

Lo-fi Hip Hop Streaming in China: Online Engagement, Motivation, and Sense of Community

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Abstract

A new wave of Lo-fi Hip Hop has emerged on YouTube, and Bilibili in China, transforming into a trending and distinctive video streaming phenomenon. However, it remains unknown how viewers with divergent socio-cultural backgrounds engage with the Lo-fi Hip Hop streaming video on digital platforms, why they participate, and how the sense of community is exhibited. A qualitative mix-method study containing comment analysis and in-depth interviews (N=12) was conducted to investigate the uniqueness of the Lo-fi Hip Hop community on Bilibili. The findings revealed the difference in viewers' online community engagement between YouTube and Bilibili and various motivations of watching Lo-fi Hip Hop streaming. Lastly, the study also extends the Sense of Community (SoC) theory to the community with implications for the application. The study further contributes to the research of Lo-fi Hip Hop video streaming in a global context.

Keywords: Lo-fi Hip Hop, China, video streaming, online community, sense of community

1. Introduction

An anime girl wearing headphones is studying under the desk lamplight. From time to time, she will stop and look outside the window. A cat is also lying by the window, occasionally moving its tail. The animation depicted above usually appears on a chilled and rhythmic music loop. It is called “YouTube lofi study girl” (Wang, 2020, p. 10), which is a representative of Lo-fi Hip Hop music (henceforth LHH) on the Internet. LHH is given its name because of the “low fidelity” nature purposely generated by music producers of the ‘genre’ (Winston & Saywood, 2019). Other similar LHH videos have varying animated characters but are

mostly consistent with “Lo-fi Hip Hop Radio to Relax/Study to” in titles. The genre of music initially emerged since 2013 as playlists on YouTube and gained millions of views. Its popularity rose further after combining with animated and video game characters (Adam, 2018). Since 2018, many LHH channels have adopted 24/7 live-streaming, becoming a phenomenal online event embedded within young generations’ ordinary life (Adam, 2018; Winston & Saywood, 2019). Recently, LHH video viewings during the pandemic have reached another peak on YouTube (Alexander, 2020), again appearing under the spotlight.

Compared to other “internet-born” music genres, Winston and Saywood (2019) have identified that LHH music is a unique kind to examine “online musical participation” (p. 42). They also problematized the LHH phenomenon on technological platforms by pointing out an ambivalent relationship. That is, the LHH video mixes viewers’ self-managed work/study with leisure activities. It also takes forms in the 24/7 live-stream feature, making the boundary between work and life obscure. The contradiction makes LHH videos unique from other live and streaming videos like “Study with Me” (SWM) videos and gaming live-stream (Lee et al., 2021; Sjöblom & Hamari, 2017). Furthermore, LHH videos also demonstrate caring, support, and sociality in the online community (Alexander, 2020; Winston & Saywood, 2019), which deviates from the study/work-focused purposes. Therefore, examining through the lens of online community as well as community members’ perceptions and motivations, including a sense of belonging, would be significant to approach this emerging issue.

Moreover, the formation of the LHH community not only emerges on international video platforms such as YouTube, but also extends to Bilibili (www.bilibili.com), one of the most popular user-generated content (UGC) video streaming platforms in

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China. The average daily active users of Bilibili reach 60 million in the first quarter of 2021 (Wang & Zhang, 2021). Additionally, Bilibili has similar social functions as YouTube. Users can opt to share, favorite, comment, or subscribe to the video. They can also privately message the video uploaders. Besides, Danmaku function (alias. “Bullet Screen”) is unique to Bilibili. It represents asynchronous bullet-like comments flying across the screen, which creates a different interaction from regular comments sections. Video viewers can interact with the Danmaku by giving a thumbs up.

