Lower	Odds ratio	Upper
Model pr	redicting deliberate sharing of false information	on			
ı '	Constant	-2.28 (.18)***		.10	
	Prosocial activism	.12 (.16)	.82	1.13	1.55
	To attack or manipulate others	.60 (.11)***	1.46	1.82	2.275
	Entertainment	.60 (.14)***	1.34	1.75	2.29
	Awareness	.69 (.14)***	1.51	2.00	2.64
	Political self-expression	.27 (.15) ^a	.97	1.31	1.77
	Fighting false information	-11 (.15)	.67	.90	1.20
Model pr	redicting accidental sharing of false informatio	n			
2	Constant	10 (.10)***		.37	
	Prosocial activism	.18 (.11)	1.20	1.20	1.49
	To attack or manipulate others	.44 (.10)***	1.28	1.56	1.90
	Entertainment	.31 (.10)**	1.11	1.36	1.66
	Awareness	.26 (.10)*	1.06	1.30	1.59
	Political self-expression	.09 (.11)	.88	1.09	1.35
	Fighting false information	025 (.II)	.79	.98	1.20

CI = confidence interval.

Note. For Model 1, $\chi^2(6) = 70.015^{***}$, R^2 (Nagelkerke) = .25; for Model 2, $\chi^2(6) = 38.565^{***}$, R^2 (Nagelkerke) = .11. Across models, variance inflation factors = 1 per predictor, indicating no collinearity within our data. Across Models 1–2, for political information sharing, nonadjusted levels of significance are reported; the significance of these findings persisted after applying Bonferroni adjustment per model ($\alpha/2 = .025$). $\alpha = .05 .$

of the motives captured in our clusters by showing that some of our clusters are associated with sharing false information, whether knowingly or accidentally.

Correlations of Clusters of Motives for Sharing Information on Social Media. We explored the correlations between clusters of motives and other (social-media-related, background) variables that past research has indicated are relevant to sharing misinformation (Table 5). Significant correlations of at least r = .2 are described in text. Prosocial activism was positively associated with trust in political information on social media, r = .26, p < .001, perceived influence of political information, r=.27, p<.001, and political information sharing on social media, r=.48, p<.001. Attack or manipulation of others was positively associated with trust in political information on social media, r=.21, p<.001, political information sharing on social media, r=.20, p<.001, and negatively associated with female gender, r=-.26, p<.001. Entertainment was positively associated with political information sharing on social media, r=.23, p<.001, and right-wing political orientation, r=.30, p<.001, and negatively associated with female gender, r=-.34, p<.001. Awareness was positively associated with political information sharing on social media, r=.22, p<.001, and right-wing political orientation, r=.41, p<.001. Political self-expression was positively associated with political information sharing on social media, r=.40, p<.001. Fighting false information was positively associated with political information sharing on social

media, r=.23, p<.001. Together, these correlations show that the clusters of motives identified herein are associated with constructs related to sharing false political information and suggest that different motives are associated with different user characteristics and self-reported behaviors.

General Discussion

Based on a synthesis of the existing literature, and novel findings obtained with an ecologically valid approach, we have provided a parsimonious set of motives for sharing political information and misinformation based on social media users' own accounts. A key finding is that people report a variety of reasons for sharing such material. We have shown that there are distinct sets of motives people report for their misinformation sharing behavior, and labeled these: prosocial activism, attack or manipulation of others, entertainment, awareness, political self-expression, and fighting false information. Also, we have shown that these sets of motives are associated with variables known to predict sharing misinformation, and that some of these sets predict social media users' self-reports of having shared misinformation in the past.

Broadly, the current findings concerning sets of motives derived from users' accounts resonate with theory-driven research on motives—for example, relating to political worldviews (Osmundsen et al., 2021), self-expression (X. Chen & Sin, 2013), and entertainment (Chadwick et al., 2018). In

^{*}p<.05; **p<.01; ***p<.001.

