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Beyond negativity? A laboratory study on emotional responses to populist strategies on social media

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This exploratory laboratory study analyzes emotional responses to two types of populist strategies on social media platforms. We focus on emotional responses to content expressing ordinariness (on Instagram) and victimhood (on TikTok), where the content creator is a right-wing populist leader who is unfavorably perceived by the respondents in the study. Thus, the study critically tests the effectiveness of de-demonization strategies used by populist leaders to diversify the electorate. The research employs a combination of facial expressions analysis and two self-report measures of emotions to investigate the emotional responses elicited by populist strategies in individuals belonging to an out-group. Additionally, we examine the interrelation between psychophysiological measures and self-reported emotions. In doing so, the study makes a methodological contribution by advancing our understanding of emotional response processes and the methodologies employed to measure emotional responses. The results reveal positive and negative emotional responses, challenging the prevailing emphasis on negative emotions in response to out-group communication. However, the facial expressions and the self-reported emotions do not correlate. Our interpretation underscores the role of cognitive reasoning processes in differentiating emotional responses to political out-group social media content.

KEYWORDS

right-wing populism, social media, laboratory study, emotional responses, facial expression, self-reports

Introduction

In politics, social media platforms provide a space for the informal and communicative expression of everyday concerns, allowing parties and politicians to engage directly with the public (Kissas, 2022). This avenue has proven especially attractive to populist parties, whose messages may encounter challenges in gaining traction within conventional media outlets. Populist parties have thus harnessed the potential of social media platforms, which has also contributed to electoral success (Aalberg and de Vreese, 2017). However, researchers argue that populists, especially through their social media communication, exacerbate negative emotional trends, indirectly fueling affective polarization (Hameleers, 2020). Affective polarization, the increasing tendency of individuals to harbor strongly negative feelings toward those with different political views, has become a growing concern in many democracies worldwide (Iyengar et al., 2019; Berntzen et al., 2023). One of the most troubling aspects of

affective polarization is its association with the production of negative emotions, such as anger and fear (Lu and Lee, 2019; Rehnström et al., 2023). In fact, negative emotions, such as anger, have been found to boost engagement on social media (Martella and Bracciale, 2022). This suggests that adopting a negative tone as a communication style can be a particularly effective strategy on social media (Hameleers et al., 2021; Schwartz et al., 2022), with algorithms playing a crucial role in amplifying the visibility of negative content (Settle, 2018).

At the same time, to broaden their electoral appeal and reach volatile voters, populist parties try to polish their image and de-demonize themselves (Albertazzi and Bonansinga, 2023), potentially giving rise to more positive emotional responses. Previous research has primarily focused on negative emotional responses to populist communication styles, neglecting the potential positive emotional responses that may arise (Fischer and Lelkes, 2023). In general, research on emotions within political science has exhibited a particular emphasis on fear, anger, and enthusiasm, and overlooked other emotions such as empathy or disgust (Marcus, 2023; Redlawsk, 2023). Thus, to fully understand the emotions of populist communication, it is essential to explore a broader spectrum of emotional responses. While some studies have examined the correlation between in-group enthusiasm and out-group anxiety (McLaughlin et al., 2020), little is known about the possibility of positive emotions from the out-group in response to populist social media strategies. Given the significant influence of social media on affective polarization, it is crucial to investigate how emotional responses to social media content arise. In addition, the concepts, theories, and methodology for measuring emotions remain a contested area of research and an important question that remains unresolved among political psychologists pertains to the connection between psychophysiological and self-report measures (Bakker and Schumacher, 2024). Therefore, to provide a broader understanding of the emotional responses, both psychophysiological and self-reported measures were collected, making a methodological contribution to the field of research (Bucy, 2021).

This study aims to analyze the emotional responses of an out-group audience to social media content from a right-wing populist party¹ leader since social media content can amplify out-group animosity (Rathje et al., 2021). The out-group is defined in terms of political identity. Consequently, this study aims to assess the efficacy of populist communication strategies through an examination of a critical case involving a sample that, while not the typical target audience of such communication, represents a group with the potential to broaden the populist party's electorate. In Finland, the right-wing populist party has become one of the largest political parties in terms of voter support and much of their success has been attributed to the effective utilization of social media platforms in their efforts to reach out to the electorate (Horsti, 2015; Hatakka, 2017). Empirically, we utilize content from the Instagram and TikTok accounts of the successful female right-wing

populist leader of the Finns Party, Riikka Purra. We utilized real social media content to increase external validity, mirroring how users are influenced by social media in the real world (Banks et al., 2021). Furthermore, the chosen platforms' architecture is conducive to generating distinct strategies, which may elicit a variety of emotional responses (Nawara and Bailey, 2017; Bast, 2021). Right-wing populists frequently employ Instagram, adopting a positive tone to foster a sense of closeness with citizens (Bast, 2021). In contrast, TikTok serves as a platform for populists to communicate more ideological content, targeting a perceived common enemy to the people, often using a humorous and entertaining manner (Gonzalez-Aguilar et al., 2023). The motivation for our investigation of the social media content of Riikka Purra is her distinct strategies to use different strategies (ordinariness and victimhood) on the two platforms. On Instagram, Purra adopts an intimate ordinariness communication style, sharing a wide range of content, from homemade meal snapshots to pictures of nature. This diverse content may create a feeling of intimacy and closeness with her followers with a focus on playful language and emojis, de-demonizing and mainstreaming the populist leader (Albertazzi and Bonansinga, 2023). In contrast, on TikTok, Riikka Purra shifts her approach to project a sense of victimhood and political activism. During the time of the study, her TikTok content primarily revolved around her campaign for the 2023 Parliamentary election, employing strategies rooted in people-centric messaging, portraying "the elite" as a threat to "the people." These two strategies encapsulate the embodiment of an ordinary persona that portrays itself as speaking on behalf of people while victimizing them, in different emotional ways (Kissas, 2022). The study contributes by testing the effectiveness of the de-demonization strategy on a population belonging to the out-group. Focusing on the possibility of both positive and negative emotional responses in a critical case, a young out-group, provides important insight into research on populist communication. In conjunction with the establishment of the theoretical framework, the study's exploratory research questions are formulated.

Theoretical framework

Populist social media strategies: ordinariness and victimhood

Populism has been defined as a "thin-centered" ideology that separates the people and the elite into two homogenous and antagonistic groups, "the pure people" and "the corrupt elite" (Mudde, 2004, p. 543). Other scholars have focused on the view of populism as a style of communication (e.g., Jagers and Walgrave, 2007). Populism can be posited as a distinct style of political communication because it is primarily an act of speech, as populist actors use words, signs and images to connect with "the people" and vilify "the elite" (Block and Negrine, 2017). This populist style of communication often includes an anti-establishment appeal of victimhood (Al-Ghazzi, 2021), and an ordinariness appeal (Kissas, 2022). Furthermore, the populist communication style can include an emotional element to convey the division between "us" and "them" in a more compelling way by the expression of positive emotions towards "us" and negative emotions towards "them" (Hameleers et al., 2021). Research has found that populists use significantly more emotional appeals, such as anger and fear, compared to mainstream parties. Additionally, the medium of

¹ In political science literature, various labels such as "populist radical right," "far right," and "extreme right" are frequently used to classify these parties. We use the label "right-wing populist party" to characterize the Finns Party. This designation indicates that the party adopts an authoritarian stance on socio-cultural issues (e.g., opposing multiculturalism) while maintaining a less defined position on socio-economic issues (e.g., welfare services).

communication, specifically social media, increases the use of emotional appeals for all parties (Widmann, 2021). Additionally, a notable trait of populist parties is their strong emphasis on a charismatic leader (Bos et al., 2013).

Moreover, populism is garnering growing attention as a communicative strategy valued for its capacity to engage people, generate interest, and fuel debates, positioning it as a method employed to capture attention and achieve success (Engesser et al., 2017), particularly on social media platforms (Martella and Bracciale, 2022). We acknowledge that there are various conceptual frameworks of populism as a communication style (see de Vreese et al., 2018; Bast, 2021; Hameleers et al., 2021; Schwartz et al., 2022). In our study, we see populism as a communication style that justifies its actions by appealing to and identifying with the people and is rooted in anti-elite sentiments (Jagers and Walgrave, 2007). In a social media context, this populist communication style encompasses two distinct strategies: ordinariness and victimhood (Kissas, 2022). Although populist communication styles are not exclusive to populist politicians and parties (Schwartz et al., 2022), we argue that ordinariness and victimhood as communicative strategies are particularly fundamental for populist actors in a social media context. In line with Kissas (2022), we have an integrative approach to populism by viewing populism as a performance that shapes identity through technology, particularly social media, and emotions. This performance is stylized, while also being subject to the regulation and framing within the platform's media environment (Kissas, 2022).

