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Behavioural mimicry or herd behaviour of Generation Z? Social media interactions in the context of information overload

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ABSTRACT

The article aimed to examine the relationship between Generation Z's interactions on social networking sites in the context of herd behaviour and behavioural mimicry through central and peripheral content processing pathways. The study was conducted using the CAWI method on a group of 142 representatives of Generation Z from selected universities in Poland. Nonparametric tests were used for statistical analyses. In the case of information overload, approximately 20 % of respondents' interactions on different social media platforms may result from behavioural mimicry and herd behaviours. This type of activity is influenced primarily by the observed number of interactions and the emotional nature of other users' reactions. The observed differences are determined by gender, the type of social media platform, and related content specificity. Research limitations result from the specificity of the research sample in the context of its homogeneity and size. The theoretical contribution is related to the development of the cognitive-emotional-behavioural theory of memes about the imitation of interactions of social media users' conditioned herd behaviour and behavioural mimicry. The novelty of the research lies in the application of the theoretical Elaboration Likelihood Model approach to the analysis of herd behaviour and behavioural mimicry in the context of research on the cognitive, emotional, and behavioural activities of various social media platform users.

KEY WORDS

social media interactions, behavioural mimicry, herd behaviours, information overload, Generation Z, elaboration likelihood model, memetics

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Introduction

Social media interaction is any connection between different user types on a social networking site (SNS), expressed as a numerical indicator of user attitudes towards the shared content (Stavrositu & Kim, 2014). Interactions, including likes, comments, shares, tags, and profile following, are perceived as specific "social media virality metrics (SMVM)", informing viewers of how other people have reacted to the media content (Park & Jung, 2023). Such interactions can be determinants of a brand's success in social media communication

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activities (Lauron, 2023). In peer-to-peer relations, the reactions could also be perceived as specific "digital social evaluation" (Fatt & Fardouly, 2023). In the realm of SNS presence, the primary motivation behind content creation is the desire to reach a broad audience (Müller & Christandl, 2019) and elicit a substantial number of interactions. The absence of reactions can potentially heighten the stress levels of individual content creators (Haug et al., 2024). For brands, it may signify a lack of interest in the content (Kohli et al., 2015), indicating the ineffectiveness of brand marketing communication activities in social media channels.

Popular content generates a high level of interaction, which may result, among other things, from the phenomenon of herd behaviours (Sun, 2013) or behavioural mimicry (Chartrand & Bargh, 1999) as a specific "social glue" in the context of creating relationships. Cialdini et al. (1991) suggested that if a particular action (behaviour) is common, there are real and substantive reasons to behave in a particular way. This approach may result from the social learning theory (Bandura & McClelland, 1977), which maintains that human activity is conditioned by observation and imitation of the behaviours of others. Observation, in turn, is conditioned by the perception of other user interactions in a digital media environment (Bandura, 2001).

Based on Chung et al. (2020), in the universally understood virtual space, which includes the space of social media, individual users learn specific behaviours from each other. As mentioned by Cracco et al. (2018), imitation can be understood as a way to achieve positive consequences, including social ones, by the imitator. The specific "positivity" of the consequences arises from the suggestion put forward by Conte (2000), according to which people are not vectors of cultural transmission but actors who drive this process.

In this context, it can be assumed that high content popularity represented by a single post and its specific reactions most likely result from the observed high number of interactions. Thus, their increase may be determined not so much by the substance of the post but by its popularity (Chang et al., 2020). In this case, the interactions associated with the post can refer to imitating the behaviour of others without delving into the content of the post itself. This type of dependency can be highly probable, especially from the perspective of fan pages with many followers and the presence of multiple and varied digital relations with peers or brands and digital communities. In such circumstances, content recipients are functioning under conditions of information overload (Jacoby et al., 1974) and attention economy (Menczer & Hills, 2020).

This is particularly interesting from the viewpoint of multiple interactions between Generation Z groups operating on SNS, where disseminated content can influence several behaviour types of information recipients, and the behaviour of individual users. Both behavioural mimicry and herd behaviours can be perceived as one, although the latter involves a declaration of rejection of one's own preferences in favour of the choices of other users.

Bearing in mind the fact that recipients sometimes disregard their own beliefs and imitate the behaviour of others (Whelan et al., 2013), an interesting research problem would be to relate imitation behaviour to the theory of behavioural mimicry and herd behaviour to the central and peripheral routes (Petty & Cacioppo, 1986), ways of processing shared content in the context of the observed number of interactions.

