Explicating the Effects of In-versus Out-Group Membership and Collective Action Framing on Social Media Activism Messages

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Social media activism is a relatively recent phenomenon that has taken off worldwide, where many have taken to social media platforms to relay messages on sociopolitical issues such as racism. However, factors that influence the effects of such activism messages are yet to be studied. This research seeks to address this gap. Informed by self-categorization theory (SCT) and collective action framing, we conducted an online experiment to test how group membership (in-group vs. out-group) and message framing (diagnostic vs. motivational) affect individuals’ responses to social media activism messages. We found that activism messages promoted by out-group members with a motivational frame (vs. a diagnostic frame) led to greater perceived persuasiveness of the message, whereas activism messages promoted by in-group members revealed no such difference, regardless of the use of frames. The findings promise theoretical contributions to SCT and framing literature and provide insights on using social media to effectively deliver activism messages.

Keywords: self-categorization, in-group/out-group, collective action framing, activism

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Social media have become a strategic means for activism, with like-minded people easily coming together to facilitate collective actions on societal issues (Chon & Park, 2020). With the trend of various racial movements being mobilized online and on social media, the persuasiveness of anti-racism messages, specifically in the social media context, has been increasingly studied by scholars in recent years (Goh & Pang, 2016; Hon, 2016; Valentino & Nicholson, 2021). Much of the current literature has placed focus on the persuasiveness of the messaging factors that anti-racism or social activist groups use, such as the effects of framing theories as well as theories in group behavior (Appiah, Knobloch-Westerwick, & Alter, 2013; Horowitz, 2017; Littleford & Jones, 2017). However, little research has focused on the interactive effects between said framing theories and theories on group behavior in the context of racism despite evidence of theoretical relevance in other areas of study (Cookson, 2000; Polzer, Stewart, & Simmons, 1999). Furthermore, most of the findings are based on movements in the United States; there is thus a gap with regard to the generalizability of research into anti-racism activism in Eastern cultures such as Singapore where online activism is a relatively nascent phenomenon (Goh & Pang, 2016). Additionally, a review of existing literature by Chew (2018) found that there is a lack of research using psychometric instruments and experimental methods to investigate racism in Singapore despite significant research into prejudice reduction in an American context.

Singapore is a multiracial society with an ethnic composition comprising 75.9% Chinese, 15.1% Malays, and 7.4% Indians (Department of Statistics, 2021). Despite the considerably varied composition of ethnicities, racial injustices against minorities are prevalent in Singapore. Fifty-two percent of Malay respondents believe that the current approach toward multiracialism and racial inequality needs to be improved, while 25% of Chinese, and 37% of Indians agree with this statement (Mathews, Hou, Tan, & Chua, 2021). In line with these sentiments, many have turned to social media to voice their concerns and the issues surrounding racism, wherein racism is defined as the differential treatment enacted on individual persons stemming from stereotypes of a group’s phenotypic, linguistic, or cultural differences (Gamst, Liang, & Der-Karabetian, 2011).

To address those gaps, our study draws on self-categorization theory (SCT) and collective action framing to examine the effects of social media activism (i.e., anti-racism) messages in an Eastern culture site (i.e., Singapore). Specifically, we examined how group membership (in-group vs. out-group) and message framing (diagnostic vs. motivational) affect individuals’ responses to activism messages on social media. The findings of this study extend the literature regarding SCT and framing theories. The research also broadens theoretical understanding of the interaction effects between SCT and collective action framing in online social movements. Furthermore, our findings inform activists and social movement organizations of the messaging strategies that can be employed in social media activism communications.

**Literature Review**

**Casual Racism and Social Media Activism**

Racism is the differential treatment enacted on individual persons stemming from stereotypes of a group’s phenotypic, linguistic, or cultural differences (Gamst et al., 2011). While scholars have analyzed various manifestations of racism on a macro level, relatively little work has been done on an equally
proliferant type of racism: Everyday racism, or casual racism (Essed, 1991). Casual racism is akin to microaggressions toward a certain racial group, such as micro-assaults (e.g., intentional slurs), micro-insults (e.g., demeaning of a person’s racial identity), and micro-invalidations (e.g., nullifying a person’s thoughts; DeAngelis, 2009; Otuyelu, Graham, & Kennedy, 2016). While casual racism may not be extreme, it is often embedded in mundane practices that actualize underlying racial relations (Essed, 1991). In Singapore, casual racism operates in two ways, either by a person’s phenotypic and biological characteristics or by the reinforcement of cultural stereotypes that perpetuate racial inequities (Velayutham, 2017). While the state is actively vigilant in suppressing overt racist provocations, everyday racism lacks public acknowledgment (Velayutham, 2009). According to Velayutham and Somaiah (2021), everyday racism usually becomes normalized as concrete evidence is hard to consolidate and is only reported when the act is recorded and shared on social media. As citizen involvement around racism has been constrained by the Singapore political system with public voicing of grievances suppressed, publicly chastised, or criminalized for disrupting racial harmony (Chua, 2003), social media have developed into a space for Singaporeans to express their views anonymously on racism (Gomes, 2014; Velayutham & Somaiah, 2021).

