

User engagement behaviors: Exploring predictors of ARMY's active and passive media usage behaviors using social cognitive theory

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ABSTRACT

This study examines the active and passive media usage behaviors of ARMY, the fanbase of the Korean pop music group BTS. Active media use includes actions such as posting, commenting, and sharing, while passive media use includes simply consuming content without actively participating. We conducted an online survey (N=262) and used Social Cognitive Theory as a framework to investigate how parasocial relationships with BTS members and other factors contribute to active and passive social media use. The results indicated that parasocial relationships were positively related to passive media use, but were not related to active use. Furthermore, guidance needs and community belonging needs were positively related to both active and passive media use, whereas social integrative needs were not related to either type of media use. These findings have implications in terms of understanding how to improve engagement and user experience in social media.

CCS CONCEPTS

• **Human-centered computing** → **Empirical studies in collaborative and social computing**; *Computer supported cooperative work*; Social media.

KEYWORDS

User engagement; Active media use; Passive media use; Parasocial; Media usage; ARMY; BTS

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1 INTRODUCTION

The increasing use of social media facilitates social interaction, information, and entertainment between users in which users can be engaged in activities that involve direct interaction with other users (i.e., active usage), or consuming content without any direct

interaction (i.e., passive usage) [13]. User engagement in the context of social media is considered as the "phenomena of being captivated and motivated" where it is not just "about how a single interaction unfolds, but about how and why people develop a relationship with a platform or service" [15] (p.56). To investigate different motivations of user engagement [6, 32], emotional involvement is of the underlying fundamentals in the related literature [28], particularly its role in sharing, liking, and commenting behaviors [25, 42]. In this domain, some studies have looked closely at the concept of parasocial relationships as long-term, one-sided relationships that people develop toward a media persona [12], and its role in user engagement on social media [20].

Motivated to find out the reasons for active and passive media usage behaviors of online community members, especially the role of parasocial relationships, we focused on ARMY, which is the global fandom of BTS - a seven-member South Korean music group. ARMY is a diverse group of social media users with millions of members across the world and a powerful network of activities on social media platforms [26]. They are highly engaged and represent a wide range of cultural backgrounds and ages [23, 26]. Despite their diversity, ARMY shares a common purpose, which results in a wide range of user engagement patterns on social media. These include active engagement through hashtag usage, content creation, and social activism, as well as passive engagement such as consuming content, following BTS-related accounts, and reading posts and comments without necessarily liking, commenting, or sharing the content.

Few studies have investigated the role of emotion on user engagement behaviors as [32], in a systematic literature review, found only two studies focused on the relationship between emotion and engagement behaviors. Therefore, the role of the parasocial relationship as a socio-emotional relation [12] is still not clear in media usage behaviors. Finally, most of the current studies tried to understand media usage behaviors across specific web or mobile applications or social media platforms. For example, [16] investigated the motivations of users' consumption on YouTube. Therefore, because each of the social media platforms or websites is designed with different types of activities, it might limit the results of those studies.

In this study, we tried to understand the factors that motivate active and passive social media usage behaviors. We used Social Cognitive Theory [2] as a framework to explore personal and environmental factors of ARMY's active and passive media usage behaviors. The results of this study will contribute to having a better understanding of the types of different activities to measure

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active and passive media usage behaviors, especially because there are few validated measures to do so [34]. Moreover, since ARMY members use multiple social media platforms to be engaged in different types of activities related to BTS [26], the results of this study will provide a broad insight into the motivations of users' media engagement by considering their active and passive media usage across multiple platforms instead of focusing on one social media platform.

2 LITERATURE REVIEW

2.1 User engagement behaviors

User engagement on social media can be viewed as "an individual's interaction with media" including both "click-based interactions (participation) and simple content viewing and reading (consumption)" [16] (p.237). In this regard, active social media use refers to actively seeking out and engaging with content, such as by commenting, sharing, or creating content [40]. On the other hand, passive media usage refers to passively consuming content, such as by scrolling through a feed or watching a video without commenting or interacting with it [7]. Active engagement can indicate a higher level of user engagement and satisfaction with digital media while passive engagement may indicate a lower level of engagement or dissatisfaction [3]. Understanding the different ways that users are engaged with digital media can help designers create more engaging and satisfying experiences. Additionally, understanding the proportion of active and passive users can also help to identify potential areas for improvement in terms of user engagement, such as increasing the number of active users or improving the user experience for passive users.