The article aimed to identify the phenomenon of behavioural mimicry and herd behaviours related to the imitation of specific SNS user interactions under conditions of information overload and the economy of user attention. Due to the specific nature of Generation Z (Levickaitė, 2010; Herman et al., 2021; Krippes et al., 2024; Graczyk-Kucharska & Erickson, 2020), who, unlike previous generations, are perceived as "digital natives" (Smith, 2017), the study included this group.

The paper consists of separate sections. The literature review offers an extensive overview of theories related to social media content and user interactions in the context of behavioural mimicry and herd behaviours. This section culminates in presenting research questions and outlining specific objectives. Then, the methodological part provides detailed insights into the research methods. The results section presents the research findings. The subsequent section discusses the results and their practical and theoretical implications of SNS behavioural mimicry and herd behaviours, particularly in the context of memetic imitation theory. The need and areas for further research were also highlighted. The conclusion section discusses and summarises the most important findings from the study and describes the examination limitations, along with concluding explanations and remarks.

1. Literature overview

1.1. Social media content and user interactions

The functionalities of social media platforms provide users with a broad spectrum of options for content creation and dissemination. Social media content may take the form of User Generated Content (UGC), created by individual users and representing their unique experiences (Fu et al., 2015). It could also be Marketer Generated Content (MGC), directly or indirectly associated with a specific brand or product (Qian et al., 2022) created and shared by businesses or other commercial and non-commercial entities. The primary motivation behind content creation is the desire to reach a broad audience (Müller & Christandl, 2019) and elicit a substantial number of reactions. Thus, the obtained reactions could be perceived as a specific "digital social evaluation" (Fatt & Fardouly, 2023). The absence or low level of interactions, defined as "paralinguistic digital affordances" (Hayes et al., 2016), particularly in UGC, can potentially heighten the stress levels of content creators (Haug et al., 2024). It could also be perceived as a lack of social support (Wohn et al., 2016).

The reactions are directly connected with content popularity, measured by the volume of specific metrics such as likes, comments, and shares (Vandenbosch et al., 2022). The metrics are related to cognitive (i.e., connected with content consumption and assimilation of specific knowledge resulting from content processing), affective (referring to the usually emotional effect triggered by the assimilation of knowledge/ideas arising from content and externalised through likes or dislikes in various graphical forms depended on a platform), and behavioural user activities externalised through comments and shares. Such a typology of activities is based on the AIDA model of consumer behaviour (Strong, 1925). The model was the core for other models related to web content consumption, i.e., AIDAT (Attention, Interest, Desire, Action, Tell; Charlesworth, 2012) and COBRA (Muntinga, 2013), which is based on the level of consumption of the shared content without distinction of the affective stage, indicating the lowest level of content consumption (viewing and reading), a moderate level of content consumption (commenting), and the highest level of contribution, which refers to creating and sharing user-generated content (UGC).

1.2. Information overload and attention economy

Information overload is a recipient's condition caused by too much information (Jacoby et al., 1974). Information overload, next to communication overload (i.e., too frequent occurrence of communication episodes), is one of the elements of universally understood technological overload (Karr-Wisniewski & Lu, 2010), which significantly reduces the individual's productivity and reduces the ability to properly process the message. Information overload combined with system function overload (a factor related to the presence of too many complex software functions in the context of user needs) are key elements contributing to emotional exhaustion and social media fatigue (Sheng et al., 2023) and causing user dissatisfaction (Zhang et al., 2016).

Similarly, Cao et al. (2021) indicate that information overload from a cognitive–emotional–behavioural perspective may generate recipients' lack of independent thinking and the resulting unfavourable socio-economic consequences and contributes to the excessive and uncontrolled spread of fake news (Zhang & Ghorban, 2020). Therefore, user attention is a factor for which different information sources compete in the context of the attention economy (Menczer & Hill, 2020).

A way to reduce the inability to consume excess content may be the phenomenon of behavioural mimicry, i.e. imitating the behaviour of known and trusted people, i.e., influencers (Geyser, 2022), or peers. This happens when content feels valuable because of shared experiences or represented views (Modgil et al., 2021; Sasahara et al., 2021).

1.3. Behavioural mimicry, herd behaviours, and SNS

Mimicry is an individual's interaction with others through observing and imitating attitudes, expressions, and behaviours (Stel & Vonk, 2010). Mimicry occurs in a variety of contexts and situations, e.g., in face-to-face interactions (Chartrand & Bargh, 1999). From the perspective of social media, mimicry may involve, among others, user willingness to imitate the lifestyle and behaviours of online idols (Ruvio et al., 2013). From the perspective of mimicry itself, the emotions of message recipients result from imitating the sender's statements (Hatfield et al., 2011). As suggested by Harringan et al. (2012), SNS users build and strengthen mutual relationships by

interacting with others and sharing knowledge. Users imitate not only themselves but also the behaviour of virtual avatars (Fasya et al. (2024). In the context of the spread of offensive speech, Song et al. (2022) proposed four mechanisms related to imitating interactions: general reciprocity, direct reciprocity, leader mimicry, and peer mimicry related to mutual imitation of the behaviour of others.