Social media have been used in recent years to organize and gather evidence of everyday racism with the aim of enhancing awareness of the issue, such as stories of workplace racism (Zainal, 2021). In America, social media have become a widely used tool, providing a platform for ethnic minorities to share their grievances, such as in #SayHerName (Brown, Ray, Summers, & Fraistat, 2017), #Free_CeCe (Fischer, 2016) and Million Hoodies (Hon, 2016). Similarly, many social media accounts in Singapore have taken steps to encourage their followers to spread anti-racism messages. Numerous activism campaigns on the Internet facilitate the sharing of activism narratives and stories, cementing ties within online networks (Bennett & Toft, 2009). Social media hence not only go beyond simply sending and receiving messages but also overcome the cognitive constraints of individuals to facilitate collective actions (Bimber, Flanagin, & Stohl, 2005). Apart from cementing ties, social media activism is commonly used to express grievances because sharing, posting content, and commenting on social media work as a form of identity construction and performance (Papacharissi, 2012). As an aspect of identity performance in virtual spaces, ethnic minorities can use social media to expound on issues central to their ethnic minority identity (Velasquez, Montgomery, & Hall, 2019). With 87% of 2,001 Singaporean respondents indicating that their race was important or very important to their sense of identity (Mathews et al., 2021), there are grounds for further research on the relationship between Singaporeans’ online ethnic identity performance and engagement with anti-racism messages on social media platforms, which our article aims to explore by leveraging on SCT.

Additionally, current studies on race and social identity in Singapore are limited to topics present in mainstream political discourse and the impact of state-imposed multiculturalism (Ho & Kathiravelu, 2022; Reddy, 2016; Rocha & Yeoh, 2020). The body of quantitative research examining racism remains small, with seven (53.85%) narrative reviews, two (15.38%) qualitative studies, and four (30.77%) quantitative studies (Chew, 2018). While these studies have provided fundamental knowledge on the role of social media in social movements in Singapore, this body of literature needs to be expanded with experiment-focused research that examines the causal relationship between prejudice intervention methods and behaviors and attitudes toward racism.
As mentioned previously, SCT and framing theories have been studied together in past literature, albeit in other fields of study. For example, Cookson (2000) and Polzer and colleagues (1999) investigated the effects of different message frames on social groups in the context of distributing public goods. Comparatively, while the two schemas of SCT and collective action framing have gained prominence separately in racism and social movements research, the interaction between them has not received the same scrutiny despite both theories’ strong links to group behavior and social movements. Therefore, our study seeks to investigate how SCT and collective action framing interact to affect individuals’ responses to anti-racism messages on social media.

**Self-Categorization Theory**

As a general theory of interpersonal and intergroup behavior (Wyer, 2010), SCT posits that one’s self-concept moves between personal and social identities (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Self-categorization theory was built on social identity theory (SIT), which postulates that people constantly categorize themselves into various groups, evaluate group worth, and compare their values with those of others (Trepte & Loy, 2017). Self-categorization theory further extends SIT and emphasizes that “both—social and personal identity processes—may be at work simultaneously” (Trepte & Loy, 2017, p. 1). Under SCT, when personal identity is salient, people think of themselves as distinct individuals (Wyer, 2010). Conversely, when social identity is salient, people think of themselves as interchangeable with in-group members and pay attention to significant in-group characteristics (Wyer, 2010). Self-categorization theory has been widely used in investigating issues surrounding discrimination and racial prejudice (Barrett & Davis, 2008; Oldmeadow, Platow, Foddy, & Anderson, 2003; Verkuyten, 1998). Importantly, identification with a social group, referred to as depersonalization, is argued to be “the cognitive redefinition of the self—from unique attributes and individual differences to shared social category memberships and associated stereotypes—that mediates group behavior” (Turner, 1984, p. 528). For example, depersonalization can result in conformance to in-group norms (Van Knippenberg & Wilke, 1992). Furthermore, the process of self-categorization is dynamic, and an individual may identify with different social categories based on “the relative salience or importance of a certain situation” (Trepte & Loy, 2017, p. 1). During social interaction, people “constantly refine their social categories” (Trepte & Loy, 2017, p. 3). In some cases, different social categories (e.g., race, gender) “could work in parallel” to dictate one’s judgmental process (Trepte & Loy, 2017, p. 6).

Prior literature has compared the effect of in-group members and out-group members (Mackie, Worth, & Asuncion, 1990; Turner, 1991; Wilder, 1990). Wilder (1990) indicated that in-groups exerted greater social influence than out-group members. Based on two experiments, Mackie and colleagues (1990) reported that in-groups were generally more persuasive compared with out-groups (students from the same university were more persuasive versus students from another university on the issue of educational policy). In-groups can influence cognitive processing in two ways. Turner (1991) suggested that in-group categories serve as cognitive shortcuts to judge the validity of information, thus defining reality by providing heuristic clues (Abrams & Hogg, 1990). However, Mackie and colleagues (1990) proposed that in-group messages increased message processing and subsequently contributed to attitude change when the issue was relevant to in-groups. In-group messages were associated with content-focused processing, while out-group messages were processed via heuristic clues (Mackie, Allison, Worth, & Asuncion, 1992).
A key moderator of social categorization is meaningfulness (Oakes, 1987; Oakes, Turner, & Haslam, 1991). That is, depersonalization occurs when group membership is meaningful in a specific situation (Simon, Hastedt, & Aufderheide, 1997). For example, when discussing matters of race, one’s ethnic identity might be particularly meaningful. The same categorization would be less meaningful in a discussion about computing best practices (Simon et al., 1997). According to Simon and colleagues (1997), minority members showed more depersonalized self-perception than majority members when the meaningfulness of in-group categorization was high (vs. low). Wyer (2010) found that in-group sources (vs. out-group sources) were more persuasive when in-group definition was salient to the issue at hand. However, when the in-group definition was not salient to the attitude issue, in-group and out-group sources were equally persuasive (Wyer, 2010).

In our study, we propose that status as an ethnic minority or majority is salient and meaningful, especially in the discussion of matters of racial inequality in Singapore. In a social group, self-categorization occurs to the extent that maximizes between-category differences while minimizing within-category differences in a comparative context (Turner & Oakes, 1986). Race is important to Singaporeans’ sense of identity (Mathews et al., 2021). Thus, given this existing social context paired with an emphasis on the ethnic identity of both respondents and message sources, depersonalization and, therefore, the in-group persuasion effect should be observed.