Also, differentiating media use in terms of active and passive usage allows researchers to understand how the design and features of social media platforms influence user behavior [16] and help to identify patterns and trends in social media use [24]. For example, research has shown that social media platforms that are designed to be highly engaging and encourage active use (e.g. by using notifications, gamification, or personalized content) may lead users to spend more time on the platform and become more engaged with the content. On the other hand, platforms that are designed to be more passive, such as those that display a continuous stream of content, may lead users to spend more time-consuming content without actively engaging with it [22].

Researchers have conducted various studies to understand media usage behaviors [1], particularly active and passive media use. Some studies have focused on understanding the factors that influence active and passive media usage [16, 32] while other studies examined the impact of active and passive media use on various outcomes, such as level of user engagement, satisfaction, and well-being [3]. Also, several studies have investigated the personal characteristics of users that might influence active and passive media use, such as personality traits, motivation, and needs [14]. Furthermore, some other studies have investigated the impact of social influences on active and passive media use [39].

2.2 Applying social cognitive theory

Social cognitive theory (SCT) is a learning theory that assumes individuals acquire and maintain certain behaviors by observing

others and explains how both environmental and personal factors influence user's behavior [2]. The social cognitive theory of mass communication further suggests that social media users can learn to do behaviors by observing other users' behaviors [21]. [20] (p. 2) indicated that "Bandura envisioned socially adopted behaviors (e.g., retweet, like, share, tagging, etc.) long before the current major social media platforms, such as Twitter and Facebook, were launched", showing he believed that the SCT offers a novel perspective on how humans behave on social media. Several studies have used this theory as a framework to explain social media usage behaviors [17, 20], work-related social media usage [27], and fans' stickiness with the company's social network site [10].

Parasocial relationship. The term refers to the audience's one-sided and long-term relationship with a media personality or celebrity [12]. Expanded use of social media platforms and their features help to develop the parasocial relationship by facilitating the relationship between audiences and celebrities [20]. The K-pop idols' consistent presentation across platforms, particularly the digital intimacy and social presence of the BTS members, lead to the emotional bonds between fans and their idols [18, 30]. Recent studies investigated the role of parasocial relationship on users' brand engagement [35], repeated viewing of live-streaming games [20] and user engagement with celebrity's social media page [43]. Therefore, we hypothesized that:

H1a: ARMY's' parasocial relationships with BTS members is positively related to their active social media use.

H1b: Fans' parasocial relationships with BTS members is positively related to their passive social media use.

Guidance needs Guidance needs refer to where the users require assistance or direction in order to improve their performance and achieve their goals. People use social media platforms to seek and share information they needed [5]. ARMY members also seek guidance needs in social media content related to BTS since they have openly spoken about how their personal experiences influenced their music and lyrics [19]. Considering this, we hypothesized that:

H2a: Fan's guidance needs are positively related to their active social media use.

H2b: Fan's guidance needs are positively related to their passive social media use.

Community belonging. Community belonging mostly focuses on identification with the group and allows fans to feel part of a larger community of people with the same interest [4]. The social connections and community belongingness between fans have been shown to be a key part of fan activities as scholars have shown the feeling of belonging to the community had a positive effect on fan activities [33] and on customer engagement on social media [9]. Therefore, considering the fact that ARMY is a community based on a collaborative construction [30, 31], we hypothesized that:

H3a: Fan's community belonging needs are positively related to their active social media use.

H3b: Fan's community belonging needs are positively related to their passive social media use.