Table 5. Correlations between Clusters of Motives for Sharing False Information Online, Social-Media-Related Variables, and Background Variables.

	Social-media-related variables			Background variables			
	Trust in political information on social media	Perceived influence of political information	Political information sharing on social media	Political ideology	Age	Gender ^a	Education
	r (n)						
Component	. ,						
Prosocial activism	.26*** (470)	.27*** (470)	.48*** (470)	02 (470)	.04 (470)	.11* (448)	03 (470)
Attack or manipulation	.21*** (470)	.18*** (470)	.20*** (470)	.17*** (470)	04 (470)	26*** (448)	.04 (470)
of others	04 (470)	04 (470)	22*** (470)	20*** (470)	00h (470)	2.4*** (4.40)	12* (470)
Entertainment	.06 (470)	.06 (470)	.23*** (470)	.30*** (470)	.08 ^b (470)	34*** (448)	I2* (470)
Awareness	.08 ^b (470)	03 (470)	.22*** (470)	.41*** (470)	.11* (470)	17*** (448)	16*** (470)
Political self-expression	.18*** (470)	.13** (470)	.40*** (470)	.05 (470)	.11* (470)	08 (448)	10* (470)
Fighting false information	03 (470)	.03 (470)	.23*** (470)	.11* (470)	.16*** (470)	08 ^b (448)	08 ^b (470)

Note. Components were assessed as regression factor scores.

addition, our findings are consistent with theory-driven evidence that people's destructive mind-set toward societal order and structures—termed *need for chaos*—can predict sharing hostile political rumors (Petersen et al., 2023). At the same time, three of the sets of motives identified herein have a prosocial orientation and demonstrate that sharing potentially harmful information may be construed by users as an act that can actually serve to improve relationships, group cohesion, and society. On this basis, we suggest that different interventions may be required to combat misinformation sharing driven by different motives, as detailed below.

Prosocial Motives for Sharing

The current findings reveal three clusters of motives that appear to reflect beneficent or prosocial motives for sharing: prosocial activism, awareness, and fighting false information. The items in these clusters mainly reflect a concern with "making things better" in a range of ways, and acting in a manner that is beneficial to society as a whole. The items in the prosocial activism cluster reflect a desire to change society for the better; to protect, inform, educate or warn others; to drive social change and encourage people to do the "right" thing. The items comprising the awareness cluster reflect motives focused on increasing awareness to and inclusion of many voices in society, that is, pluralism ("because there's no harm in hearing people's opinions") and increasing awareness to information typically outside mainstream media, that is, freedom of information ("to balance the bias in the media"; "because people should know about secret plots planned against them"). Pluralism and freedom of information are both principles of behavior that benefits others. Broadly, pluralism encourages social participation and social

inclusion; freedom of information enables accountability of public authorities and therefore the safeguarding of individuals. We therefore view this cluster as prosocial in nature, despite its conspiracist overtones. It is likely that individuals endorsing these three items would believe their motivations reflect a wish to benefit group cohesion and society (even if observers might disagree). Finally, the fighting false information cluster reflects a desire to minimize the spread of false information, to point out it is true, and prevent others from acting on it. All these items reflect care for others and rejection of falsehood.

Thus, the current findings advance an in-depth understanding of prosocial orientations that may underlie misinformation sharing. Our findings extend qualitative evidence that group cohesion, helping others, debunking, and social duty can motivate sharing (Table 1) and theory-driven evidence concerning altruistic (Balakrishnan et al., 2021) and civicdeliberative (Chadwick et al., 2022) motives for sharing. For example, our Study 2 findings concerning online activism and information systems go beyond previous bottom-up research (Madrid-Morales et al., 2020; Wasserman & Madrid-Morales, 2021) by showing that moral motivations for sharing extend to calls-for-action that shape political and legislative agendas; these motives are reflected in the prosocial activism cluster of motives. In addition, whereas Study 2 participants were critical toward established structures, such as government or factchecking organizations, they shared misinformation with constructive (e.g., balancing perceived media bias, regulating online information platforms) intentions; these are echoed in the awareness cluster of motives. In the same vein, humor-based sharing—captured in the entertainment cluster and in Study 2 themes—can also function to strengthen social and community bonds (O'Boyle, 2021).