Following the social identity approach, Fielding, Hornsey, Thai, and Toh (2019) promoted climate change policy to Republican and Democrat participants in their study. Participants showed more favorable attitudes, increased support, and greater intentions to engage in policy-supportive behavior when climate change policies were promoted by in-group (vs. out-group) members (Fielding et al., 2019), regardless of the policies’ actual alignment with in-group or out-group values. Particularly, in the context of social media, after reading a favorable message, individuals often exhibit behaviors of interacting with the message and spreading electronic word of mouth (eWOM) on social networks, such as liking, commenting, or sharing the message (Alhabash & McAlister, 2015). Given these findings, we predict that a message from in-group members will contribute to the persuasiveness of the message and eWOM intentions (Fielding et al., 2019; Mackie et al., 1990; Wilder, 1990).

H1: Anti-racism messages promoted by in-group members (vs. out-group members) will lead to (a) greater perceived persuasiveness of the message and (b) higher eWOM intentions.

Aside from the effects of in-group and out-group sources on anti-racism messages, message framing, particularly collective action frames, significantly affects the persuasiveness of messages in the context of social and racial movements (Harlow, 2011; Hon, 2016; Kang, 2012; Pu & Scanlan, 2012).

**Collective Action Framing**

Collective action framing is a well-used cognitive schema in studying communication processes in social movements (Gahan & Pekarek, 2012; Vicari, 2010) and was first developed by sociologists Snow and Benford (1988). Defined as the emergent action-oriented sets of beliefs and meanings that inspire and legitimize social movement activities and campaigns (Gamson, Croteau, Hoynes, & Sasson, 1992; Snow &
Benford, 1992), social movement activities and campaigns, be they online or offline, use collective action frames in messaging to engage supporters, recruit new supporters, and motivate supporters to act in ways congruent with the organization’s mission (Snow & Benford, 1988). With activists in Singapore turning to social media for protests, collective action framing is becoming increasingly pertinent in investigating the development of social movements in Singapore (Goh & Pang, 2016). However, sustained success in engaging in collective action through social media depends on how strongly potential actors identify with the protest (Harlow, 2011; Kang, 2012; Pu & Scanlan, 2012). Previous literature has firmly established the three core functions of collective action frames in social movement (core framing tasks): Diagnostic, prognostic, and motivational (Benford & Snow, 2000; Gamson et al., 1992; Goh & Pang, 2016; Johnston & Noakes, 2005; Snow & Benford, 1988).

Specifically, diagnostic framing identifies a problem, defines why the problem needs to be solved, and attributes blame to certain entities (Dove, 2010). As social movements seek to correct a problem or issue, it follows that directed action requires attributing blame in addition to identifying the cause and culpable parties (Benford & Snow, 2000). Diagnostic frames are the most frequently researched frames by researchers of emergent social movements (Hon, 2016) and are integral to collective action framing. These frames can amplify the harm inflicted by a problem, driving moral outrage and action (Gamson et al., 1992). They can also articulate the stakes and reasons for anger to potential protestors (Pu & Scanlan, 2012).

Prognostic framing describes a means of tackling a particular problem (Dove, 2010), focusing on actions that will solve the problem (Pu & Scanlan, 2012). In practice, social movement organizations are concerned with both their own plans of action as well as how previous efforts from other entities have fallen short (Benford & Snow, 2000). For example, in the 2013 Million Hoodies Movement for Justice in the United States (Hon, 2016), prognostic framing was used to inform the audience that the organization would be sharing the names of the children killed by gun violence to spread awareness on a safe environment for children to live in.

Lastly, motivational framing is a “call to arms” for participating in group action (Johnston & Noakes, 2005). Organizations manufacture causes for action that drive potential protestors to organize against a threat or an issue (Benford & Snow, 2000; Goh & Pang, 2016). Using language that emphasizes the severity, urgency, efficacy, and propriety of a problem (Johnston & Noakes, 2005; Snow & Benford, 1992) is a key part of motivational framing. This serves to persuade actors toward a perceived problem by articulating the need for action to tackle the problem (Dove, 2010). Ultimately, this makes the issue more salient to prospective participants (Benford & Snow, 2000). In the Million Hoodies Movement, motivational framing was used to encourage people to take actionable steps such as sharing flyers and links about the first anniversary candlelight vigil event in honor of Trayvon Martin.

Although no research has yet empirically compared the effectiveness of three collective action framing strategies, we predict that motivational framing is the most effective framing task in terms of persuading people and encouraging behaviors. A motivational frame seeks to legitimize actions, minimize risks, and emphasize the benefits of participation (Walgrave & Manssens, 2000). Through “calls to arms,” a motivational frame mobilizes people for social media activism and online movements (Goh & Pang, 2016; Johnston & Noakes, 2005). Such a strong focus on altering the behaviors and minds of people regarding a
cause increases the power of persuasion (Johnston & Noakes, 2005). Motivational frames were also the most dominant frame observed in the Population White Paper Protest in Singapore against the government’s plans to raise the population (Goh & Pang, 2016). Furthermore, Overton (2018) investigated the effect of the three collective action frames in the context of environmental corporate social responsibility (companies’ voluntary actions to benefit society). Overton (2018) indicated that using a motivational framing strategy could be the most effective in moving publics to action. Therefore, we argue that motivational framing is the most effective framing strategy to increase message persuasiveness (Dardis, 2007; Klandermans, 2014) and individuals’ eWOM intentions (Overton, 2018), compared with diagnostic and prognostic framing.