Social Integrative needs Social integrative needs refer to the human need for social interaction and connection which include the need for acceptance, understanding, and support from others. ARMY members have a shared interest in BTS and their music,

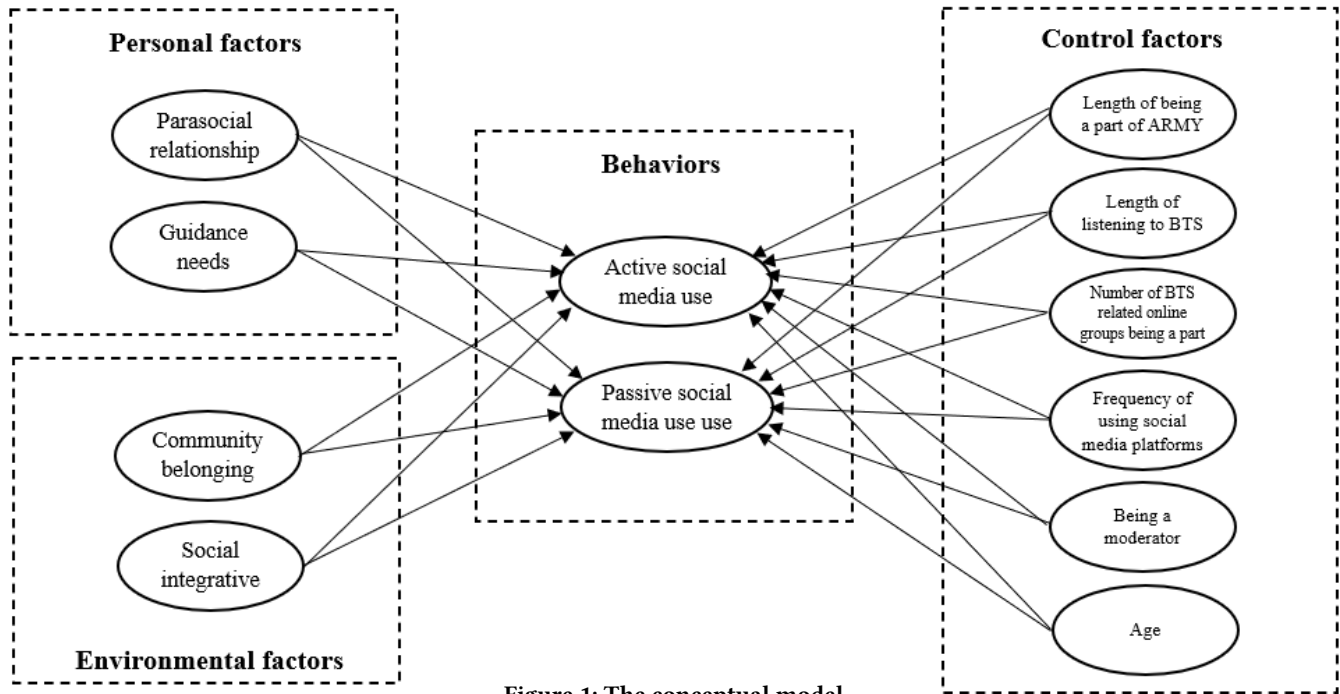


Figure 1: The conceptual model

which can be served as a bond between them to meet these needs by participating in online fan activities [26], therefore, we hypothesized that:

H4a: Fan's social integrative needs are positively related to their active social media use.

H4b: Fan's social integrative needs are positively related to their passive social media use.

The conceptual model for the study is shown in figure 1.

3 METHODS

3.1 Data collection

This study is a subset of a larger research project that aims to investigate ARMY's social media activities and their motivations. We used three primary recruiting methods: distributing the survey in-person at events, contacting administrators and moderators of online BTS fan communities and asking them to share the survey, and recruiting individuals through social media posts using BTS-related hashtags and keywords. The recruitment period took place from December 2021 to January 2022. The in-person survey distribution took place at BTS concerts and fan-organized events, and postcards with a QR code linking to the online survey were handed out. For the online recruiting campaign, the social media platforms used were Amino, Discord, Facebook, Reddit, and Twitter for contacting fan communities and organizations, and Instagram, Facebook, Tumblr, and Twitter for recruiting individuals through relevant public postings.