Flores and Hilbert (2023) analysed microblogs and showed that from the perspective of shares, negative emotions are imitated in information cascades. Luo et al. (2023) showed that the greater the popularity of the shared content in the Q&A community, the greater the likelihood of imitating the author's linguistic style. Similarly, Fleck and Quester (2007) and Xu et al. (2022) showed the influence of the cognitive-emotional factor, which may contribute to imitating both the language of the message and its emotional nature.

Of course, imitation of behaviour can also take the form of herd behaviour, where users, despite having different views or opinions, may react similarly to the majority (Sun, 2013). From this perspective, Mattke et al. (2020) showed that only "likes" from well-known users or those who are perceived as knowledgeable users (i.e., perceived as experts) can generate similar intentions to click. Tan and Cousin (2016) pointed out this type of dependency in Weibo comments. Ahmad (2023) also confirmed this mechanism in the case of sharing content.

1.4. Theoretical framework

Therefore, in the context of the cognitive–emotional–behavioural models indicated above, user actions may take the following form (individual or in combination with others):

- Cognitive, relating to the acquisition of knowledge (Kowalczyk-Purol, 2015), e.g., associated with shaping public opinion on various aspects of social life (Firth et al., 2019).
- Affective, referring to the usually subconscious emotional effect produced by acquiring knowledge and influencing behaviour (Zhang et al., 2024).
- Behavioural, linked to behaviour patterns based on the assimilated message (Sun et al., 2024).

The above considerations fit directly into the elaboration likelihood model (ELM, Petty & Cacioppo, 1986; Bhattacherjee & Stanford, 2006), which constitutes the theoretical framework of the study. In this model, peripheral (affective) and central (cognitive) signals (cues) may be responsible for the development of a specific activity. Affective signals accompanying the message are processed superficially and peripherally (i.e., without direct consumption of the content). From a central perspective, emerging behaviours are related to direct consumption and holistic processing of content. It was assumed that behavioural mimicry and herd behaviours are related to the peripheral route and involve the development of imitative behaviours related to generating interactions in response to shared content without delving into the substance of the content (Chang et al., 2020).

With the above in mind, the following research questions were stated:

RQ1: From the perspective of content shared on SNS, can the phenomenon of imitation of behaviours be observed through behavioural mimicry or herd

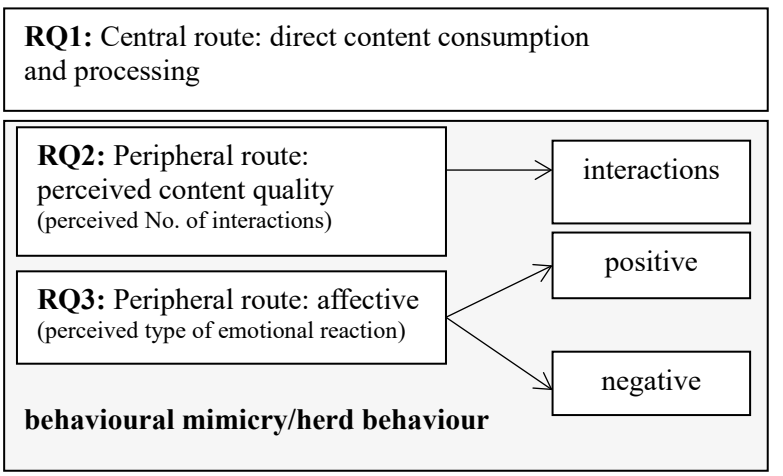

Fig. 1. Theoretical framework of the study

behaviours and related to generating interactions without consuming the content?

RQ 2: How does the number of reactions prompt users to behavioural mimicry or herd behaviours without delving into the content of the shared content?

RQ3: Which of the interactions of varied emotional nature — likes, comments, or shares — most often influence the occurrence of behavioural mimicry and herd behaviours?

A graphical representation of the research questions is shown in Fig. 1.