Previous research also found prognostic framing to be the least prevalent of the three tasks in terms of use by social movement groups (e.g., Goh & Pang, 2016). In the Population White Paper protest in Singapore, prognostic framing was the least prevalent framing task used in postings by protestors and individuals (10% of organizer’s postings and 7.7% of individual’s postings; Goh & Pang, 2016). On the other hand, motivational framing was the most prevalent framing task used, with 36.4% of organizer’s postings and 44.2% of individual’s postings (Goh & Pang, 2016). Diagnostic framing was the second most used, at 17.7% of organizer’s postings and 20.5% of individual’s postings (Goh & Pang, 2016). Furthermore, diagnostic framing accounts for most of the existing framing research because it describes the core messages of social movements (Dove, 2010). Accordingly, the present study focused on diagnostic and motivational framing and examined the effects of the two framing strategies. We propose that

**H2:** Anti-racism messages using a motivational frame (vs. a diagnostic frame) will lead to (a) greater perceived persuasiveness of the message and (b) higher eWOM intentions.

Collective action frames and SCT are both schemas that are fundamentally observed in contexts of group behavior. For instance, messages from in-group sources increased message processing (Mackie et al., 1990). This effect is driven by depersonalization, which mediates group behavior when individuals see themselves as part of a collective (Turner, 1984). Similarly, collective action frames spur group activity in service to social movements (Snow & Benford, 1988). They are action-oriented sets of beliefs and meanings that drive and lend legitimacy to the actions of a social movement or organization (Benford & Snow, 2000). A message from an in-group source with a collective action frame should thus be effective in spurring action as individuals perceive the messages to be part of a group opinion and collective opinion. The in-group persuasion effect leads to more involved cognitive processing, amplifying the persuasive effects of collective action frames, especially motivational frames, resulting in greater effects toward action mobilization. Thus, a message from in-group sources with a motivational frame should result in greater perceived persuasiveness of the message and eWOM intentions, compared with that with a diagnostic frame. However, such a difference will be less pronounced when the message is promoted by out-group members.

**H3:** There will be an interaction effect between group membership (in-group vs. out-group) and framing (diagnostic vs. motivational), such that anti-racism messages, when promoted by in-group members and paired with a motivational frame (vs. a diagnostic frame), will lead to (a) greater persuasiveness of the message and (b) higher eWOM intentions among the participants; however, when anti-racism messages are promoted by out-group members, such a difference between using a motivational frame (vs. a diagnostic frame) will be lessened.
Method

Stimuli Development

In- Versus Out-Group Profiles

Following prior research (e.g., Wyer, 2010), we manipulated in- versus out-group membership by manipulating the source of anti-racism messages (ethnic majority vs. ethnic minority). An in-group membership was further assumed when the ethnicity of participants was congruent with that of the message source; conversely, an out-group membership was assumed when the ethnicity of participants was incongruent with that of the message source (Wyer, 2010). We decided to use appropriate profile photos to reflect a source’s ethnicity. To minimize the confounding effect of photo attractiveness, we conducted a pretest to determine one ethnic majority profile and one ethnic minority profile that were equivalent in attractiveness ($N = 83$; 75.9% 18–24 years old, 22.9% 25–34 years old, 1.2% 45–54 years old; 85.5% Chinese, 3.6% Malay, 6.1% Indian, 4.8% Others). Participants were shown six mock-up Instagram profiles, with three for ethnic majority (Chinese) and three for ethnic minorities (Malays and/or Indians). We told participants that each Instagram account was owned by a pair of friends and asked them to rate the attractiveness of profile photos in a repeated-measure design (see Appendix A for the stimuli used in the pretest). Based on the results of a paired samples $t$-test, we selected two profiles that represented different ethnic groups yet exhibited no difference in attractiveness ratings ($M_{\text{Majority}} = 4.86; \text{SD} = 1.11; M_{\text{minority}} = 4.67; \text{SD} = 1.11$, $t(82) = 1.63$, $p = .11$).

Message Framing Manipulation

We further created fictitious Instagram posts generated by the selected majority/minority profile. Each post consisted of an image of casual racism news in Singapore and several lines of textual anti-racism messages. As the online media in both the United States and Singapore often portray activism via images and texts, we included an identical news image with a line resembling a news headline—"3 in 4 Singaporeans have heard racist comments by friends and colleagues (SG News)—across all conditions to indicate the topic of the posts. For the textual information, we followed previous experimental studies to manipulate the framing of anti-racism messages (e.g., Overton, 2018; Overton & Yang, 2021). Particularly, in diagnostic frame conditions, the message was issue-focused and described facts and examples of casual racism in Singapore. In motivational frame conditions, the message focused on encouraging people to take concrete action to tackle racism in everyday life (see Appendix B for stimuli).

Pilot Study

We launched an online pilot survey on Qualtrics using the developed stimuli among 400 Singaporean participants gathered through convenience sampling of college students and residents. In the survey, adapted from Overton (2018), the first manipulation check question assessed participants’

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2 The pilot study was conducted in December 2021. The main study included two batches: The first batch of data collection was in March 2022, and the second batch was in September 2023 during the revision process.
understanding of the message frame using one multiple-choice question (options included the following: (a) identifying a source for the problem of racism in Singapore, (b) a call for action for Singaporeans to work together to address racism, and (c) none of the above). The second manipulation check question assessed whether the participants were able to correctly identify whether the social media account owners were members of an ethnic majority or an ethnic minority (options included the following: (a) ethnic majority (i.e., Chinese), (b) ethnic minority (i.e., Malay, Indian), and (c) I cannot recall). Participants who chose an incorrect option for framing/ethnicity or could not recall the ethnicity of the social media account profile were considered unsuccessful in manipulation and were therefore removed from further analysis.

The manipulation check process reduced the workable sample to 120. The sample was severely reduced mainly due to our manipulation check for framing: The multiple-choice question removed responses entirely if the participants chose the incorrect answer. The poor success rate of the manipulation check highlighted participants’ difficulties in recalling the correct message and a lack of clarity in how the messages were conveyed, presumably due to a lack of clear textual differences between the two framing messages.