In the age of social media and politics, presenting oneself as an ordinary person is vital for politicians, as it allows the public to identify with them and perceive them as representatives who can advocate on their behalf (Bast, 2021; Kissas, 2022). Ordinariness is closely linked to the concept of personalization in contemporary politics. The rise of social media has accelerated and intensified the trend of personalized politics (McGregor et al., 2017), wherein the influence of individual politicians is amplified, accompanied by more personalized, intimate, and lifestyle-oriented interactions with politics (Bennett, 2012). Populist actors thus often embrace an intimate communication style, sharing personal and private aspects of their lives to present themselves as relatable and unpretentious political leaders (Stanyer, 2012; Bracciale and Martella, 2017). This process is particularly crucial for populist actors aiming to transition into the mainstream political arena and mitigate the perception of being too extreme (Albertazzi and Bonansinga, 2023). The ordinariness strategy manifests in the use of "one of you" imagery or rhetoric encompassing emotionalization and simplification (Farkas et al., 2022). Studies show that politicians primarily use Instagram to support the ordinariness strategy by conveying a sense of proximity to people and the overall tone on Instagram tends to be more positive compared to other platforms (Nawara and Bailey, 2017; Bast, 2021). Researchers have also noted that the strategy of ordinariness can be interpreted as a mechanism of de-demonization for populists, undertaken to polish their public perception and expand their electorate (Albertazzi and Bonansinga, 2023). However, for female populist leaders, displaying their private life, and presenting a softer, more human image can be a double bind, as there is simultaneously a need to project the image of a strong populist leader with "masculine" traits (see Bast et al., 2022).

The populist style of communication extends beyond the portrayal of ordinariness; it may also manifest as a strategy of victimhood (Kissas, 2022). In general, negativity is a characteristic of populist media performativity (Hameleers et al., 2021). Consequently, central to the populist communicative strategy is the victimization of people in a confrontational, nonconforming and provocative way in the face of a perceived injustice perpetuated by an establishment (Kissas, 2022). In other words, the victimhood strategy portrays "the elite" as a threat to "the people" and "the elite" is perceived as ignoring the voices of "the people" (Hameleers et al., 2021). Additionally, the victimhood strategy can manifest as a dichotomous "friend versus foe" rhetoric (Weyland, 2001), portraying minorities within "the people" as enemies (Bast, 2021). As a result, populism's appeal to the public transcends the celebration of ordinariness; it strategically shifts blame onto "the corrupt elites," framing "the people" as victims of this establishment (Hameleers et al., 2021; Kissas, 2022). Overall, the victimhood strategy encompasses a tonality that is more overtly negative.

In summary, the populist style of communication prominently features emotional appeals that encompass both positive and negative emotions, with negativity (Schwartz et al., 2022) and a focus on victimization. We perceive these two strategies, ordinariness and victimhood, as encompassing several other defining features and recurring elements of populism, including the three core concepts of populism: people-centrism, anti-elitism, and popular sovereignty (Mény and Surel, 2002). The strategy of ordinariness involves populists positioning themselves as closely connected to "the people" and as being a part of the people, while the victimhood strategy entails discrediting the elite and asserting that they have undermined the people's sovereignty (Ernst et al., 2019). By employing these two distinct strategies of populist communication, populists aim to convey their affinity with the people while simultaneously distancing themselves from, assigning blame to, or identifying elites or minorities as adversaries (Bast, 2021).

Emotional responses to populist strategies on social media

Although emotions are often seen as individual responses, in politics, and on social media, it is also important to recognize collective behavior, and its placement in social relations (Wahl-Jorgensen, 2019). Political figures, leaders, and social movement organizers utilize emotions in their online communication to amplify message reach and reinforce perceived social norms (Brady et al., 2017). Populism is intertwined with emotions, given populism's inherent emotional intensity aimed at evoking affective responses by appealing to "the people" or blaming "others" (Martella and Bracciale, 2022; Schumacher et al., 2022). Populists employ, for instance, an ordinariness strategy to elicit positive emotions like pride, enthusiasm, and hope (Albertazzi and Bonansinga, 2023) when connecting with the public. Conversely, with a victimhood strategy, they target elites or assign blame to specific groups to evoke negative emotions—anger by assigning blame and fear by portraying vulnerability and threat to "the people".

Employing a negative frame on social media not only increases transmission (Brady et al., 2017) but also heightens the perception of polarization (Banks et al., 2021). Populists on social media often use negative emotions in combination with ideology, and it has proven to be a successful strategy during election campaigns (Martella and Bracciale, 2022). Negative emotional appeals have been shown to be a more effective strategy for eliciting user interactions and reactions compared to positive appeals (Martella and Bracciale, 2022). Another study examining the emotional expressions of American politicians on Instagram and Facebook revealed that young people prefer their political leaders to convey emotionality, such as happiness or compassion (Bossetta and Schmøkel, 2023), which indicates that positive communication can also be significant for voters. Populist communication frames depicting ordinariness result in more likes on Facebook and reduce angry reactions (Jost et al., 2020).

Most of the studies presented above identify emotional responses by utilizing reaction buttons on social media platforms, and these reaction buttons represent a very limited supply of different emotions. Also, when looking at the psychophysiological responses to populist communication styles, no differences were found between exposure to anti-establishment and pro-establishment rhetoric (Schumacher et al., 2022). Instead, other variables, such as vote choice and education level, condition the effects in the study (Schumacher et al., 2022). This demonstrates that the way of measuring emotional reactions has importance for the outcome.

Moreover, when looking at populist communication strategies, the in- or out-group of the respondents is important. The language used for political in-groups and out-groups generates different forms of engagement (Rathje et al., 2021). In a study of Twitter and Facebook discussions, the same pattern was found on both platforms: out-group content is associated with angry reactions, but also with "haha" comments, and in-group language correlates with positive reactions and love. Posts with out-group language were re-posted twice as often as posts with in-group language, emphasizing the effectiveness of such content by evoking mockery and emotions such as anger (Jost et al., 2020; Rathje et al., 2021). Concerning the alignment of emotional responses, in-group discourse could result in strong emotions without an unconscious, affective response. Similarly, out-group discussions could exhibit individual physiological responses but not report any emotions because they are motivated to reduce their reasoning cognitive reactions consciously or unconsciously (Homan et al., 2023). Likewise, in situations where individuals are overwhelmed with a large amount of conflicting information, people tend to switch from thoughtful and reflective deliberation to relying more on their reflexive and partisan instincts (Choi and Lee, 2021). There is evidence that exposure to out-group disagreements can backfire (Kim, 2015; Bail et al., 2018), but these studies often analyze intentional exposure or discussion with the out-group (Heatherly et al., 2017). This impact could be constrained since most individuals do not actively seek out news on social media (Gil de Zúñiga et al., 2017). In a study of online unintentional exposure to information that challenges one's beliefs, the results do not reduce or moderate the emotional responses people have toward their political views, nor does it backfire in a negative way (Zhu et al., 2024).

In summary, there has been a strong focus on negative emotions in political communication, particularly when combined with populist strategies and out-group communication. However, there remains a gap in our understanding of whether a broader range of emotions can be elicited (cf. McLaughlin et al., 2020). Given the recognized influence of style, framing, and emotionality in populist communication (Jost et al., 2020; Hameleers et al., 2021; Schwartz et al., 2022), this study formulates an exploratory research question to further investigate the impact of populist social media communication on emotional responses: *RQ 1*: What emotional responses do the right-wing populist communication strategies ordinariness and victimhood evoke in individuals belonging to an out-group?

Measuring emotional responses

In recent decades, emotions have garnered growing attention as a consequential field of study within political science. The shift towards a scientific approach to comprehending emotions has provided advantages previously unavailable to researchers endeavoring to enhance their understanding of the nature of emotions and their impact on human judgment (Marcus, 2023). Still, the precise definition and measurement of these concepts continue to pose challenges (Wahl-Jorgensen, 2019). Affect, an immediate, unconscious physiological response to stimuli (Lodge and Taber, 2005), is often analyzed using arousal (the intensity) and valence (positive or negative) dimensions (Russell, 1980; Bakker et al., 2021). The affective response is followed by cognitive evaluation and discrete emotions such as anger or fear (Marcus et al., 2000). Emotions represent the subjective aspect of this experience, encompassing intensity within constructed narratives, semantic progressions, and semiotic frameworks (Massumi, 2002). Affective responses can be measured by psychophysiology such as skin conductance and facial electromyography (Bakker et al., 2021), and discrete emotions are often measured by self-reports (Bradley et al., 2001; Homan et al., 2023; Zhu et al., 2024). However, broader categorizations into positive-negative emotions, or moral and nonmoral-emotional expressions are often employed, with the potential for employing finer subcategories (Brady et al., 2017).