The research received 262 completed responses from 34 different nations, with the majority (65.9%) coming from the United States. The majority of participants were between the ages of 18-29 (66.9%) and identified as female (91.4%). The largest racial group represented was White (39%), followed by Asian (38.6%). Over half of the

participants were employed (51.2%) and a majority were pursuing an undergraduate degree (60.3%).

3.2 Measurements

In this study, the independent variables were measured using a 5-point Likert-type scale, where participants were asked to rate their agreement with a series of statements on a scale from 1 (strongly disagree) to 5 (strongly agree).

Parasocial relationship ($M = 3.94$, $SD = 0.61$, $\alpha = .93$). Assessed the participants' parasocial relationship experience with BTS members. We used Tukachinsky's 24-item multiple-parasocial relationship scale [36].

The scales presented below are derived from the findings of the first part of this research project, as previously mentioned. Through a principal component analysis, we identified the key themes that underlie ARMY's motivations and needs in following BTS.

Guidance needs ($M = 4.54$, $SD = 0.59$, $\alpha = .83$). Refers to an individual's need to understand their surroundings and themselves in order to develop interpersonal skills. Items included "they inspire me to be a better version of myself", "they serve as a guide in my life", "they give me a sense of purpose", "they give me strength and hope to overcome hardship in my life", and "I like their personalities and want to emulate them".

Community belonging needs ($M = 4.19$, $SD = 0.72$, $\alpha = .86$). Referred to participants' perceived sense of belonging within the community. Items included "they make me feel like I belong to a community", "I enjoy being surrounded by like-minded people", "I want to be part of something bigger than myself", and "I relate to other ARMY members".

Social Integrative needs ($M = 2.28$, $SD = 1.03$, $\alpha = .82$). Refers to a person's need to connect and socialize with others, as well as

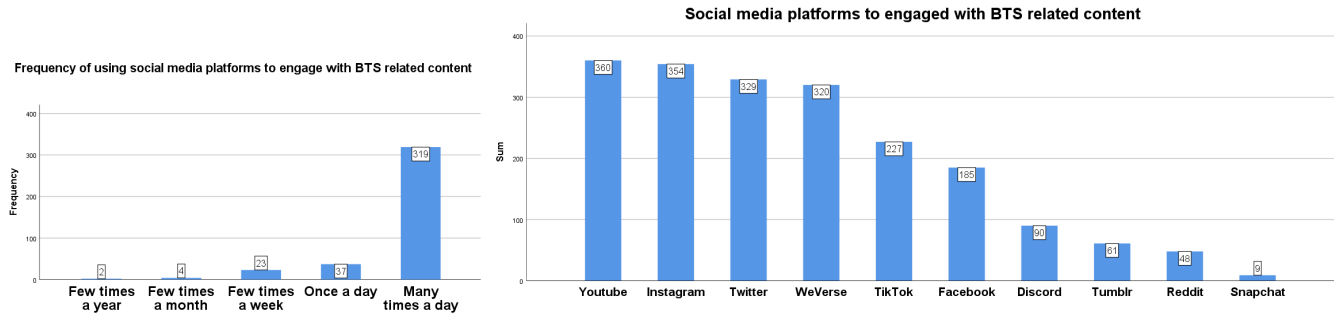


Figure 2: Social media platforms and the frequency of using them to engage with BTS-related content by ARMY