To address the high attrition rate, further changes were made to the main study. Adapted from Dardis (2007), new manipulation check questions were used for collective action framing, including two items on a 7-point Likert scale (1 = "Strongly Disagree," 7 = "Strongly Agree"): "The message I just read included information that primarily focused on: (a) Describing. The post describes the situation that minorities face due to casual racism and (b) Taking Action. This post motivates people to take action and combat casual racism."

**Main Study Design, Participants, and Procedure**

We employed a 2 (message framing: diagnostic vs. motivational) × 2 (membership: in-group vs. out-group) between-subjects experimental design for the main study (see Appendix B). Singapore citizens or permanent residents were recruited from Dynata. We limited our study to Singapore citizens and permanent residents to ensure they had sufficient context about Singapore and a balanced majority-to-minority ratio to ensure a balanced representation in the results across both racial groups. At the beginning of the main study, participants indicated their ethnicity and individual position on anti-racism and answered filler questions (e.g., social media usage frequency). Next, participants were randomly assigned to one of the four fictitious Instagram post conditions. Specifically, we told participants that the social media post was generated by an account owned by a pair of Chinese friends (@majorityperspectives.sg) or Malay and Indian friends (@minorityperspectives.sg). Participants viewed the account profile and then read the anti-racism post using either a diagnostic frame or a motivational frame. We used @majorityperspective.sg and @minorityperspective.sg as the profile names, respectively, to highlight message sources and prime participants’ in- or out-group categorization. After viewing the stimuli, participants answered questions about the persuasiveness of the message, eWOM intentions, manipulation checks, as well as demographic information.

We recoded in- versus out-group membership in the following way: When a Chinese participant (non-Chinese) was exposed to a message promoted by an ethnic majority (ethnic minority) profile, we coded it as an in-group condition; conversely, when the ethnicity of the message profile and participants did not match, we
coded it as an out-group condition. We eliminated participants who failed the manipulation check of social media account owners (i.e., the majority/minority profile) to better represent responses that demonstrated attentive reading in the sample. Our final sample consisted of 303 participants ($M_{age} = 41, SD = 10.08, 48\%$ female). In terms of ethnicity, $53.8\%$ were Chinese and $46.2\%$ were of minority race (Malay, Indian, Other).

**Measures**

*Persuasiveness of Message*

Participants were asked to rate the message along six dimensions adapted from Adelman and Dasgupta (2018), including (a) agreement; (b) persuasiveness; (c) importance; (d) fairness; (e) constructiveness; and (f) helpfulness. The items were measured on a 7-point Likert scale (1 = "Strongly Disagree," 7 = "Strongly Agree"; Cronbach’s $\alpha = .92$).

*Electronic Word of Mouth*

We adapted Alhabash and McAlister’s (2015) scales to measure eWOM intentions (see Appendix C for the full list of items). They captured social media users’ intentions to interact with a social media activism message beyond simply viewing it, including (a) sharing or forwarding the message on social networks, (b) expressing affective evaluations of the message, and (c) deliberating and commenting on the message (Alhabash & McAlister, 2015). The items were measured on a 7-point Likert scale (1 = “Strongly Disagree,” 7 = “Strongly Agree”; Cronbach’s $\alpha = .91$).

*Covariate*

Since individuals’ existing attitudes or opinions toward a social cause significantly affect how they process and evaluate anti-racism messages for the cause (Lim & Golan, 2011), we measured participants’ current standpoint on anti-racism on a 7-point Likert scale as a control variable ("I identify as an anti-racist”; 1 = "Strongly Disagree,” 7 = “Strongly Agree”).

**Data Analysis**

We conducted a multivariate analysis of covariance (MANCOVA) to test the hypotheses, with in-versus out-group membership and framing as independent variables, perceived persuasiveness of message and eWOM intentions as dependent variables, and participants’ preexisting standpoint on anti-racism as a covariate.

**Results**

*Manipulation Check*

Results of an independent-sample $t$-test indicated that participants rated the message using a motivation frame to be more motivational than that of a diagnostic frame ($M_{motivational} = 5.25, SD = 1.12$, $t(301) = 10.62$, $p < .001$).
$M_{\text{diagnostic}} = 4.54$, $SD = 1.24$, $t(301) = 5.19$, $p < .001$), whereas they rated the message using a diagnostic frame to be more descriptive than that of a motivational frame ($M_{\text{motivational}} = 4.74$, $SD = 1.31$, $M_{\text{diagnostic}} = 5.27$, $SD = .97$, $t(301) = 4.01$, $p < .001$). Our manipulation of message framing was considered successful.

**Hypothesis Testing**

Hypothesis 1 predicted that in-group members (vs. out-group members) promoting anti-racism messages would enhance message persuasiveness (H1a) and eWOM intentions (H1b). The MANCOVA results showed that group membership did not have a main effect on dependent variables ($\lambda = .99$, $F(2, 297) = 1.44$, $p = .24$). Thus, H1a and H1b were not supported (see Tables 1 and 2 for detailed results).

**Table 1. Descriptive Statistics for Dependent Variables.**

<table>
<thead>
<tr>
<th>Conditions</th>
<th>$N$</th>
<th>Persuasiveness of Message $M$ (SD)</th>
<th>EWOM Intentions $M$ (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-group/Diagnostic</td>
<td>79</td>
<td>5.11 (0.89)</td>
<td>3.97 (1.48)</td>
</tr>
<tr>
<td>In-group/Motivational</td>
<td>72</td>
<td>5.07 (1.13)</td>
<td>4.09 (1.51)</td>
</tr>
<tr>
<td>Out-group/Diagnostic</td>
<td>76</td>
<td>4.63 (1.05)</td>
<td>3.45 (1.60)</td>
</tr>
<tr>
<td>Out-group/Motivational</td>
<td>76</td>
<td>5.16 (1.11)</td>
<td>4.17 (1.70)</td>
</tr>
</tbody>
</table>