Presently, prevailing practices in political science predominantly hinge on the reliance on self-reported emotions (Bakker and Schumacher, 2024). A notable challenge associated with relying on self-reports for emotional measurements pertains to the predominantly preconscious nature of affective processes, rendering them difficult to measure (Bakker and Schumacher, 2024). Furthermore, individuals may be inclined to self-report in socially desirable ways, particularly concerning sensitive topics (Bakker and Schumacher, 2024). In prior research, the assessment of self-reported emotions has frequently relied on surveys that inquire about the prevalence of specific emotions. However, the theoretical underpinning of these studies often centers on preconscious appraisals (Marcus, 2023). Noteworthy, affective responses do not have to align with cognitive discrete emotions (Barrett and Satpute, 2019; Homan et al., 2023), which could be explained by the fact that different brain regions are involved. The connection between a direct and unmediated decision-making process, initiating with psychological responses and concluding with behavioral responses, has been challenged (Bakker and Schumacher, 2024). The observed weak link between self-reports and physiological indicators of emotions has prompted concerns regarding the validity of these measures. Moreover, upon examining the emotional responses provided by respondents without relying on pre-defined survey categories, a considerably wider range of emotions becomes apparent. In a study involving interviews with affectively polarized individuals (Versteegen, 2024), more than 25 distinct emotional expressions were identified, and for instance, sarcasm, discontent, and nostalgia were found to be more prevalent than fear and happiness.

Nevertheless, some researchers posit that physiological measures and self-reports may be tapping into distinct facets of affect (Bakker and Schumacher, 2024). Physiological measures might more accurately capture affect, representing the initial valanced reaction to a stimulus, while subjective reports encompass additional cognitive noise and reflect socially conditioned emotions (Funck and Lau, 2023). Hence, physiological and self-reported measurements are different, but valid ways of capturing emotions (Bakker et al., 2021).

This study also addresses an exploratory methodological research question, given that prior research emphasizes that various measures of emotion may not necessarily align (Barrett and Satpute, 2019; Homan et al., 2023). In previous studies of populist communication, reaction buttons on social media are often used to capture emotional responses, which does not capture all the emotions that previous research has shown to be important (Marcus, 2023; Versteegen, 2024). Hence, we study both the immediate and subconscious reactions in the form of facial expressions and two types of self-reported responses (free written statements, and a questionnaire) that involve cognitive reasoning processes. Thus, the study formulates a second methodological exploratory research question:

RQ 2: How are the psychophysiological and self-report measures of emotions interrelated in out-group response to right-wing populist content?

Research design

In this exploratory laboratory study, the participants were randomly assigned to two treatment groups with two distinctive stimuli of populist strategies: ordinariness (Instagram) or victimhood (TikTok). The participants in the study were Swedish-speaking Finns, and the content from the out-group of the receivers consisted of social media content made by Riikka Purra, the party leader of the rightwing populist Finns Party. The Swedish-speaking Finns, despite having official language status, represent a minority in Finland, constituting 5.2% of the total population (Saarela, 2021). The Finns party has a history of opposing the rights of this minority in Finland (Himmelroos and Strandberg, 2020) and is the most disliked party by Finnish Swedish-speaking voters (Strandberg, 2023). To test the effect of the two strategies, we implemented an experimental single-factor design with psychophysiological measurements during the exposure to stimuli and a post-test-only measurement of self-reported emotions. By using real social media content (Instagram and TikTok), we uphold experimental realism (McDermott, 2002). To reduce the threat to internal validity that the differences in content might produce, we randomized the respondents into two treatment groups (Banks et al., 2021) and conducted a separate stimuli manipulation check with an additional student sample.

The study design, hypotheses, and research questions, and the planned analyses were preregistered on the Open Science Framework (OSF) (https://doi.org/10.17605/OSF.IO/GBMQY) before data collection begun. Moreover, the OSF page contains a Supplementary material with detailed information about the measurements, the coding instructions, information about deviations

from the pre-registration plan, and other relevant information for reproduction of the study. We adhered to the ethical evaluation procedure established by the Research Ethics Committee at Åbo Akademi University.

Participants

The study was conducted in June 2023, and 43 participants aged 20–36 took part, which is a normal sample size used in laboratory studies (Fournier et al., 2020). The participants were recruited through an e-mail invitation to students at a Finnish University. The aim was to deliberately recruit participants from the Swedish-speaking Finnish population, as they are likely to exhibit out-group feelings towards the social media content creator used in the study. It is noteworthy that Swedish-speaking Finns typically exhibit a robust linguistic identity while also demonstrating proficiency in the Finnish language (Karv and Backström, 2022). Moreover, the aim was to specifically target young people, given that they constitute the primary demographic of social media users. For comprehensive descriptive statistics of the sample, see the Supplementary material. The study was conducted before the party leader, Riikka Purra, came under severe scrutiny in July 2023 for racially insensitive remarks in an online blog post dating back to 2008.

In this study, participants were randomly assigned to two groups. Random participant allocation is an effective way to control for known factors like gender, age, and political interest, as well as unmeasured and unknown variables that could potentially impact the outcome (Stoker, 2010). The two treatment groups were:

- 1 The group that watched the Instagram account of Riikka Purra (n=22)
- 2 The group that watched the TikTok account of Riikka Purra (*n*=21)

To confirm the respondents' emotional distance to Riikka Purra, we investigated feelings towards Finnish political parties represented in parliament, with the specific interest of feelings towards Riikka Purra's Finns Party (PS). Participants were asked to indicate their feelings with the following question: "How would you describe your feelings towards the following political parties? Please indicate your response on a scale of 1-7, where 1 means that you strongly dislike the party, 4 means you are completely neutral towards the party, and 7 signifies that you strongly like the party." The Finns Party (PS) was most disliked (\bar{x} = 2.1) by the participants, whereas the Swedish People's Party (RKP) was most liked ($\overline{x} = 5.7$) by the participants (for comprehensive descriptive statistics, see the Supplementary material). The fact that the Finns Party is the most disliked party is not surprising, given that the participants were deliberately recruited from the Swedish-speaking Finnish population among which the RKP is the most popular party. Additionally, the result aligns with previous research showing that the right-wing populist Finns Party is typically less favored by the Swedishspeaking population (Strandberg, 2023). The Wilcoxon signed-rank test confirms that the participants consistently had more negative feelings towards the Finns Party than the Swedish People's Party (p < 0.001).

We conducted a randomization check to assess group differences in various background variables, including socio-economic background, political interest, social media usage, and feelings toward Finnish parties (Freeman–Halton extension of the Fisher exact

	Ordinariness Instagram		Victimho	Mann–Whitney U-	
		SD		SD	testª
Convey image of ordinary person	5.77	1.07	4.40	1.92	<i>U</i> = 265, <i>p</i> = 0.005
Depiction of everyday life	5.53	1.19	3.73	1.98	<i>U</i> = 215, <i>p</i> < 0.001
Critique of the elite	2.23	1.22	4.50	1.83	<i>U</i> = 751, <i>p</i> < 0.001
Expressing societal threats	2.00	1.14	5.20	1.40	<i>U</i> = 841, <i>p</i> < 0.001
Emotional valence	4.43	1.07	2.64	1.59	U = 144, p < 0.001

TABLE 1 Stimuli manipulation check for theme and emotional valence.

Instagram, n = 30, TikTok, n = 30.

^aTwo-tailed Mann–Whitney U-test.

probability test or Mann–Whitney *U*-test). Details regarding the measurements, median values, and specific tests employed are presented in the Supplementary material. At the 0.05 significance level, there were no statistically significant differences between the treatment groups by gender (p=0.86), age (p=0.77), feelings for the Finns Party (p=0.07) habit of using Instagram or TikTok (p=1 and p=0.96), political interest (p=0.50) nor occupation (p=0.52). The differences between the two treatment groups concerning feelings for the Finns Party are small but almost significant, and the group that watched TikTok rated the Finns Party slightly more positive than the group that watched Instagram (mean 2.4 versus 1.8). Thus, the Finns party is still by far the most disliked party in both groups.

Procedure

When arriving at the laboratory, participants received a brief introduction to the study and research ethics and signed an informed consent form. Subsequently, they completed a pre-test survey before being taken into a separate computer-equipped room for data collection, involving a calibration process. During data collection (2 min), participants wore noise-canceling headphones, to block noise other than that from the stimuli. Participants were instructed to use the social media platform for a standard two-minute session. They were free to browse the feed and engage with content as usual, with the only stipulation being to stay within Riikka Purra's profile. If participants felt they had finished before the two-minute mark, they had the option to do so by ending the stimuli session.

After viewing the stimulus, participants were asked about their self-reported emotions and experiences during the stimuli, by completing a survey on the computer. Following the data collection, participants received a debriefing session and the opportunity to ask questions before departing.

The laboratory study was conducted by one senior researcher, and one trained research assistant. Participants were compensated with a 25-euro gift card and a complimentary lunch for their participation.

Stimuli and manipulation check

The stimuli in this study were:

1 The Instagram account of Riikka Purra: https://www.instagram. com/sanrines/

2 The TikTok account of Riikka Purra: https://www.tiktok. com/@riikkapurra

The main reason for choosing Purra was that her social media communication strategies varied greatly between the two platforms, which creates a potential for evoking varying emotional reactions.

To validate our stimuli post-hoc, we conducted a manipulation check after the laboratory study using a different sample of university students, similar to the initial sample. Participants were recruited through an email invitation sent to students at a Finnish university. As the mean number of opened posts in the actual laboratory study was three on both Instagram and TikTok, participants consisting of university students (N=60), instructed to examine the three posts from either Riikka Purra's Instagram or TikTok that were most viewed during the actual laboratory study.