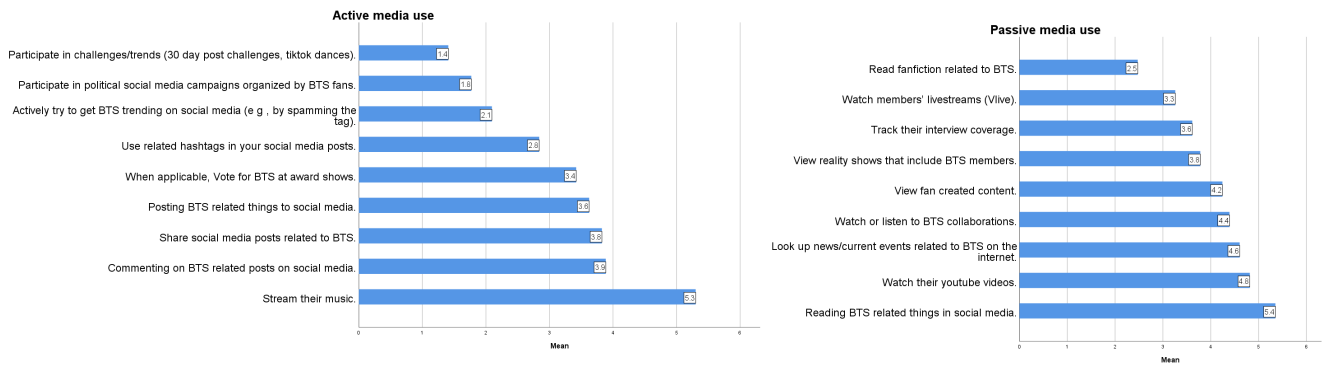


Figure 3: ARMY's active and passive media usage behaviors

help them develop their social identity. Items included "I want to keep up with my peer's interests", "my closest friends support BTS so I feel influenced by my friends", and "a lot of people like them and I want to share that passion with them".

Also to measure both dependent variables, active ($M = 3.16$, $SD = 1.08$, $\alpha = .87$) and passive ($M = 4.07$, $SD = .92$, $\alpha = .86$) social media use, we used the existing scales in the literature to measure active and passive media use [8, 38] as well as our observations from ARMY's activities on social media platforms such as Weverse, Discord, and Twitter over a span of 3 months (from September 2021 to November 2021, prior to data collection) to consider different types of ARMY's media usage behaviors and adapting them with the existing scales. The list of items for active and passive media use is shown in figure 3. To answer these items, participants were asked to respond to each item using one of the six options: Never (1), Few times a year (2), Few times a month (3), Few times a week (4), Once a day (5), Many times a day (6).

Participants also responded to other BTS-related questions, including how long they've considered themselves as a part of BTS ARMY when they started listening to BTS, the number of online groups related to BTS they are part of, how frequently they use social media platforms to engage with BTS, whether they moderate a BTS-related community and their age.

4 RESULTS

First, to understand the active and passive ARMY's social media usage behaviors, the results were statistically visualized using figures. Figure 2 illustrates social media platforms and the frequency of using them to engage with BTS-related content. Additionally,

the study sought to determine the most frequently used items of ARMY's active and passive media use. Figure 3 presents the mean values for different items of active and passive media use, highlighting that streaming was the most frequent form of active media use ($M = 5.3$) and reading was the most frequent form of passive media use ($M = 5.4$). The study also analyzed the dependent variables based on each of the control variables and found that ARMY members were more frequently engaged in passive activities as presented in Figure 4.

In order to assess the relationship between the independent and dependent variables, separate bivariate correlational analyses were conducted. This method allowed for the examination of how each independent variable correlates with the dependent variable on its own, without taking into account the influence of other independent variables. This approach provides insight into the unique contributions of each independent variable to the dependent variable. Table 1 presents the specific correlation coefficients for each of the relationships.

Finally, we ran two separate linear regression models in order to test our model about the factors related to active and passive social media behaviors

4.1 Model explaining active social media use

Our first model indicated each of the independent and control variables has a positive relationship with active social media usage behaviors. The overall regression model was statistically significant (adjusted R square = .35, $F(7, 287) = 24.14$, $p < .000$). Of the personal