2. Methods

2.1. Participants

The target group consisted of bachelor's and master's students (n=143) from Bialystok (Bialystok University of Technology — PB; n=69), Rzeszów (Rzeszów University of Technology — RUT; n=46) and Krakow (Krakow University of Economics — KUE; n= 25). Single surveys were received from Poznan (Poznan University of Economics — UEP; n=2) and Warsaw (Warsaw University of Life Sciences — WULS; n=1). Respondents were identified through purposive sampling (Davies et al., 2024). One respondent from PB refused to indicate their gender; therefore, this questionnaire was omitted from the statistical analyses. The number of responses was significantly lower than the number of people who were given both forms to access. From the point of view of respondents from PB and RUT, the number of responses represented approximately 40 % of the total number of invited respondents. For KUE, it was about 20 %. In turn, for PUE and SGGW, this value was below 5 %. The survey ensured complete anonymity, as it included no questions allowing respondents to be identified by name, nationality, specific age, or contact information. Consequently, it was determined that the act of completing and returning the survey would, in itself, imply consent to participate in the study (Trinity College Dublin, 2024). Data was collected in March and April 2024.

2.2. Research procedure

The CAWI (Computer Assisted Web Interview) technique was used to collect data. The research tool was a survey generated in Google Forms and made available to respondents thanks to the kindness of lecturers from the universities indicated above. The form was made available as a QR code or a direct link to the survey. The questionnaire consisted of four parts (Table 1).

2.3. Data processing and analysis

Basic descriptive statistics were calculated for each of the analysed variables, i.e., mean and standard derivation (SD). Normality tests for each variable were performed using the Shapiro–Wilk (W) test. The reliability of individual questionnaire items was calculated using the Cronbach's Alpha coefficient. It is assumed that α values ≥ 0.7 are satisfactory (George & Mallery, 2016) and determine the appropriate coherence of the research tool.

During the initial processing of the collected data, four main social media platforms used by respondents were identified, i.e., Instagram (INST), TikTok (TT), Facebook (FB), and X (former Twitter). Those that were indicated sporadically (including Discord, Reddit, and YouTube) are grouped into a common category (Other).

From the perspective of the research questions presented above, it was assumed that although most respondents declare behaviours related to the central route (CR), some of them will declare behaviours related to the peripheral route (PR). Therefore, a linear relationship was assumed between PR and the number of interactions (RQ2), and PR and the emotional nature of these interactions (RQ3).

To establish a statistically significant relationship between reporting of herd behaviour (PR3a)/behavioural mimicry (PR3b) in the context of the number of observed interactions (PR3c) and from the perspective of the most frequently used platform, Spearman's correlation analyses were performed. A similar relationship was analysed in the context of RQ3 for the variables PR3a/PR3b versus PR4a-PR4h. Spearman's nonparametric correlation coefficient is widely used in social networking exploratory data analysis (Xiao et al., 2016). The following scale was used for interpreting Spearman coefficients: $0.0 \leq |\rho| \leq 0.2$ — a lack of correlation; $0.2 < |\rho| \leq 0.4$ — weak correlation; $0.4 < |\rho| \leq 0.7$ — average correlation; $0.7 < |\rho| \leq 0.9$ — strong correlation; $0.9 < |\rho| \leq 1.0$ — a very strong correlation.

Statistical analyses were conducted separately for each platform using the Statistica 13.3 software. The collected data and analyses were deposited in the Mendeley Data repository. ChatGPT 3.5 was used for final language corrections.

Tab. 1. Structure of the research tool (questionnaire)

Group of variables	Variables	Source
demographics	• age (A1a); • sex (S1b); • mostly preferred SM platform (choose one: Instagram, Facebook, TikTok, YouTube, other; P1c); • city of studying (C1d)	Mattke et al. (2020), modified;
statements referred to the central route (CR2) of content consumption and processing	• I leave the emotional reaction (I like/dislike) only after reading the content of the post (CR2a); • I comment only after reading the content of the shared post (CR2b); • I share the post only after reading its content (CR2c)	Petty and Cacioppo (1986); Bhattacherjee and Stanford (2006); Charlesworth (2012); Muntinga (2013)
statements referred to the peripheral route (PR3) of content consumption and processing from the perspective of the perceived number of interactions	• being active in the virtual space, sometimes I react to shared content like most reacting users, even though I have a different opinion on a given topic (PR3a); • sometimes, I react to shared content without reading it, in the same way that most of the reacting users did (PR3b); • if a shared post causes many reactions (likes, comments, shares), sometimes I also react this way without going into the content of the post (PR3c)	Petty and Cacioppo (1986); Bhattacherjee and Stanford (2006) Sun (2013); Chang et al. (2020); Bandura (2001); Charlesworth (2012); Muntinga (2013)
statements referred to the peripheral route (PR4) of content consumption and processing from the perspective of the perceived type of emotional reaction	• if positive likes dominate, I react similarly, without going into the content of the post (PR4a); • if negative likes dominate, I react similarly without going into the content of the post (PR4b); • when people I know and respect leave their emotional reactions (I like/dislike), I react similarly without going into the content of the entry (PR4c); • when positive comments dominate, I comment in the same way as users I know and/or respect, without reading the content of the posts (PR4d); • I share posts with a large number of positive likes, but I do not read their content (PR 4e); • I share posts with a large number of negative likes without reading their content (PR4f); • I share posts with a large number of positive comments without reading their content (PR4g); • I share posts with a large number of negative comments without reading their content (PR4h)	Petty and Cacioppo (1986); Bhattacherjee and Stanford (2006) Sun (2013); Chang et al. (2020); Bandura (2001); Charlesworth (2012); Mattke et al. (2020); Muntinga (2013)