**Table 2. Two-Way Analyses of Covariance Results.**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Persuasiveness of Message</th>
<th>$F(1, 298)$</th>
<th>$\eta^2_p$</th>
<th>EWOM Intentions</th>
<th>$F(1, 298)$</th>
<th>$\eta^2_p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group membership</td>
<td></td>
<td>2.78</td>
<td>.01</td>
<td></td>
<td>1.57</td>
<td>.01</td>
</tr>
<tr>
<td>Message framing</td>
<td></td>
<td>5.13*</td>
<td>.02</td>
<td></td>
<td>6.79**</td>
<td>.02</td>
</tr>
<tr>
<td>Group membership $\times$ Message framing</td>
<td></td>
<td>5.58*</td>
<td>.02</td>
<td></td>
<td>2.76</td>
<td>.01</td>
</tr>
<tr>
<td>Preexisting standpoint on anti-racism (covariate)</td>
<td></td>
<td>7.56**</td>
<td>.03</td>
<td></td>
<td>10.49**</td>
<td>.03</td>
</tr>
</tbody>
</table>

Note. *$p < .05$; **$p < .01$.  

Hypothesis 2 predicted that a motivational frame (vs. a diagnostic frame) would lead to greater persuasiveness of the message (H2a) and higher eWOM intentions (H2b). Results showed a significant main effect of message framing on dependent variables ($\lambda = .98$, $F(2, 297) = 3.80$, $p = .02$, $\eta^2_p = .03$). Specifically, a motivational frame (vs. a diagnostic frame) generated a higher level of message persuasiveness ($M_{\text{motivational}} = 5.12$, $SD = 1.11$, $M_{\text{diagnostic}} = 4.88$, $SD = 1.00$, $F(1, 298) = 5.13$, $p = .02$, $\eta^2_p = .02$), and also increased participants’ eWOM intentions ($M_{\text{motivational}} = 4.13$, $SD = 1.61$, $M_{\text{diagnostic}} = 3.71$, $SD = 1.60$, $F(1, 298) = 6.79$, $p = .01$, $\eta^2_p = .02$). Therefore, H2a and H2b were supported.

Hypothesis 3 hypothesized that anti-racism messages, when promoted by in-group members and paired with a motivational frame (vs. a diagnostic frame), would lead to greater persuasiveness of message (H3a) and higher eWOM intentions (H3b), whereas the difference would be less pronounced when anti-racism messages were promoted by out-group sources. Results showed a marginally significant interaction effect on dependent variables ($\lambda = .98$, $F(2, 297) = 2.84$, $p = .06$, $\eta^2_p = .02$). The interaction effect
was significant only on persuasiveness of the message ($F(1, 298) = 5.58, p = .02, \eta^2_p = .02$) but was not on eWOM intentions ($F(1, 298) = 2.76, p = .098$).

A simple effect analysis (see Figure 1) further revealed that when out-group members promoted anti-racism messages using a motivational frame (vs. a diagnostic frame) perceived persuasiveness of message was greater ($M_{\text{Motivational}} = 5.16, SD = 1.11, M_{\text{Diagnostic}} = 4.63, SD = 1.05, F(1, 298) = 10.76, p < .001, \eta^2_p = .04$). However, the difference was not significant when anti-racism messages were promoted by in-group members ($M_{\text{Motivational}} = 5.07, SD = 1.13, M_{\text{Diagnostic}} = 5.11, SD = .89, F(1, 298) = .00, p = .95$). Hence, H3a and H3b were not supported.

![Figure 1. Interaction effect between group membership and message framing on perceived persuasiveness of the message.](image)

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3 When anti-racism messages were promoted by out-group members, the positive effect of a motivational frame (vs. a diagnostic frame) on perceived persuasiveness of message was consistent for both Chinese and minority participants. We created a data file including out-group membership conditions only and split the file based on participants’ ethnicity (Chinese vs. minorities). An independent-sample t-test showed a similarly significant effect of a motivational frame (vs. a diagnostic frame) on perceived persuasiveness of message across both ethnic groups. For Chinese viewing messages from minorities: $M_{\text{Motivational}} = 5.02, SD = 1.09, M_{\text{Diagnostic}} = 4.46, SD = 1.09, t(77) = 2.08, p = .04$; for minorities viewing messages from Chinese: $M_{\text{Motivational}} = 5.31, SD = .83, M_{\text{Diagnostic}} = 4.82, SD = .98, t(71) = 2.27, p = .03$. 
Moreover, results showed a significant effect of the covariate (preexisting standpoint on anti-racism) on dependent variables (Wilks’ $\lambda = .96$, $F (2, 297) = 5.78$, $p < .01$, $\eta^2_p = .04$). Participants’ preexisting standpoint on anti-racism positively affected their perceived persuasiveness of message ($F (1, 298) = 7.56$, $p < .01$, $\eta^2_p = .03$, $B = .09$, $SE = .03$) and eWOM intentions ($F (1, 298) = 10.49$, $p < .01$, $\eta^2_p = .03$, $B = .16$, $SE = .05$).

**Discussion**

Our study aimed to understand how SCT and collective action framing affect individual responses toward social media activism messages. Our findings show that group membership did not significantly influence perceived persuasiveness of the message and eWOM intentions. However, anti-racism messages using a motivational frame generated higher perceived persuasiveness of the message and eWOM intentions than a diagnostic frame. More importantly, the interaction between group membership and collective action framing was significant for perceived persuasiveness of the message. Specifically, when anti-racism messages were promoted by out-group members, a motivational frame (vs. a diagnostic frame) increased perceived persuasiveness of the message and eWOM intentions, while such a difference was not observed for anti-racism messages from in-group memberships. Our findings advance the literature on how SCT and collective action framing interact in the context of social media activism messages. Building on the nascent research of social media activism, our study offers both theoretical and practical insights on maximizing the effectiveness of such social campaigns.