^a0 = man, I = woman.

b.05 .

^{*}p<.05; **p<.01; ***p<.001.

Overall, the findings of our Studies 1–3 converge in showing that sharing misinformation can be perceived by users as a strategy to enhance social cohesion (Duffy & Tan, 2022) and furthermore to drive societal and moral progress.

Applied Directions

State-of-the-art misinformation interventions tend to focus on boosting skills and knowledge, misinformation recognition, accuracy nudges, and establishing falsity of information (Bruns et al., 2022; Ziemer & Rothmund, 2022). There is clear evidence that such interventions can be effective (e.g., Pennycook & Rand, 2022). However, different interventions may be required when the processes underlying decisions to share are deliberative, not automatic (Moravec et al., 2020). Such interventions will need to consider users' motives, and different approaches are likely to be needed for people who are driven by different personal goals (Kunda, 1990) and identity-related motives. However, empirical research on interventions that involve identity management is sparse (Ziemer & Rothmund, 2022). When sharing is seen as instrumental to driving social change or maintaining social relationships, interventions that target deliberate processing and go beyond focusing on the falsity of the story should be considered. In the same vein, when sharing is political in nature—for example, driven by political views (Kahan, 2016) and political self-expression motives—interventions that consider identity management processes relating to political partisanship may be warranted (Rathje et al., 2022; Ziemer & Rothmund, 2022).

Development and pre-testing of items measuring motivation, and identification of the groupings into which they cluster, offers the opportunity for researchers to deploy them in questionnaires measuring motivations for sharing political news online. A potential set of 18 items that could be used in this way is described in Online Appendix 13 alongside psychometric information. Finally, individual differences, for example, in sharing motives, can be associated with the perceived accuracy of information encountered online and intentions to share it (Ahmed & Tan, 2022; Morosoli, Van Aelst, & Van Erkel, 2022; Rathje et al., 2023). The examination of such associations is a direction for future research.

Limitations

Our review methodology included a tailored replicable search of two major databases and bias-reduction measures (e.g., partial second reviewer verification). Nonetheless, it is possible that our methodology did not capture all relevant studies. In the same vein, the methodological approach we used in Study 2 has limitations (as discussed in Study 2). However, our reliance on the principles of restricted systematic reviews (Plüddemann et al., 2018), the ecologically valid approach we used in Study 2, and our overall integrative

approach to identifying motives based on multiple sources optimizes the detection and clustering of key motives as reported by users. More broadly, we took a bottom-up approach to understanding users' motives for sharing and as such did not focus on potential reasons for sharing that did not involve deliberative processing. To complement this aspect of our findings, future work could synthesize theory-driven evidence on automatic processing (e.g., Moravec et al., 2020).

Conclusion

In this article, we have developed a bottom-up descriptive framework for understanding social media users' motives for sharing political information and misinformation. Our procedures enhance the generalizability of previous misinformation research and have led to the identification of six clusters of key motives. These include prosocial as well as political and destructive motives. Crucially, our findings highlight and elaborate on users' motives that aim to benefit other individuals and society as a whole. Such insights, derived from social media users' own accounts for their motives for sharing false information online, have implications for the methods and focus of future research and practice in the battle against political misinformation.

Data Availability

The anonymized summary data that support the findings of Study 2 (https://osf.io/mvkj9/) and Study 3 (https://osf.io/adtxz/) are openly available on OSF.

Declaration of Conflicting Interests

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Supplemental Material

Supplemental material for this article is available online.

Note

 We use the term "false" loosely to capture different degrees of falseness, that is, completely false and partially false, such as true information presented out of context (Hameleers et al., 2023).

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