The manipulation check employed a randomization process to ensure the participants were assigned to view either Instagram or TikTok. Following this, participants were tasked with evaluating the thematic content resonating with both profiles. The assessment incorporated items designed to measure themes of ordinariness and victimhood (from 1, "not at all apparent theme," to 7 "clearly apparent theme") and the emotional valence (from 1, "very negative," to 7, "very positive") of the content. The results are presented in Table 1. Given the non-normal distribution of the data, a Mann–Whitney *U*-test was conducted to assess statistical significance.

The findings indicate a significant difference in the content between Riikka Purra's Instagram and TikTok. The participants rated ordinariness strategies, such as portraying the image of an ordinary person and depicting everyday life, to be more prominent on Instagram. She frequently shares images of her meals, including a description of what she has been making, such as "Spaghetti made from zucchini and a versatile sauce 🍞 🚳 (tomatoes, bell peppers, yellow and garlic onions, celery, dates, lemon, pepper, coconut aminos) + side dishes ()" (Purra, 2023a). She also shares everyday photographs, either of herself out in nature or of her dog. One example is the birthday celebration of "Princess Kerttu Kaarina, from the streets of Bucharest, is celebrating her birthday at home in Kirkkonummi with her favorite people. The menu includes a liver casserole cake with six sausages and a chocolate version for humans" (Purra, 2022). Although Purra's self-personalizing frame thus includes glimpses of private life, she does not publish imagery relating to family life and roles in the content.

In contrast, victimhood strategies, such as criticizing the elite and expressing threats against people, were rated to be more prominent on TikTok. On TikTok, Purra's content revolves around her active campaign for the Parliamentary election. She frequently addresses the camera directly and discusses political matters often using strategies of victimhood, posing "the people" against an establishment. The videos are filled with statements of people-centrism and a return of popular sovereignty, such as videos with statements: "[...] The Finns Party is not a radical party, but we are exactly where a Finnish party should be. Defending this country and the citizens of this country and restoring the position of Finns as number one in their own country" (Purra, 2023b).

Furthermore, participants in the manipulation check perceived the content on Instagram as more positively oriented compared to the content on TikTok. This difference reinforces the validity of our manipulation, indicating that our treatment groups were effectively exposed to two distinct populist strategies—ordinariness on Instagram and victimhood on TikTok.

Measurements

Dependent variable: facial expressions

Participants viewed stimuli on a 22-inch full HD widescreen monitor while their facial expressions were recorded using iMotions 9.3 software. A Logitech HD Pro C920 web camera, placed at eye level in an upright position, captured participants' facial reactions.

Facial expression analysis (FEA) was performed through automatic analysis using computer vision with the Affectiva (AFFDEX SDK 5.1) software. The analysis is done through three steps: (1) face detection (2) facial action units (AU) detection and registration, and (3) facial expression and emotion classification. The AFFDEX software does not necessitate a baseline neutral stimulus. Instead, it utilizes an internal rolling baseline for its classifiers. This means that each analyzed frame is compared not only to the current face but also to the ones from past and future frames. This technique reduces the occurrence of false positives by eliminating prolonged or persistent resting faces. The rolling baseline operates under the assumption that genuine, natural facial expressions are fleeting events that emerge and vanish over time. Therefore, persistent expressions are regarded as "unnatural" and are excluded from the calculation. The use of the rolling baseline has been found to enhance the accuracy of detecting AUs based on internal research (iMotions 9.3, 2023).

The unit of analysis for the FEA data is per treated frame. In AFFDEX, seven emotions are detected: happiness, anger, fear, surprise, sadness, contempt, and disgust. The emotion score is derived from a combination of different AUs, to correspond with Ekman and Friesen's (1986) EMFACS-7, representing seven basic emotions. Each emotion gets a value between 0–100, where 50% (50) likelihood represents a moderately strong display of facial response, 75% (75) is a strong response and 25% (25) is a mild facial response. The classification process is entirely based on statistical analysis, and the classifier provides a probabilistic outcome that reflects the probability or possibility of the expression being genuine (iMotions 9.3, 2023). The AFFDEX algorithm has been validated in several

studies. For instance, when the facial expression analysis in iMotions is compared to facial electromyography (EMG), happy and angry faces correlate highly and the results of the comparison between AFFDEX and EMG are comparable (Kulke et al., 2020). In another study, Westermann et al. (2024) find that EMG determines the expressions faster than AFFDEX (approximately 800 ms). In our study, the timing delay is not a problem, since we use the max value of facial expressions during the whole stimuli session. Moreover, not adding additional tension due to electrodes applied in the face, such as when using EMG, possibly provides more reliable results (Kulke et al., 2020). When AFFDEX is compared to other emotion classifying algorithms such as FACET, the latter performs better, but the AFFDEX algorithm still achieves acceptable accuracy (Stöckli et al., 2018). However, there is always the potential for inaccurate coding when using computer vision. An examination of previous research indicates that computational algorithms align with human evaluations in detecting positive emotions, anger and neutral expressions. However, the identification of emotions like fear has proven to be more challenging (Peng and Lu, 2023). The specific programs utilized for these evaluations are not explicitly detailed in the referenced article.

Dependent variable: self-reported emotions

Firstly, after exposure to the stimuli, the participants were presented with an open-ended question: "Can you describe what you experienced while engaging with Riikka Purra's social media content? Provide examples of how you felt during the study and if there is anything specific you reacted to." If participants provided responses that were unclear to the researcher, clarification was sought during the debriefing session. The answers were coded for different emotional responses by two researchers at the analysis stage. To analyze the recipients' thoughts and the depth and valence of cognitive reasoning processing, the thought-listing technique of Cacioppo and Petty (1981) was used. Each sentence was treated as an individual unit of analysis, resulting in 122 units of analysis. The sentences were coded according to their valence into positive, negative, neutral, surprised or mixed thoughts. The emotion surprised was introduced as a distinct valence because it could be interpreted as either a negative or a positive emotion, yet still not considered a mixed emotion. Following the analysis stage, the categories of surprise and mixed emotions were merged into a single category labeled" other" due to their low frequencies feeling. The coding instructions and operationalization are presented in Table 2.

The two researchers coded half the material each based on the coding instructions and then each re-coded half of the material based on the provided coding instructions. We conducted an inter-reliability test on 20 randomly drawn sentences using Krippendorff's alpha (Krippendorff, 2011), the α for the coding is 0.933, representing a very high agreement.

Secondly, the participants were asked to rate three emotions, anger, happiness and fear (Homan et al., 2023): "On a scale from 1 to 100, indicate how much you felt (emotion) where 100 represents very much (emotion) and 0 not at all (emotion)."

Significance levels and effect sizes in the analysis

As the subjects were not randomly drawn from a population, the number of subjects per group is small, and the data is not normally distributed for the dependent variables, robust nonparametric statistics were used in the analysis. For continuous variables, median values (Mdn) that are less sensitive to outliers, and interquartile range (IQR: 75th minus 25th percentile) are presented.

The nonparametric Mann–Whitney *U*-test, performed on mean ranks instead of initial scores, was carried out for comparisons between groups (facial expressions and self-reported emotions on a scale of 0–100). To assess effect size, which is a crucial issue in studies with small numbers of subjects (Kramer and Rosenthal, 1999), a nonparametric effect size estimator, Cliff's delta (*d*), was used since it is robust in small sample sizes with non-normal distributions (Cliff, 1996). According to Vargha and Delaney (2000), Cliff's *d* of 0.11, 0.28, and 0.43 correspond to small, medium, and large effects, respectively.

Differences between the groups regarding the free written sentences were analyzed with Pearson's chi-square test. To identify categories that significantly differ from each other, we examined the adjusted residuals. Values below -1.96 or above +1.96 represent clear differences (Agresti, 2002). The interrelatedness of the emotional measurements was analyzed with Spearman's rank correlation coefficient.

The significance level was set at p < 0.5, which is also used in other laboratory studies (e.g., Bakker et al., 2021). The designed power analysis (calculated with G*Power 3.1.9.7. software for Mann– Whitney *U*-test) was calculated for two-tailed tests of non-normally distributed data. This yielded an effect size of 0.9 at alpha = 0.0.5 and power (beta) = 0.75. Obviously, the high effect size means we run the risk of not noticing smaller significant differences between the treatment groups. On the other hand, it entails that the differences that are significant indicate large differences and thus likely to be found in replications of our experiment.

Results

Facial expressions during the stimuli exposure

Firstly, we address the first research question: What emotional responses do the right-wing populist communication strategies ordinariness and victimhood evoke in individuals belonging to an out-group? Table 3 presents the maximum values of facial expressions observed during the stimuli exposure. Overall, the two treatment groups exhibit comparable emotional responses. For respondents viewing Instagram, anger emerges as the facial expression with the highest maximum values recorded (2.1). For respondents viewing TikTok, surprise emerges as the facial expression with the highest maximum value (2.5). No significant differences between the groups emerge for any of the facial expressions. Furthermore, these numbers represent less than a mild facial expression (iMotions 9.3, 2023). These findings suggest that the two strategies, ordinariness and victimhood, did not elicit strong initial emotional responses in the participants.