Contrary to our predictions and the narratives led by existing literature (Mackie et al., 1990; Wilder, 1990), the positive effect of a motivational frame (vs. a diagnostic frame) on individual responses was found for out-group sources but was less pronounced for in-group sources. One possible explanation is that an in-group source serves as a cognitive shortcut for individuals to judge the validity of information, which in turn leads to weaker content processing (Abrams & Hogg, 1990; Turner, 1991). Instead, messages from out-group members may receive stronger content-focused processing, and individuals pay more attention to the frames in the messages. This is consistent with Esposo and colleagues’ (2013) findings that the argument quality of criticism did not affect the judgments of in-group members, while it exerted a significant impact on out-group members. Moreover, according to Simon and colleagues (1997), minority members are more likely to self-categorize and show heightened depersonalization of self-perception when the social contextual fit is high (vs. low). We further demonstrated the potential moderating role of message framing (diagnostic vs. motivational) in the impact of group membership. For instance, we showed that, when an anti-racism message is promoted by an out-group member, a motivational frame outperforms a diagnostic frame in eliciting increased perceived persuasiveness of the message for both majority (Chinese) and minority

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4 The major findings remained unchanged when we excluded the covariate in analysis. A multivariate analysis of variance (MANOVA) showed a nonsignificant main effect of group membership (Wilks’ $\lambda = .99$, $F (2, 298) = 1.39$, $p = .25$), a significant main effect of framing (Wilks’ $\lambda = .98$, $F (2, 298) = 3.04$, $p = .049$, $\eta^2_p = .02$), and a marginally significant interaction effect (Wilks’ $\lambda = .98$, $F (2, 298) = 2.82$, $p = .06$, $\eta^2_{pq} = .02$). The interaction effect was significant only on perceived persuasiveness of message ($F (1, 299) = 5.56$, $p = .02$, $\eta^2_p = .02$) but was not on eWOM intentions ($F (1, 299) = 2.76$, $p = .098$).
participants. It could be that, given the high contextual fit of the topic (racism), when an anti-racism message is promoted by an in-group member, both minority and majority groups engage in the process of depersonalization of self-perception and assimilate opinions from their in-group members, respectively, regardless of the frames used in the messages. However, when an anti-racism message is promoted by an out-group member, both minority and majority groups are less likely to generate depersonalized self-perception, and the effect of message framing thus becomes more pronounced, making the motivational frame more persuasive than the diagnostic frame. In this view, our findings enrich the current discourse about in-group/out-group persuasion effects and their interactions with SCT. Nonetheless, we expect future research to shed light on the underlying explanations for this unexpected finding.

Our findings also contribute to the literature on social movements in several ways. First, it should be noted that the relationship between SCT and collective action frames has not been previously established in social movements literature despite the fact that both theories are concerned with the mechanics of large-scale group action (Mackie et al., 1990; Snow & Benford, 1988; Turner, 1984). With the interaction effects demonstrating a statistical significance between the two independent variables, our findings open a potential new body of social movements research. Future studies should consider studying the implications of the interaction between SCT and collective action frames to broaden understanding of their effects. Moreover, we have established that a motivational frame (vs. a diagnostic frame) could increase perceived persuasiveness of the message and eWOM intentions; this finding expands the current literature on comparing the effects of different framing strategies. Given the increasing use of social media for activism and group action (Brown et al., 2017; Fischer, 2016; Hon, 2016), our findings add to the current understanding of collective action framing theory in online activism. Particularly, the findings augment the currently nascent research on collective action framing in the context of Singapore. The present study further adds to a growing field of experiment-based literature that focuses on the application of collective action framing theory in delivering effective activism messages (Dardis, 2007; Klandermans, 2014; Overton, 2018).

**Practical Implications**

Our study provides insights into how social activists can effectively develop anti-racism messages online. In-group members of the same ethnicity may not be as persuasive as previously thought when it comes to spreading anti-racism messages, especially when message frames are considered. In Singapore, the efficacy of ethnic minority activists reaching out to general audiences composed of the ethnic majority may therefore be understated. Activist organizations seeking to spread such messages among the Chinese population in Singapore may consider engaging more ethnic minority voices in such efforts; for example, rather than turning to Chinese voices to provide more “relatable” voices to majority audiences on difficult topics like racism, ethnic minority voices may instead improve the persuasiveness of their messages. This, however, does not mean that the sole responsibility of engaging in anti-racism behavior should fall onto ethnic minorities, as Chinese Singaporeans who do believe in the anti-racism movement can still contribute by calling out and acting against racism.

Additionally, using SCT and collective action frames together to better inform the formation of anti-racism messages may prove helpful to practitioners in enhancing their messages’ persuasive effects on the
intended audience. For example, message persuasiveness may be increased when practitioners target out-group members with a motivationally framed message instead of a diagnostically framed one. Our results show that by considering the in-group/out-group dynamics of the audience and the source of the message, future activist campaigns can use differing message framing strategies to meet their goals more effectively.

**Limitations and Future Research**

Our research findings should be examined alongside a few limitations. While we sought to maximize ecological validity through an online experiment, the post was nevertheless viewed as part of a simulation. Decisions made during the experiment might not reflect an organic social media activism setting, and participants may provide responses to present a better social image of themselves due to the nature of self-reporting. We also note that the self-reported measures of dependent variables (perceived persuasiveness of the message and eWOM intentions) cannot fully reflect individuals’ actual behaviors. Future research might further investigate the effects found in this study through other methods such as field experiments or big data analytics. Moreover, while our study furthers the literature on SCT and collective action framing by understanding how they interact, our study only considered the issue of racism. Thus, potential future research may expand on our study by investigating the interaction effects between SCT and collective action framing on other social issues. Our stimuli were also based on just one social media platform (i.e., Instagram) that online activists may use. As different social media platforms vary in their technical affordances, our findings may not be generalizable to other social media sites. We only compared the effect of a diagnostic frame with that of a motivational frame in the social media activism context. Future research can also examine the effects of the three types of frames simultaneously, including a prognostic frame. Future studies should examine the theoretical and practical implications of SCT and collective action framing on other social media platforms such as Facebook, X/Twitter, and TikTok.