Informants were to respond to the indicated statements using a 5-point Likert scale, where "1" — strongly disagree; "2" — disagree; "3" — I do not know; "4" — agree", and "5" — strongly agree.

3. Findings

The analyses used the results obtained from 142 respondents. Fifty-four per cent (77) of respondents were women, and 46 % (65) were men. Informants use Instagram (61; 43 %), TikTok (36; 25 %), Facebook (21; 15 %), X (16; 11 %), and "Other" (8; 6 %) platforms. The age structure (variable A1a) of the study sample by gender (variable S1b), the most frequently used social media platform (variable P1c), and home university are presented in Table 2.

The results of the Shapiro–Wilk test suggest that none of the analysed variables has a normal distribution. The values of the W statistic for individual variables ranged from 0.68 to 0.86 ($p = .00$).

The value of Cronbach's alpha internal consistency coefficient for the questionnaire components used was $\alpha = .92$ in the case of the central path (CR2) related to direct consumption and processing of content (subscale composed of three items: CR2a-CR2c). For the peripheral route (PR3; PR3a-PR3c) related to the perceived quality of content (perceived number of interactions), the subscale consisting of three items, the mentioned coefficient was .77. From the point of view of the last subscale, consisting of eight items (Peripheral route: affective, related to the perceived type of emotional reaction; PR4a–PR4h) $\alpha = .90$. Details are shown in Table 3.

Considering RQ1, regarding the central path of consuming and processing information (CR), the obtained descriptive statistics indicate the dominant

Table 2. Characteristics of participants

	No. of participants (F/M)	Age of participants FB (F/M)		Platform				
				INST (F/M)	T-T (F/M)	X (F/M)	Other (F/M)	
BUT	68 (32/36)	18–21	52 (76 %)	1/8	16/16	12/2	1/8	2/2
		22–25	14 (21 %)					
		26–29	2 (3 %)					
RUT	46 (29/17)	18–21	45 (98 %)	3/5	9/5	14/4	3/2	0/1
		22–25	1 (2 %)					
		26–29	-					
KUE	25 (14/11)	18–21	2 (8 %)	2/1	8/5	4/0	0/2	0/3
		22–25	23 (92 %)					
		26–29	-					
PUE & WULS	3 (2/1)	18–21	-	1/0	1/1	-	-	-
		22–25	3 (100 %)					
		26–29	-					
Total	142 (77/65)			21 (15 %)	61 (43 %)	36 (25 %)	16 (11 %)	8 (5 %)

Tab. 3. Descriptive statistics

	Variables	Cronbach's a		M	SD	W
CR2	CR2a	.92	3.71	4	1.42	.79
	CR2b		3.92	5	1.45	.72
	CR2c		3.99	5	1.48	.68
PR3	PR3a	.77	2.31	2	1.12	.85
	PR3b		2.37	2	1.15	.86
	PR3c		2.36	2	1.22	.85
PR4	PR4a	.90	2.06	2	1.05	.8
	PR4b		1.88	2	.9	.78
	PR4c		2.31	2	1.12	.84
	PR4d		1.92	2	.95	.8
	PR 4e		1.68	2	.86	.74
	PR4f		1.62	1	.83	.69
	PR4g		1.66	2	.82	.74
	PR4h		1.57	1	.77	.69

tendency of users to consume content shared on their preferred social media platforms through the central route, followed by a reaction in the form of likes, comments or shares. However, some respondents (Fig. 2a) exhibit characteristics of herd behaviour or behavioural mimicry ("strongly disagree" and "disagree") concerning emotional reactions (CR2a), commenting (CR2b), and content sharing (CR2c). This is also reflected in the context of a direct declaration of herd behaviour (PR3a — "strongly agree" and "agree") and behavioural mimicry (PR3b, PR3c — "strongly agree" and "agree") related to the peripheral route of processing shared content (Fig. 2b).