TABLE 2 Operationalization of the valence of thoughts in the openended questions.

Valence	Operationalization	Logic and examples
Positive	1	Positive thoughts were all statements that were favorable towards Riikka Purra, her content or the True Finns Party (e.g., "The images were very colorful and cheerful, resembling a typical mom")
Negative	2	Negative thoughts were those that expressed rejection towards Riikka Purra, her content or the True Finns Party (e.g., "Her pictures come across as fake, or in some way, they do not feel credible to me")
Neutral	3	Simple descriptions of Riikka Purras content, questions without evaluative content and expressions whose valence was ambiguous were classified as neutral (e.g., "I have not visited Purra's TikTok before")
Surprised	4	This category represents sentences that explicitly express surprise and indicate that the subject had witnessed something unexpected (e.g., "At the same time, I am somewhat surprised because I did not expect similar content from her.")
Mixed	5	Mixed thoughts were statements that have both positive and negative expressions of valence (e.g., "Better than many other politicians, but not outstanding")

Following the analysis stage, the categories of surprise and mixed emotions were merged into a single category labeled "other" due to their low frequencies.

Self-reported emotions

The participants wrote a total of 122 sentences after the stimuli presentations. On average, participants in the Instagram group and the TikTok group wrote similar amounts of sentences, 3.0 and 2.7, respectively. In Table 4, there is a statistically significant association between type of exposure and emotions expressed in the sentences by the participants. A further examination of the adjusted residuals showed that the proportion of sentences expressing positive and negative emotions clearly differs between the exposure types. A higher proportion of sentences expressing positive emotions was found among participants exposed to ordinariness stimuli on Instagram (39%) compared to those exposed to victimhood stimuli on TikTok (14%). Conversely, a higher proportion of the sentences written by the group exposed to victimhood stimuli on TikTok reported negative emotions (29%) than did the sentences by the group that were exposed to the ordinariness stimuli on Instagram (8%).

A closer inspection of the surprise sentences shows that the proportion of sentences expressing surprise is significantly larger in the pool of sentences uttered by the participants who viewed the Instagram stimuli (8 of 66 sentences, 12%) compared to the sentences by the participants exposed to TikTok stimuli (1 of 56 sentences, 2%), Fisher's exact test, p < 0.05.

Finally, we inquired with the participants regarding their emotional experiences concerning three distinct emotions: anger, fear, and happiness. Table 5 presents the median values for each treatment group. The findings indicate that after exposure to the ordinariness strategy, participants reported experiencing a high degree of happiness (48), compared to exposure to the victimhood strategy (3). Findings indicate that the participants exposed to the ordinariness strategy reported experiencing a significantly higher degree of happiness (48) compared to the participants that were exposed to the victimhood strategy (3). Conversely, exposure to the victimhood strategy elicited stronger feelings of anger (30) and fear (9), in comparison to exposure to the ordinariness strategy (0 for both emotions). All these three emotions differ significantly between the two treatment groups. All these three effect size is large, Cliff' s d > 0.48.

In summary, based on the self-reported emotional responses, the ordinariness strategy elicited notably more and stronger positive emotions, as evidenced by the free, written expressions following exposure to the stimulus, as well as by responses regarding feelings of happiness, anger, and fear where happiness emerged as the dominant and exclusive emotion. In contrast, the victimhood strategy yielded a higher prevalence of negative emotional written responses, significantly surpassing the reactions to ordinariness content. Furthermore, the victimhood strategy within self-reported emotions of anger and fear was notably accentuated exposure to the victimhood strategy evoked stronger self-reported emotions of anger and fear compared to the ordinariness stimuli. We address the exploratory research question of how emotional responses manifest through different measurements in the concluding discussion.

The interrelatedness of measurements

Our second research inquiry sought to explore the interrelationship between psychophysiological and self-report measures of emotions in response to out-group right-wing populist content. Previous research highlights the potential divergence among various measures of emotions. To address this, we conducted a correlation analysis involving correlations between the maximum values of facial expressions for anger, fear, and happiness, and self-reported measures for anger, fear, and happiness (Table 6).

These analyses yield overall negative null result, suggesting no correlation in the interrelationship between psychophysiological and self-reported measures in response to out-group populist content. There is however one significant correlation between facial expressions of anger and self-reported measures of anger for the participants who watched the TikTok stimuli. The victimhood strategy produced higher amounts of self-reported anger, which correlated with more facial expressions of anger. However, when looking at the aggregated level, no significant correlations were found for any of the three emotions.

Conclusions and discussion

This study investigated the emotional responses to social media content produced by a right-wing populist leader. The study used authentic social media content expressing the populist strategies of ordinariness (on Instagram) and victimhood (on TikTok). In the study, we employed various measures to capture emotional responses, including psychophysiological measures through facial expressions and two distinct self-report measures.

Regarding the first research question-what emotional responses do the right-wing populist communication strategies ordinariness and victimhood evoke in individuals belonging to an out-group-the study yields mixed results. Exposure to the two strategies does not result in differences regarding facial expressions. This type of content did not produce strong emotional facial expressions in the respondents, nor did the type of facial expressions differ between the ordinariness group and the victimhood group. However, self-reported emotions expressed in writing show significant differences between the groups. Concerning selfreported emotions, exposure to victimhood caused more negative emotions while exposure to ordinariness evoked more positive emotions when compared to each other. Previous studies found that out-group language was effective in evoking anger and ridicule (Rathje et al., 2021), but in this study, we find that out-group language through different strategies produces both positive selfreported emotional responses (exposure to ordinariness strategy) and negative self-reported emotional responses (exposure to victimhood strategy). This can explain why studies examining the effects of social media on affective polarization yield mixed results (Kim, 2015; Bail et al., 2018) as previous studies may have employed a wide range of framing strategies for social media content. Both strategies also resulted in a high number of neutral self-reported expressions. These results indicate that the initial emotional response to stimuli presentation did not strongly evoke emotions in participants when considering the strategies of ordinariness and victimhood by an out-group content creator. This finding is particularly intriguing since previous research has predominantly centered on negative emotions (Bakker et al., 2021). It underscores the potential for positive and neutral emotions to be associated with out-group content (Jost et al., 2020). In comparison, some studies show that when unintentionally encountering out-group content, it must not backfire negatively (Zhu et al., 2024).

Previous research indicates that the different measurements of emotions do not necessarily align (Barrett and Satpute, 2019; Homan et al., 2023). Therefore, we posed an exploratory research question: How are the psychophysiological and self-report measures of emotions interrelated in out-group response to right-wing populist content? Interestingly, we found a correlation concerning emotional expressions of anger for the group who watched the victimhood strategy on TikTok, where higher self-reported scores of anger correlate with more angry facial expressions. Anger was the dominant self-reported emotion for the victimhood strategy. Previous studies have reported that facial expressions of fear might be more challenging to capture (Peng and Lu, 2023), and since there is relatively little self-reported fear by the participants in the two exposure groups it is perhaps not surprising to not see a correlation for this emotion. At the same time, although the ordinariness strategy resulted in high levels of self-reported happiness, this is not

TABLE 3 The median max value per experimental treatment during stimuli presentation (IQR in parenthesis, scale 0-100).

Emotion	Ordinariness Instagram	Victimhood TikTok	Mann–Whitney U- testª	Cliff's d
Anger	2.1 (6.7)	1.7 (9.0)	U = 257, p = 0.53	-0.11
Contempt	1.9 (3.1)	2.2 (51.4)	U = 272, p = 0.32	-0.18
Disgust	0.1 (0.8)	0.3 (1.6)	U = 277, p = 0.26	-0.20
Fear	1.5 (4.6)	2.1 (12.6)	U = 290, p = 0.15	-0.26
Happiness	0.04 (97.1)	0.2 (73.9)	U = 257, p = 0.53	-0.11
Sadness	1.1 (9.9)	2.1 (9.5)	U = 266, p = 0.40	-0.15
Surprise	0.5 (2.4)	2.5 (8.0)	U = 290, p = 0.15	-0.26

N = 43, Instagram, n = 22, TikTok, n = 21.

^aTwo-tailed Mann–Whitney U-test.

TABLE 4 Presence of emotions in reported sentences by the participants after stimuli exposure.

Emotion	Ordinariness Instagram			Victimhood TikTok		
	n	%	Adjusted residual	n	%	Adjusted residual
Positive	26	39	3.1	8	14	-3.1
Negative	5	8	-3.1	16	29	3.1
Neutral	25	38	-0.8	25	45	0.8
Other	10	15	-0.4	7	13	0.4
Total	66	100		56	100	

N = 122 is the total amount of sentences written by the participants, Instagram n = 66, TikTok, n = 56, p < 0.01 (Pearson's chi-square test). Bold values differ significantly from each other according to the adjusted residual.

visible in the facial expressions for the Instagram group, nor at the aggregated level. One explanation is that facial expressions shown in a laboratory setting in response to video stimuli might be more covert, and not as easily detected as for instance overt emotional expression in a public setting (Bakker and Schumacher, 2024). Previous research has also highlighted that different measurements capture different aspects of affect and emotional expression (Barrett and Satpute, 2019; Homan et al., 2023), and that combining different measurements provides a broader picture of the emotional expression (Bakker and Schumacher, 2024).