**References**


**Appendix A: Profile Stimuli in Pretest**

**Ethnic majority (Chinese) profiles**

[Profile image]

A majority perspective on casual racism in Singapore

[Profile image]

A majority perspective on casual racism in Singapore

[Profile image]

A majority perspective on casual racism in Singapore

**Ethnic minority (Malays and Indians) profiles**

[Profile image]

A minority perspective on casual racism in Singapore

[Profile image]

A minority perspective on casual racism in Singapore

[Profile image]

A minority perspective on casual racism in Singapore
### Appendix B: Stimuli for the Main Study

<table>
<thead>
<tr>
<th>Ethnic majority (Chinese) profile + diagnostic framing</th>
<th>Ethnic majority (Chinese) profile + motivational framing</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="majorityperspectives.sg" alt="Diagnostic Stimulus" /></td>
<td><img src="majorityperspectives.sg" alt="Motivational Stimulus" /></td>
</tr>
</tbody>
</table>

- **Diagnostic Framing**: A majority perspective on casual racism in Singapore.
- **Motivational Framing**: A majority perspective on casual racism in Singapore.

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**Minorities in Singapore face casual racism on a daily basis.**

To better describe the situation, ethnic minorities are discriminated against by the Chinese ethnic majority through small acts or remarks about race. Examples of casual racism often demonstrated by some members of the Chinese majority include speaking in Mandarin in the presence of minority members in the workplace, insensitive “jokes” and perpetuating offensive racial stereotypes. It can be seen that it is largely the majority ethnic group that perpetuates casual racism.

**3 in 4 Singaporeans have heard racist comments by friends and colleagues.**

We call on each and everyone of you to take action and do your part to combat casual racism. Help raise awareness about this issue that often goes unseen and lend your voice to minorities experiencing racism. You can make a difference through your everyday actions and choices. Together, we can collectively tackle casual racism by educating ourselves on the reality of the racism that our minority communities experience on a daily basis.
<table>
<thead>
<tr>
<th>Ethnic minority (Malay and Indian) profile + diagnostic framing</th>
<th>Ethnic minority (Malay and Indian) profile + motivational framing</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td><img src="image3.png" alt="Image" /></td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
</tbody>
</table>

**minorityperspectives.sg** Minorities in Singapore face casual racism on a daily basis.

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Appendix C

**Table C1. Descriptive Means and Standard Deviations of Measurements.**

<table>
<thead>
<tr>
<th>Constructs/Items</th>
<th>M (SD) Overall</th>
<th>M (SD) In-Group/</th>
<th>M (SD) In-Group/</th>
<th>M (SD) Out-Group/</th>
<th>M (SD) Out-Group/</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Diagnostic</td>
<td>Motivational</td>
<td>Diagnostic</td>
<td>Motivational</td>
</tr>
<tr>
<td><strong>Persuasiveness of message</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I agree with the message.</td>
<td>5.04 (1.25)</td>
<td>5.23 (1.05)</td>
<td>5.00 (1.39)</td>
<td>4.72 (1.29)</td>
<td>5.18 (1.22)</td>
</tr>
<tr>
<td>The message is persuasive.</td>
<td>4.77 (1.19)</td>
<td>4.92 (1.02)</td>
<td>4.96 (1.17)</td>
<td>4.42 (1.16)</td>
<td>4.78 (1.34)</td>
</tr>
<tr>
<td>The message is important.</td>
<td>5.21 (1.24)</td>
<td>5.27 (1.18)</td>
<td>5.25 (1.26)</td>
<td>4.89 (1.26)</td>
<td>5.42 (1.20)</td>
</tr>
<tr>
<td>The message is fair.</td>
<td>5.01 (1.22)</td>
<td>5.11 (1.07)</td>
<td>5.04 (1.24)</td>
<td>4.63 (1.25)</td>
<td>5.26 (1.23)</td>
</tr>
<tr>
<td>The message is constructive.</td>
<td>4.96 (1.19)</td>
<td>4.99 (1.13)</td>
<td>5.18 (1.21)</td>
<td>4.54 (1.18)</td>
<td>5.14 (1.16)</td>
</tr>
<tr>
<td>The message is helpful.</td>
<td>4.98 (1.23)</td>
<td>5.15 (1.01)</td>
<td>5.01 (1.34)</td>
<td>4.58 (1.28)</td>
<td>5.17 (1.23)</td>
</tr>
<tr>
<td><strong>Electronic word-of-mouth intentions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would like this post on Instagram.</td>
<td>4.12 (1.76)</td>
<td>4.04 (1.64)</td>
<td>4.28 (1.75)</td>
<td>3.72 (1.85)</td>
<td>4.46 (1.76)</td>
</tr>
<tr>
<td>I would share this post on Instagram.</td>
<td>3.91 (1.74)</td>
<td>3.97 (1.66)</td>
<td>4.15 (1.60)</td>
<td>3.41 (1.77)</td>
<td>4.11 (1.84)</td>
</tr>
<tr>
<td>I would comment on this post on Instagram.</td>
<td>3.73 (1.72)</td>
<td>3.90 (1.56)</td>
<td>3.85 (1.76)</td>
<td>3.21 (1.70)</td>
<td>3.95 (1.80)</td>
</tr>
<tr>
<td><strong>Preexisting standpoint on anti-racism</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I identify as an anti-racist.</td>
<td>4.70 (1.78)</td>
<td>4.84 (1.59)</td>
<td>4.54 (1.90)</td>
<td>4.82 (1.81)</td>
<td>4.58 (1.86)</td>
</tr>
</tbody>
</table>