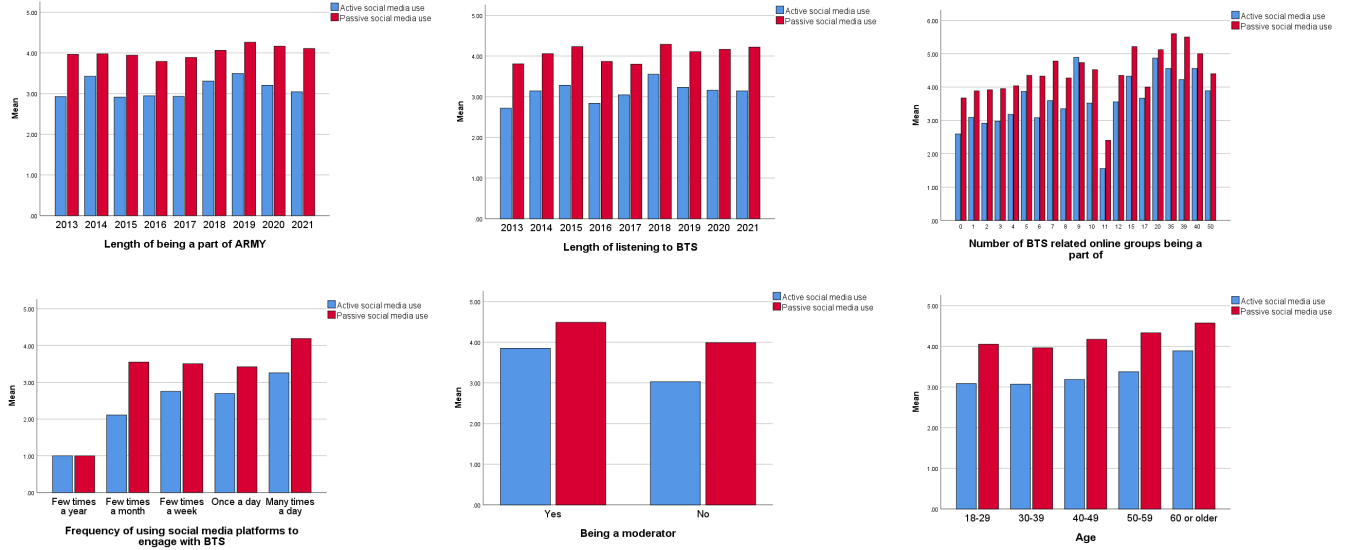


Figure 4: ARMY's active and passive media usage based on each of the control variables

Table 1: Correlation coefficients between the variables

| | Active social media use | Passive social media use |
|---------------------------|-------------------------|--------------------------|
| | r | r |
| Parasocial relationship | .44** | .47** |
| Guidance needs | .48** | .49** |
| Community belonging needs | .48** | .46** |
| Social integrative needs | .04 | .09 |

Note: **. Correlation is significant at the 0.01 level (2-tailed).

variables, the parasocial relationship was not related to active social media use while guidance needs (H2a) were positively related. Also, from the environmental variables community belonging needs (H3a) showed a positive and highly significant relationship with active social media use while social integrative needs were not related. From the control factors, the number of online groups related to BTS being a part of, frequency of using social media platforms to engage with BTS, and age were positively related to active social media use while being a moderator was negatively related to it. Therefore, in the first model, H2a and H3a were supported, but H1a and H4a were not supported.

4.2 Model explaining passive social media use

Our second model indicated each of the independent and control variables has a positive relationship with fans' activities to provide financial support. The overall regression model was statistically significant (adjusted R square = .34, $F(6, 288) = 26.76$, $p < .000$). Both of the personal variables, including parasocial relationship (H1b) and guidance needs (H2b) and from the environmental variables community belonging needs (H3b) was positively related to passive social media use while again social integrative needs were not related to it. Furthermore, from the control factors, the number of online groups related to BTS being a part of, the frequency of using

social media platforms to engage with BTS, and age showed a positive relationship with passive social media use. In the second model, H1b, H2b, and H3b were supported and H4b was not supported. The coefficient values are summarized in table 2.

5 DISCUSSION

Parasocial relationships can influence users' behavior and attitudes while using social media, for example, a user who feels a parasocial relationship with a social media influencer may be more likely to increase engagement with their content, make purchases based on their recommendations, and even adopt similar attitudes and values [41]. This is because users may be seeking more information or content about the media figure, and they find it in a passive way. Additionally, the parasocial relationship can also lead to an increased sense of loyalty and identification with the media figure, which can lead to more willingness to seek out and consume content related to them. On the other hand, the parasocial relationship may also lead to active behaviors such as posting, streaming, or creating fanfiction, but considering the fact that ARMY is a fan group that sees themselves as an organization with a clear purpose [26], it would make sense that they are mostly engaged in active behaviors to reach their goal which is promoting BTS globally.