In both cases, approximately 20 % of respondents declared this type of behaviour.

Therefore, from the perspective of RQ2, it was analysed whether the number of interactions occurring under a post could have an impact on this type of behaviour. The findings indicate probable differences related to the type of platform, the structure of the content available on it, and gender-related differences. Facebook and Instagram (medium and strong correlations) are platforms where both genders are willing to engage in behavioural mimicry and herd behaviours in terms of the number of reactions observed. TikTok is a platform where this type of

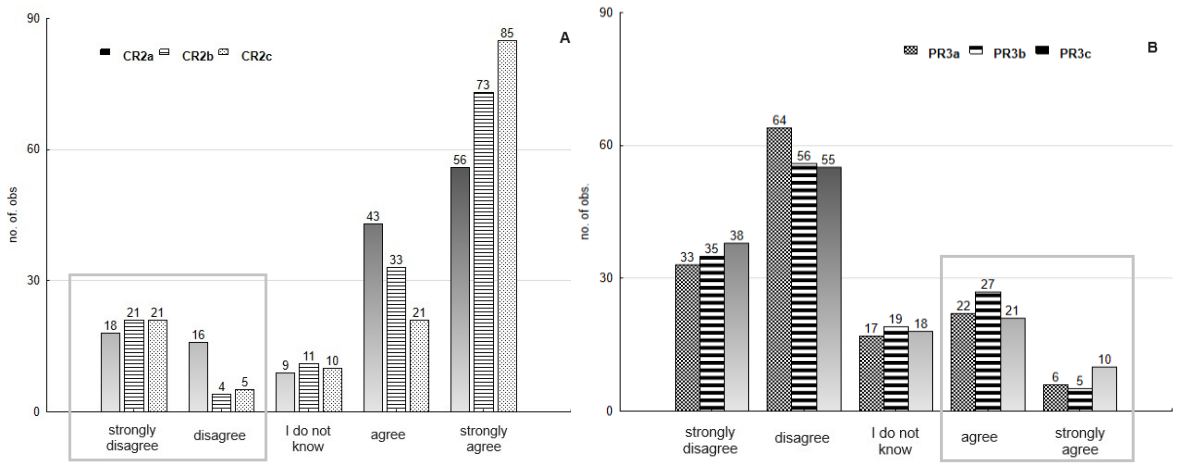

Fig. 2. Distribution of respondent answers from the perspective of central (A) and peripheral (B) routes of content consumption and processing; n=142

Tab. 4. Influence of the number of interactions on the occurrence of behavioural mimicry and herd behaviours based on the value of Spearman's ρ coefficient; n = 142

		Facebook	Instagram	TikTok	X	Other
♀	PR3a	0.88*	0.44*	0.59*	0.57	-
	PR3b	0.76*	0.56*	0.5*	0.54	-
♂	PR3a	0.61*	0.73*	0.6	0.34	0.87*
	PR3b	0.52	0.41*	0.45	0.51	0.84*

* — statistically significant; p < .05

Tab. 5. Respondent tendency to herd behaviour in the context of selected emotional and behavioural reactions; n = 142

			PR4a	PR4b	PR4c	PR4d	PR4e	PR4f	PR4g	PR4h
Facebook	PR3a (herd behaviours)	♀	0.86*	0.90*	0.81*	0.40	0.16	0.16	0.16	0.16
		♂	0.08	0.25	-0.11	0.21	0.22	0.22	0.22	0.22
Instagram		♀	0.41*	0.33	0.48*	0.44*	0.26	0.02	0.09	0.06
		♂	0.69*	0.52*	0.43*	0.63*	0.63*	0.46*	0.61*	0.45*
TikTok		♀	0.44*	0.55*	0.39*	0.44*	0.30	0.19	0.37*	0.16
		♂	0.54	0.54	0.79	0.49	0.11	-0.11	-0.11	-0.11
X		♀	1.00	1.00	0.71	1.00	1.00	0.58	0.94	0.58
		♂	0.21	0.26	-0.03	-0.17	-0.31	-0.25	-0.25	-0.25
Other		♀	-	-	-	-	-	-	-	-
		♂	0.51	0.51	0.08	0.02	0.06	0.06	0.06	0.06

* — statistically significant; p < .05

behaviour is typical for women (average value of correlation coefficient). Users of the "X" platform do not show behavioural mimicry, which may result from the specificity of the content. Due to the small number of respondents declaring the use of platforms grouped in the "Other" category, the results obtained there are most likely to be highly questionable. Details are presented in Table 4.