Another interpretation of the discrepancy between the facial expressions and the self-reported emotions suggests that differences emerge between the groups when cognitive reasoning becomes a factor (see Marcus et al., 2000). This demonstrates that prior to the cognitive reasoning process, when the affect is unconscious, there are no clear differences between the two treatment groups as the facial expressions analysis demonstrated. However, when participants are required to cognitively assess the emotions they have experienced, the perception of the out-group populist leader or her social media content comes into play and these self-reported emotions (both positive and negative) intensify significantly compared to the pre-conscious assessment. In other words, in contrast to Homan et al. (2023), when being exposed to out-group content, people increase their cognitive reasoning and self-reported emotional reactions consciously or unconsciously. This implies that the perception of

affective polarization towards the out-group elicits stronger selfreported emotions. In the context of the ordinariness strategy, which can also be viewed as de-demonization (Albertazzi and Bonansinga, 2023), it implies that communication from the out-group may pleasantly surprise individuals, evoking positive emotions. If the de-demonization strategy proves effective for a critical case such as the out-group, it is likely to be successful with other voter demographics as well.

There are some limitations of this study. Since it is an exploratory laboratory study the sample size is usually relatively small, the results presented do not readily support making broad generalizations. Thus, these findings should be viewed as exploratory. Further studies with larger samples and better power would be important to further validate the findings of this study. Nevertheless, some of the discoveries propose thought-provoking inquiries and avenues for future investigation. In particular, refraining from overly broad categorizations of content on social media is essential, for instance, only talking about right-wing populist communication is not sufficient. In this study, we demonstrate how right-wing populist strategies can elicit positive emotional responses from recipients belonging to the out-group, in this case, a critical case involving a sample that, while not the typical target audience of such communication, represents a group with the potential to broaden the Finns Party's electorate. Using real-world stimuli, from two different platforms, is always a trade-off between internal and external validity because they are more complex and difficult to control (Shadish et al., 2002), and future studies could design fictitious social media posts that precisely manipulate the aspect one wishes to investigate, to increase the internal validity. In this study, we focused on communication from a right-wing populist leader representing one party, making broad generalizations about populist movements limited, especially since there is a broad heterogeneity in populist parties in Europe (Hameleers et al., 2021). Furthermore, future studies could consider using content from ordinary citizens from the out-group, as affective polarization is not limited to negative emotions only for the political elite (Iyengar et al., 2012).

In this study, the initial unconscious responses of facial expressions were measured alongside self-reports. Within this investigation, we found clear differences between treatments regarding the self-reported cognitive assessments of emotional responses, but not within the measurement of facial expressions. This result may not come as a surprise, considering that prior studies have TABLE 5 Self-reported emotions on a scale from 0-100 after the stimuli presentation, median value (IQR).

Emotion	Ordinariness Instagram	Victimhood TikTok	Mann–Whitney U- testª	Cliff's d
Anger	0 (9.7)	30 (30.4)	U = 391, p < 0.001	-0.69
Fear	0 (0.3)	9 (19.8)	<i>U</i> = 341, <i>p</i> = 0.003	-0.48
Happiness	48 (51.5)	3 (24.9)	U = 73, p < 0.001	-0.69

N = 43, Instagram, n = 22, TikTok, n = 21.

^aTwo-tailed Mann–Whitney U-test.

	TABLE 6	Interrelatedness	of measurements
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Emotion	Ordinariness Instagram	Victimhood TikTok	Total
Anger	r = -0.30	$r = 0.44^{**}$	r = 0.06
Fear	r = -0.02	r = -0.22	r = -0.07
Happiness	r = -0.23	r = -0.09	r = -0.19

 $N\!=\!43,$ Instagram, $n\!=\!22,$ TikTok, $n\!=\!21.$ ** $p\!<\!0.05,$ and *** $p\!<\!0.01$ (2-tailed Spearman's rho, r).

predominantly relied on cognitive reasoning aspects of emotions, such as self-reports, written statements, or even Facebook reaction buttons, to analyze emotional expression and develop theoretical foundations (Bradley et al., 2001; Homan et al., 2023; Zhu et al., 2024). Consequently, we call for further research combining psychophysiological measurements with self-reported responses. In this study, the angry facial expressions correlate to more selfexpressed anger for the victimhood stimuli. The ordinariness stimulus that was perceived as more positive did not correlate with positive facial expressions. It would be intriguing to expand the assessment beyond facial expressions to include other measures of psychophysiology (e.g., skin conductance) to determine if similar patterns can also be discerned in those measures, and to combine the measurements with eye-tracking (Bakker and Schumacher, 2024) as a tool to determine what specific features of the social media content that capture the attention of the viewers. Especially when using real content, echoing the way individuals are impacted by social media in their everyday lives (Banks et al., 2021), other types of features that are displayed alongside the original post, such as comments from other users, could contribute to the emotional response of the participants. The impact of the gender of populist party leaders in shaping voter impressions through an ordinariness strategy that highlights their private life is an interesting avenue to explore. Based on an experimental study, Bast et al. (2022) show that female populist leaders are not harmed by emphasizing their private roles. Our findings support this, as the ordinariness strategy evoked positive emotions. However, Purra did not provide glimpses of family life, and the sample in our study had a female bias.

In conclusion, in our case, a female right-wing populist politician a politician who employs different social media tactics has the capacity to elicit both positive and negative emotions in a skeptical public that dislikes the politician in question. Showing a populist leader as an approachable ordinary person, doing everyday tasks, gives the respondents a positive emotional experience, even though the respondents position the populist party as an outgroup from themselves. However, when the social media content expresses victimhood contentmessages with a critique of the elite and societal threats, the respondents expressed anger. The findings align with prior research highlighting the emotional nature of right-wing populism, intending to elicit affective reactions from the public (Martella and Bracciale, 2022; Schumacher et al., 2022). However, the expression of negative emotions toward a victimhood strategy may stem from a distaste for the strategy itself and its originator, or as an emotional reaction to the specific message. Notably, the Instagram group initially disliked the Finns Party the most; however, over time, they had more positive emotional expressions. Employing multiple methods, including eye-tracking and more nuanced self-reported assessments beyond standard survey items, could assist researchers in unraveling the intricate processes involved in emotional responses. Additionally, it is noteworthy that the negative dimension of affective polarization in this context is primarily shaped by the framing of the content, rather than being rooted in immediate, unconscious emotional reactions.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation. The data will be made available through the Finnish Social Science Data Archive.

Ethics statement

The requirement of ethical approval was waived by Forskningsetiska nämnden vid Åbo Akademi for the studies involving humans. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study. The social media data was accessed and analyzed in accordance with the platform's terms of use and all relevant institutional/national regulations. Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

Author contributions

JL: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. JE: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. KS: Funding acquisition, Supervision, Writing – review & editing. TC: Supervision, Writing – review & editing. SA: Software, Writing – review & editing.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

References

Aalberg, T., and de Vreese, C. H. (2017). Introduction: comprehending populist political communication. In T. Aalberg, F. Esser, C. Reinemann, J. Strombäck and VreeseC. H. de (Eds.), Populist political communication in Europe. New York Routledge. 3–11

Agresti, A. (2002). Categorical data analysis. New York: John Wiley and Sons.

Albertazzi, D., and Bonansinga, D. (2023). Beyond anger: the populist radical right on TikTok. J. Contemp. Eur. Stud. 1–17, 1–17. doi: 10.1080/14782804.2022.2163380

Al-Ghazzi, O. (2021). We will be great again: historical victimhood in populist discourse. *Eur. J. Cult. Stud.* 24, 45–59. doi: 10.1177/1367549420985851

Bail, C. A., Argyle, L. P., Brown, T. W., Bumpus, J. P., Chen, H., Hunzaker, M. B. F., et al. (2018). Exposure to opposing views on social media can increase political polarization. *Proc. Natl. Acad. Sci. U.S.A.* 115, 9216–9221. doi: 10.1073/pnas.1804840115

Bakker, B. N., and Schumacher, G. (2024). "Using measures of psychophysiological and neural activity to advance understanding of psychological processes in politics" in Handbook of innovations in political psychology. Eds. Busby, Karpowitz and Wong.