Furthermore, being an ARMY for a longer period of time may indicate that the users have a strong interest in BTS and their music,

Table 2: An analysis of fans' active and passive social media use behaviors using regression models. Values represent standardized beta coefficients.

| | Active social media use | Passive social media use |
|--|-------------------------|--------------------------|
| Personal factors | | |
| Parasocial relationship | .12 | .18** |
| Guidance needs | .17* | .2* |
| Environmental factors | | |
| Community belonging needs | .22*** | .17** |
| Social integrative needs | -.05 | .05 |
| Control factors | | |
| Length of being a part of ARMY | -.06 | .02 |
| Length of listening to BTS | .09 | .1 |
| Number of BTS related online groups being a part of | .22*** | .2*** |
| Frequency of using social media platforms to engage with BTS | .13** | .17*** |
| Being a moderator | -.12* | -.08 |
| Age | .15** | .15** |

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

but it does not necessarily indicate how active or passive they are on social media. However, their intensity of involvement was increased once becoming an ARMY [26]. Moreover, the duration of membership in other communities would affect user engagement positively, in a way that the longer members are involved with the community, the more they would identify with the community, therefore the more participative and engaged [29]. But while the length of time a user has been an ARMY may be an indicator of their interest in BTS, it is not a predictor of their social media engagement.

In general, it is possible to argue that the results of this study may apply to celebrities who have a substantial amount of online content. In such cases, if a celebrity lacks sufficient content or fan communities, their fans' presence may not be as active or passive as compared to other fan groups. Therefore, it is possible that fan communities who have access to a lot of content available on social media may have similar experiences. But considering the fact that each fan community is unique and different in terms of both content and psychological variables such as fans' motivations [33], further research is needed to examine user engagement behaviors and their motivations across other fan groups.

The study's results also indicate that while ARMY members have active engagement purposefully on social media, they still primarily engage with content passively (as shown in Figure 4). To encourage more active participation, adding features like creating and joining online groups and fan pages can help, as the results reveal that being part of several online groups is strongly related to active media usage. This can also create a sense of community where people with similar interests can chat about topics they like which is another factor related to increasing active engagement. Additionally, features like online polls and surveys are a way to engage fans actively and get their opinions on various topics. This can help foster a sense of community by giving fans a voice and allowing them to feel like they are a part of the decision-making process. Moreover, live streaming can also help bring fans closer and create a sense of intimacy, a sense of trust by viewing unedited

content, and a sense of exclusivity by viewing content that is not available elsewhere, which can lead to increased higher-level active engagement behaviors such as commenting.

6 CONCLUSION

Understanding why ARMY use social media in active or passive ways can help creators of social media platforms to design features that meet their needs and preferences. This can include features such as easy content creation and sharing for active users, or easy content discovery through visualization [37] for passive users. The results of this study showed that ARMY members primarily engage in passive activities when consuming media related to BTS. Passive activities, such as reading, scrolling, and watching, require less effort and are more easily accessible than active activities, such as posting, commenting, and creating content. Additionally, the nature of BTS's content is mainly videos and music which are mostly consumed passively. Also, the parasocial relationships with BTS members can lead ARMY members to engage in passive behaviors mostly in the forms of reading BTS-related content and watching their YouTube videos. This media consumption is because of the parasocial connection they feel with the band members which may lead to a desire to consume as much content related to BTS as possible.

7 LIMITATIONS AND FUTURE WORK

In this study, one of the limitations is distinguishing between passive and active use, as some individuals may passively consume content but still engage with it in some other ways (e.g. by "liking" a post). Another limitation is measuring the intensity and frequency of social media use, which can affect measuring active and passive social media use. Finally, the distinction between different levels of active media engagement, including high-cost activities like posting and commenting and low-cost activities like clicking the like or share button [11], and understanding the role of parasocial relationships on different levels of active media use can continue in future studies. Also, the results showed that social media usage behavior is strongly influenced by community, therefore future studies can

focus on investigating how and why community-related factors are essential in social media usage behaviors.

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