The analysis also encompassed the possibility of a potential relationship between the tendency of various platform users to imitate the behaviour of others in the context of diverse emotional and behavioural reactions. Imitation in the context of herd behaviour (PR3a) was defined as "being active in the virtual space, I sometimes react to the shared content like most reacting users, even though I have a different

Tab. 6. Respondent tendency to engage in behavioural mimicry in the context of selected emotional and behavioural reactions; n = 142

			PR4a	PR4b	PR4c	PR4d	PR4e	PR4f	PR4g	PR4h
Facebook	**PR3b (behavioural mimicry)**	♀	0.73	0.78*	0.64	0.25	0.00	0.00	0.00	0.00
		♂	0.37	0.79*	0.55*	0.53	0.55*	0.55*	0.55*	0.55*
Instagram		♀	0.54*	0.51*	0.66*	0.45*	0.21	0.24	0.32	0.15
		♂	0.34	0.29	0.47*	0.23	0.15	-0.06	0.07	0.04
TikTok		♀	0.48*	0.29	0.49*	0.31	0.43*	0.41*	0.48*	0.39*
		♂	0.77	0.77	0.70	0.82*	0.82*	0.61	0.61	0.61
X		♀	0.94	0.94	0.50	0.94	0.94	0.82	0.78	0.82
		♂	0.69*	0.71*	0.36	0.41	0.28	0.32	0.32	0.32
Other		♀	-	-	-	-	-	-	-	-
		♂	0.65	0.65	0.49	0.00	-0.32	-0.32	-0.32	-0.32

* — statistically significant; p < .05

opinion on a given issue". About behavioural mimicry in the strict sense (PR3b), respondent tendency to directly imitate behaviour was examined about the statement, "I sometimes react to shared content without reading it, in the same way as most of the reacting users did".

From the perspective of herd behaviour (PR3a), in the case of women (♀) using Facebook, a strong correlation was found in the context of potential imitation of like/dislike reactions, including those conditioned by the influence of friends (PR4a–PR4c). An average relationship was also observed in TikTok. In this case, an additional weak positive relationship was observed in relation to the imitation of comments with an emotionally positive tone (PR4g). From the perspective of men (♂), a similar average relationship was observed only for Instagram in relation to a large number of comments and likes, regardless of their emotional nature (PR4a–PR4h). Details are presented in Table 5.

In the context of women's behavioural mimicry (♀) concerning Instagram, an average relationship was observed in terms of likes, regardless of the emotional tone and preferences conditioned by the influence of friends (PR4a–PR4c). This also applies to comments (PR4d). A similar relationship was also observed in the case of TikTok (PR4a, PR4c, PR4e–PR4h) in terms of the intensity of positive comments, comments from the perspective of the influence of friends and shares of posts conditioned by a large number of reactions, regardless of their emotional nature. A strong relationship was observed in the case of negative comments on Facebook (PR4b).

From the perspective of men (♂), a tendency towards behavioural mimicry was observed on Facebook in connection with negative comments (PR4b) and sharing posts characterised by a large number of emotionally diverse comments and likes (PR4e–PR4h). In the context of Instagram, an average tendency to respond similarly to friends was also observed (PR4c). A medium association with men's imitation of an emotional response was observed for X (PR4a–PR4b). There was also a strong relationship related to imitating the behaviour of friends in commenting and sharing posts on TikTok (PR4d, PR4e). Details are presented in Table 6.

Discussion and conclusions

Liking, commenting, and sharing content are behaviours related to both the central and peripheral content processing routes. These activities can be described as consequences of direct content consumption and, in some parts, as a synthesis of herd behaviour (HB) and behavioural mimicry (BM) related to respondents' SNS activity. This statement is a direct reference to RQ1. Hence, interesting theoretical and practical implications regarding the possibility of using the ELM model in research on SNS content processing from the perspective of HD and BM in the aspect of various social media platforms. So far, Zha et al. (2018) have used the ELM model to analyse, among others, the quality of information in social media and the credibility of the source, demonstrating the important role of the central route in terms of the impact of information quality and the peripheral route in the context of the role played by the source of the message and the level of trust in it. The obtained results also confirm the significant role of the peripheral route in the context of the influence of the peers interacting with content and the influence of reactions left by other known and trusted users.