Bakker, B. N., Schumacher, G., and Rooduijn, M. (2021). Hot politics? Affective responses to political rhetoric. *Am. Polit. Sci. Rev.* 115, 150–164. doi: 10.1017/S0003055420000519

Banks, A., Calvo, E., Karol, D., and Telhami, S. (2021). #Polarizedfeeds: three experiments on polarization, framing, and social media. *Int. J. Press/Politics* 26, 609–634. doi: 10.1177/1940161220940964

Barrett, L. F., and Satpute, A. B. (2019). Historical pitfalls and new directions in the neuroscience of emotion. *Neurosci. Lett.* 693, 9–18. doi: 10.1016/j.neulet.2017.07.045

Bast, J. (2021). Managing the image. The visual communication strategy of European right-wing populist politicians on Instagram. *J. Political Mark.* 23, 1–25. doi: 10.1080/15377857.2021.1892901

Bast, J., Oschatz, C., and Renner, A. M. (2022). Successfully overcoming the "double bind"? A mixed-method analysis of the self-presentation of female right-wing populists on Instagram and the impact on voter attitudes. *Polit. Commun.* 39, 358–382. doi: 10.1080/10584609.2021.2007190

Bennett, L. W. (2012). The personalization of politics: political identity, social media, and changing patterns of participation. *Ann. Am. Acad. Pol. Soc. Sci.* 644, 20–39. doi: 10.1177/0002716212451428

Berntzen, L. E., Kelsall, H., and Harteveld, E. (2023). Consequences of affective polarization: avoidance, intolerance, and support for violence in the United Kingdom and Norway. *Eur. J. Polit. Res.* doi: 10.1111/1475-6765.12623

Block, E., and Negrine, R. (2017). The populist communication style: toward a critical framework. *Int. J. Commun.* 11:20. Available at: http://ijoc.org/index.php/ijoc/article/ view/5820

Bos, L., van der Brug, W., and de Vreese, C. H. (2013). An experimental test of the impact of style and rhetoric on the perception of right-wing populist and mainstream party leaders. *Acta Polit.* 48, 192–208. doi: 10.1057/ap.2012.27

Bossetta, M., and Schmøkel, R. (2023). Cross-platform emotions and audience engagement in social media political campaigning: comparing candidates' Facebook and Instagram images in the 2020 US Election. *Polit. Commun.* 40, 48–68. doi: 10.1080/10584609.2022.2128949

Bracciale, R., and Martella, A. (2017). Define the populist political communication style: the case of Italian political leaders on Twitter. *Inf. Commun. Soc.* 20, 1310–1329. doi: 10.1080/1369118X.2017.1328522

Bradley, M. M., Codispoti, M., Cuthbert, B. N., and Lang, P. (2001). Emotion and motivation I: defensive and appetitive reactions in picture processing. *Emotion* 1, 276–298. doi: 10.1037/1528-3542.1.3.276

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Supplementary material

The Supplementary material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fpos.2024.1415403/ full#supplementary-material

Brady, W. J., Wills, J. A., Jost, J. T., Tucker, J. A., and Van Bavel, J. J. (2017). Emotion shapes the diffusion of moralized content in social networks. *Proc. Natl. Acad. Sci. U.S.A.* 114, 7313–7318. doi: 10.1073/pnas.1618923114

Bucy, E. P. (2021). "Embodied politics and emotional expression in the populist era: research advances amid a disruptive decade" in Routledge international handbook of emotions and media. eds. K. Döveling and E. A. Konijn (London: Routledge), 247–266.

Cacioppo, J. T., and Petty, R. E. (1981). "Social psychological procedures for cognitive response assessment: the thought-listing technique" in Cognitive assessment. eds. T. V. Merluzzi, C. R. Glass and M. Genest (New York, NY: The Guilford Press), 309–342.

Choi, J., and Lee, J. (2021). "Enthusiasm" toward the other side matters: emotion and willingness to express disagreement in social media political conversation. *Soc. Sci. J.*, 1–17. doi: 10.1080/03623319.2021.1949548

Cliff, N. (1996). Answering ordinal questions with ordinal data using ordinal statistics. *Multivar. Behav. Res.* 31, 331–350. doi: 10.1207/s15327906mbr3103 4

de Vreese, C. H., Esser, F., Aalberg, T., Reinemann, C., and Stanyer, J. (2018). Populism as an expression of political communication content and style: a new perspective. *Int. J. Press/Politics* 23, 423–438. doi: 10.1177/1940161218790035

Ekman, P., and Friesen, W. V. (1986). A new pan-cultural facial expression of emotion. *Motiv. Emot.* 10, 159–168. doi: 10.1007/BF00992253

Engesser, S., Fawzi, N., and Larsson, A. O. (2017). Populist online communication: introduction to the special issue. *Inf. Commun. Soc.* 20, 1279–1292. doi: 10.1080/1369118X.2017.1328525

Ernst, N., Blassnig, S., Engesser, S., Büchel, F., and Esser, F. (2019). Populists prefer social media over talk shows: an analysis of populist messages and stylistic elements across six countries. *Soc. Media Soc.* 5, 1–14. doi: 10.1177/2056305118823358

Farkas, X., Jackson, D., Baranowski, P., Bene, M., Russmann, U., and Veneti, A. (2022). Strikingly similar: comparing visual political communication of populist and nonpopulist parties across 28 countries. *Eur. J. Commun.* 37, 545–562. doi: 10.1177/02673231221082238

Fischer, S., and Lelkes, Y. (2023). "Emotion, affective polarization, and online communication" in Emotions in the digital world: exploring affective experience and expression in online interactions. eds. R. L. Nabi and J. G. Myrick (New York: Oxford University Press), 401–421.

Fournier, P., Soroka, S., and Nir, L. (2020). Negativity biases and political ideology. A comparative test across 17 countries. *Am. Polit. Sci. Rev.* 114, 775–791. doi: 10.1017/S0003055420000131

Funck, A. S., and Lau, R. R. (2023). A meta-analytic assessment of the effects of emotions on political information search and decision-making. *Am. J. Polit. Sci.* 1–16. doi: 10.1111/ajps.12819

Gil de Zúñiga, H., Weeks, B. E., and Ardèvol-Abreu, A. (2017). Effects of the news-findsme perception in communication: social media use implications for news seeking and learning about politics. *J. Comput. Mediat. Commun.* 22, 105–123. doi: 10.1111/jcc4.12185

Gonzalez-Aguilar, J. M., Segado-Boj, F., and Makhortykh, M. (2023). Populist right parties on TikTok: spectacularization, personalization, and hate speech. *Media Commun.* 11, 232–240. doi: 10.17645/mac.v11i2.6358

Hameleers, M. (2020). Augmenting polarization via social media? A comparative analysis of Trump's and Wilders' online populist communication and the electorate's interpretations surrounding the elections. *Acta Polit.* 55, 331–350. doi: 10.1057/s41269-018-0119-8

Hameleers, M., Schmuck, D., Bos, L., and Ecklebe, S. (2021). Interacting with the ordinary people: how populist messages and styles communicated by politicians trigger

users' behavior on social media in a comparative context. *Eur. J. Commun.* 36, 238–253. doi: 10.1177/0267323120978723

Hatakka, N. (2017). When logics of party politics and online activism collide: the populist Finns Party's identity under negotiation. *New Media Soc.* 19, 2022–2038. doi: 10.1177/1461444816660728

Himmelroos, S., and Strandberg, K. (2020). Ur majoritetens perspektiv: Opinionen om det svenska i Finland. Svenska litteratursällskapet i Finland.

Heatherly, K. A., Lu, Y., and Lee, J. K. (2017). Filtering out the other side? Crosscutting and like-minded discussions on social networking sites. *New Media Soc*, 19, 1271–1289. doi: 10.1177/1461444816634677

Homan, M. D., Schumacher, G., and Bakker, B. N. (2023). Facing emotional politicians: Do emotional displays of politicians evoke mimicry and emotional contagion? *Emotion* 23, 1702–1713. doi: 10.1037/emo0001172

Horsti, K. (2015). Techno-cultural opportunities: Anti-immigration movement in the Finnish media environment. *Patterns Prejud.* 49, 343–366. doi: 10.1080/0031322X.2015.1074371

iMotions 9.3 (2023). iMotions A/S. Copenhagen: Denmark.

Iyengar, S., Lelkes, Y., Levendusky, M., Malhotra, N., and Westwood, S. J. (2019). The origins and consequences of affective polarization in the United States. *Annu. Rev. Polit. Sci.* 22, 129–146. doi: 10.1146/annurev-polisci-051117-073034

Iyengar, S., Sood, G., and Lelkes, Y. (2012). Affect, not ideology: A social identity perspective on polarization. *Public Opin. Q.* 76, 405–431. doi: 10.1093/poq/nfs038

Jagers, J., and Walgrave, S. (2007). Populism as political communication style: An empirical study of political parties' discourse in Belgium. *Eur. J. Polit. Res.* 46, 319–345. doi: 10.1111/j.1475-6765.2006.00690.x

Jost, P., Maurer, M., and Hassler, J. (2020). Populism fuels love and anger: the impact of message features on users' reactions on Facebook. *Int. J. Commun.* 14:22. Available at: https://ijoc.org/index.php/ijoc/article/view/13400

Karv, T., and Backström, J. (2022). Kulturkonsumtion, språkrelationer och inställning till det svenska i Finland under pandemitider [Cultural consumption, language relations, and attitudes towards Swedish in Finland during the pandemic]: The Social Science Research Institute (Samforsk), Åbo Akademi University.