Similarly, Moradi and Zihagh (2022) pointed out the dominant role of the peripheral route from the point of view of content disseminated on social media platforms. In turn, Xu and Warkentin (2020) analysed the role of herd behaviour in the context of the ELM model, building messages related to information security and engaging employees in related behaviours. The current approach combines both the ELM model and the theory of herd behaviour and behavioural mimicry in the context of various social media platforms. It was shown (RQ2) that the number of reactions left by other users and the influence of friends' reactions, especially from the women's perspective, on the appearance of HB (Facebook, Instagram, and TikTok) play a significant role. In the context of RQ3, related to the influence of the emotional context of various reactions of other users, a relationship was found between HB and the imitation of likes/dislikes by women (Facebook, Instagram, and TikTok), which was most likely determined by the influence of friends (Facebook, Instagram, and TikTok). The same goes for positive comments (Instagram and TikTok). The full spectrum of herd behaviour for the analysed variables in terms of the peripheral route is also observed in men who are Instagram users.

Behavioural mimicry in the context of the observed number of likes and positive comments is declared by women who use Facebook, Instagram, and TikTok. Imitation activities related to sharing posts with a large number of reactions are particular to TikTok. In turn, men active on Facebook show BM in the context of posts with a large number of reactions, while those active on the X platform imitate the behaviour of other recipients in the context of the number of likes.

As previously mentioned, it is important to emphasise that HB and BM can occur individually and jointly in the context of different social media platforms. The judgment also raises interesting implications regarding the directions of further research. Research should examine the extent to which HB and BM occur and the influence that opinion leaders have on them (Katz & Lazarsfeld, 1955). Their typology, presented by Bamakan et al. (2019), deserves special attention in this context, considering the scope of the impact, the positive or negative emotional nature of the impact, or the time (long-term vs. short-term). It would also be interesting to develop a theory about when and under what conditions HB and BM activities mainly occur. How do influencers (Geyser, 2023) contribute to the emergence of HB and BM, and what is their role in disseminating information (Casaló et al. 2018) based on both types of imitative behaviour?

Of course, the scope of the study should show managerial implications for content management that will encourage recipients to react in the way intended by the source of the message. From the viewpoint of the sample characteristics, it would be interesting to indicate personality traits that predispose users to represent HB and/or BM. This would be particularly important from the point of view of building guidelines for creating or preventing herd behaviour. In the first case, creating herd behaviour or behavioural mimicry could help disseminate messages related to universally understood social marketing to increase their reach. In the second case, both types of activities could be related to limiting the pace of dissemination of fake news or universally understood disinformation campaigns.

From the viewpoint of the central route, the effect of content processing and assimilation should be the emergence of a specific pattern of cognitive, emotional (like/dislike) and/or behavioural activity that increases the level of adaptation of the individual to the group or community in their virtual environment. But such an effect could also be achieved using BM or HB, which is from the perspective of about 20 % of users who react to content without reading it or react in the same way as people they consider important to them (peers in this study). Both approaches can be justified in the context of specific social rewards (Matyjek et al., 2020; Smeijers et al.,2022). In this case, the occurrence of HB and BM can be viewed as one of the mechanisms for creating social bonds (Laninga-Wijnen & Veenstra, 2023) in a virtual environment.

In the above approach, imitation in terms of HB and BM is related to the transmission of cultural information, including methods of behaviour, which is related to the theory of memes. In the classic approach (Dawkins, 1976), memes are carriers of cultural information and are the subject of cultural evolution. Schlaile et al. (2018), based on Distin (2014), suggest that memes can be defined as a mental representation of cultural content that can influence and control behaviour. The more a meme increases the level of adaptability, the more often it is assimilated and replicated from the perspective of social learning and imitation (Bandura, 2001). This means that the basic characteristics of a meme (Dawkins, 1976), such as copy fidelity, longevity, and fecundity, are high, and the meme itself tends to spread and express itself quickly.

Therefore, BM and HB can be seen as expressions of specific memes. However, explaining this phenomenon also requires detailed research on refining the meme concept and developing the related theoretical and practical implications. The current considerations can be related to the concept of the meme as a cognitive–emotional–behavioural continuum mentioned by Cao et al. (2021), with the difference that it is consolidated and replicated only when it brings tangible benefits. Hence, the manifestations of BM and HB in the SNS, which in conditions of information overload (Jacoby et al., 1974) determine a specific non-verbal social reward, can be perceived as memes — cultural units of information transmission that may have a cognitive nature, affective and behavioural impact on recipients.

The study has some limitations. It applies to Generation Z only. The behaviour of respondents from other generations (Levickaitė, 2010) would be different. Another problem is the small sample size, resulting from respondents' reluctance to participate in even short CAWI surveys.

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