Kim, Y. (2015). Does disagreement mitigate polarization? How selective exposure and disagreement affect political polarization. *J. Mass Commun. Q.* 92, 915–937. doi: 10.1177/1077699015596328

Kissas, A. (2022). Populist everyday politics in the (mediatized) age of social media: the case of Instagram celebrity advocacy. *New Media Soc.* 26, 2766–2785. doi: 10.1177/14614448221092006

Kramer, S. H., and Rosenthal, R. (1999). "Effect Sizes and Significance in SmallSample Research." In R. H. Hoyle (Ed.) *Statistical Strategies for Small Sample Research*, (pp. 60–79). Sage, London.

Krippendorff, K.. (2011). Computing Krippendorff's alpha-reliability. Available at: https:// repository.upenn.edu/entities/publication/034a6030-c584-4d14-9d3d-7b7e8d16df20. (Accessed November 2, 2023)

Kulke, L., Feyerabend, D., and Schacht, A. (2020). A comparison of the affectiva iMotions facial expression analysis software with EMG for identifying facial expressions of emotion. *Front. Psychol.* 11:329. doi: 10.3389/fpsyg.2020.00329

Lu, Y., and Lee, J. K. (2019). Partisan information sources and affective polarization: panel analysis of the mediating role of anger and fear. *Journal Mass Commun Q.* 96, 767–783. doi: 10.1177/1077699018811295

Lodge, M., and Taber, C. S. (2005). The automaticity of affect for political leaders, groups, and issues: An experimental test of the hot cognition hypothesis. *Polit. Psychol.* 26, 455–482. doi: 10.1111/j.1467-9221.2005.00426.x

Marcus, G. E. (2023). Evaluating the status of theories of emotion in political science and psychology. *Front. Polit. Sci.* 4:1080884. doi: 10.3389/fpos.2022.1080884

Marcus, G. E., Russell Neuman, W., and Mackuen, M. (2000). Affective intelligence and political judgment. Chicago, IL: University of Chicago Press.

Martella, A., and Bracciale, R. (2022). Populism and emotions: Italian political leaders' communicative strategies to engage Facebook users. *Innov. Eur. J. Soc. Sci. Res.* 35, 65–85. doi: 10.1080/13511610.2021.1951681

Massumi, B. (2002). Parables for the virtual: Movement, affect, sensation. Durham, NC: Duke University Press.

McDermott, R. (2002). Experimental methods in political science. Annu. Rev. Polit. Sci. 5, 31–61. doi: 10.1146/annurev.polisci.5.091001.170657

McGregor, S. C., Lawrence, R. G., and Cardona, A. (2017). Personalization, gender, and social media: Gubernatorial candidates' social media strategies. *Inf. Commun. Soc.* 20, 264–283. doi: 10.1080/1369118X.2016.1167228

McLaughlin, B., Holland, D., Thompson, B. A., and Koenig, A. (2020). Emotions and affective polarization: How enthusiasm and anxiety about presidential candidates affect interparty attitudes. *Am. Politics Res.* 48, 308–316. doi: 10.1177/1532673X19891423

Mény, Y. and Surel, Y., (2002). The constitutive ambiguity of populism. In: *Democracies and the Populist Challenge*. Eds. Y. Surel, (UK: Palgrave Macmillan). 1–21. doi: 10.1057/9781403920072_1

Mudde, C. (2004). The populist zeitgeist. Gov. Oppos.39, 541–563. doi: 10.1111/j.1477-7053.2004.00135.x

Nawara, S., and Bailey, M. B. (2017). "The Twitter election: Analyzing candidate use of social media in the 2016 presidential campaign" in The internet and the 2016 presidential campaign. eds. J. C. Baumgartner and T. L. Towner (Lanham, MD: Lexington Books), 79–107.

Peng, Y., and Lu, Y. (2023). "Computational visual analysis in political communication" in Research handbook on visual politics. eds. D. Lilleker and A. Veneti (Cheltenham, England: Edward Elgar Publishing), 42–54.

Purra, R.. (2022). [...] Prinsessa Kerttu Kaarina, kotoisin Bukarestin kaduilta, viettää syntymäpäiviään kotona Kirkkonummella lempi-ihmistensä parissa. Tarjoiluna maksalaatikkokakku kuudella nakilla ja ihmisille suklaaversio. [Image]. Instagram. Available at: https://www.instagram.com/p/CkVi5EkNFht/

Purra, R.. (2023a). Kesäkurpitsasta spagetti ja monenmoisesta kastike **V (**tomaattia, paprikaa, kelta- ja valkosipulia, varsiselleriä, taatelia, sitruunaa, pippuria,

kookosaminoa) + lisukkeet. . [Image]. Instagram. Available at: https://www. instagram.com/p/Cq3KTjlNFHr/

Purra, R. (2023b). [...] Perussuomalaiset ei ole radikaali puolue, vaan me olemme juuri siellä missä suomalaisen puolueen kuuluu olla. Puolustamassa tätä maata. Tämän maan kansalaisia ja palautatammassa suomalaisen ykköseksi omassa maassaan. [Video]. TikTok. Available at: https://www.tiktok.com/@riikkapurra/video/7217148807493045510

Rathje, S., Van Bavel, J. J., and Van Der Linden, S. (2021). Out-group animosity drives engagement on social media. *Proc. Natl. Acad. Sci. U.S.A.* 118, 1–9. doi: 10.1073/pnas.2024292118

Redlawsk, D. P. (2023). Expanding our thinking about discrete emotions and politics. *Politics Life Sci.* 42, 146–157. doi: 10.1017/pls.2022.23

Rehnström, E. A., Bäck, H., and Carroll, R. (2023). Threats, emotions, and affective polarization. *Polit. Psychol.* 44, 1337–1366. doi: 10.1111/pops.12899

Russell, J. A. (1980). A circumplex model of affect. J. Pers. Soc. Psychol. 39, 1161–1178. doi: 10.1037/h0077714

Saarela, J. (2021). Finlandssvenskarna 2021 – En statistisk rapport [The Finland-Swedes 2021 – A statistical report]. (Helsinki, Finland: Svenska Finlands Folkting).

Schumacher, G., Rooduijn, M., and Bakker, B. N. (2022). Hot populism? Affective responses to antiestablishment rhetoric. *Polit. Psychol.* 43, 851–871. doi: 10.1111/pops.12832

Schwartz, S. A., Nelimarkka, M., and Larsson, A. O. (2022). Populist platform strategies: A comparative study of social media campaigning by Nordic right-wing populist parties. *Inf. Commun. Soc.* 26, 3218–3236. doi: 10.1080/1369118X.2022.2147397

Settle, J. (2018). Frenemies: How social media polarizes America: Cambridge University Press.

Shadish, W., Cook, T. D., and Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Houghton, Mifflin and Company.

Stanyer, J. (2012). Intimate politics. Cambridge, England: Polity Press.

Stöckli, S., Schulte-Mecklenbeck, M., Borer, S., and Samson, A. C. (2018). Facial expression analysis with AFFDEX and FACET: a validation study. *Behav. Res. Methods* 50, 1446–1460. doi: 10.3758/s13428-017-0996-1

Stoker, G. (2010). Exploring the promise of experimentation in political science: Micro-foundational insights and policy relevance. *Polit. Stud.* 58, 300–319. doi: 10.1111/j.1467-9248.2009.00812.x

Strandberg, K. (2023). "'Us and them': Affective polarization among voters of different parties" in Finland turned right: Voting and public opinion in the parliamentary election of 2023. eds. K. Grönlund and K. Strandberg (Turku: The Social Science Research Institute (Samforsk), Åbo Akademi University).

Vargha, A., and Delaney, H. (2000). A critique and improvement of the CL common language effect size statistics of McGraw and Wong. *J. Educ. Behav. Stat.* 25:101. doi: 10.2307/1165329

Versteegen, P. L. (2024). We love, they hate: Emotions in affective polarization and how partisans may use them. *Polit. Psychol.* 1–19. doi: 10.1111/pops.12955

Wahl-Jorgensen, K. (2019). Emotions, media and politics: Polity Press.

Westermann, J., Schäfer, R., Nordmann, M., Richter, P., Müller, T., and Franz, M. (2024). Measuring facial mimicry: Affdex vs. EMG. *PLoS One* 19:e0290569. doi: 10.1371/journal.pone.0290569

Weyland, K. (2001). Clarifying a contested concept: Populism in the study of Latin American politics. *Comp. Polit.* 34, 1–22. doi: 10.2307/422412

Widmann, T. (2021). How emotional are populists really? Factors explaining emotional appeals in the communication of political parties. *Polit. Psychol.* 42, 163–181. doi: 10.1111/pops.12693

Zhu, Q., Weeks, B. E., and Kwak, N. (2024). Implications of online incidental and selective exposure for political emotions: affective polarization during elections. *New Media Soc.* 26, 450–472. doi: 10.1177/14614448211061336