Bilibili mainly targets digital natives and is deeply rooted in fandom and subaltern culture especially favored by China’s ACG (Anime, Comics, & Games) population (Yin & Fung, 2017; Schneider, 2021). More importantly, Bilibili provides an alternative sphere for youth in China to express themselves and participate in public discussions through creative and entertaining ways (Yin & Fung, 2017). Another unique gamification culture (an ‘experience’ point system) urges users to practice ritualistic routines such as logging in and watching videos (Schneider, 2021), cultivating an intimate relationship with the platform.

Despite that the Great Fire Wall has limited Chinese netizens’ access to global social media including YouTube, the information flow from the world still makes its way to China. One vital force is constituted of individual Chinese users who transport global information using circumvention technology like VPN (Lu et al., 2022). In the case of LHH, bloggers on Bilibili re-upload the same LHH video from YouTube, attracting huge traffic. Such a transportation and localization process of LHH videos make us ponder if it would generate anything new and different as to audience perceptions and online cultural participation. Moreover, considering that LHH videos are primarily for young generations to study and relax, would Bilibili LHH users, who are heavily influenced by the exam-centric system and facing different platform affordances, cope with academic pressure differently than the YouTube LHH users? This question is also worth exploration.

The study adopted McMillan and Chavis (1986)’s Sense of Community (SoC) as a theoretical framework. Thematic analysis of crawled comment data was used to compare LHH videos on Bilibili and YouTube. It was then followed by in-depth interviews and open coding for profound understandings of viewer’s motivations for using LHH videos and the manifestation of senses of community. The study further contributes to the research of LHH videos in a global environment. It also helps extend the application of SoC framework to a niche online community, with several theoretical and practical implications. Finally, limitations and possible future research are discussed.

2. Literature review

2.1. Lo-fi Hip Hop video streaming and online community engagement

To have a clear picture of the LHH phenomenon, delving into the LHH related literature and understanding people’s online community engagement on video streaming platforms is crucial.

Relevant research shares commonality in emphasizing that young people in the United States are inclined to watch LHH videos for study focus enhancement and relaxation, given the social context of increasing academic stress (Winston & Saywood, 2019; Wang, 2020). The academic stress is also deemed one of the conspicuous consequences of exam-centric education system in China (Kirkpatrick & Zang, 2011). In addition, LHH videos on YouTube can facilitate self-regulated learning (Winston & Saywood, 2019), which is also reflected on “SWM” videos on Bilibili. Moreover, Taber et al. (2020) identified the presence of parasocial relationship in the YouTube videos. These viewpoints raised by previous researchers can lay a foundation of studying the LHH video on Bilibili.

Moreover, there are other similarities among prior literature. For instance, the ambivalent relationship between viewers and the LHH videos proposed by Winston and Saywood (2019) echoes Alexander (2020)’s observation. Also, Winston and Saywood (2019) and Wang (2020) pointed out a relationship between the LHH videos and nostalgia, referring to reflections on childhood experiences associated with both specific memories and an ambiguous feeling. However, it is unclear that if these characteristics of LHH videos can be extended to a different platform other than YouTube with a different socio-cultural background.

The online community engagement literature can also help to understand how youngsters engage in the online LHH community in a Chinese context.

The online community is defined as “a virtual space where people come together with others to converse, exchange information or other resources, learn, play, or just be with each other” (Kraut & Resnick, 2011, p.1). It can also provide alternative support to real-life communities (Bargh & McKenna, 2004).

Furthermore, online engagement is a crucial element of online communities taking various forms in different online platforms (Han et al., 2019), such as Twitch (Sjöblom & Hamari, 2017), YouTube (Lee et al., 2021), Bilibili (Wang & Zhang, 2021), and Tik Tok (Lu et al., 2019). Specifically, Danmaku comments, as a unique online community engagement on the Bilibili platform, offers an asynchronous co-viewing experience that is distinct from the synchronous livestream chat on

YouTube, Tik Tok and Twitch (Fang et al., 2018). Therefore, to add socio-cultural and different technological platform comparison perspectives to the online community engagement of LHH videos, the first research question is proposed here,

RQ1: How do Chinese users engage with Lo-fi Hip Hop videos on Bilibili, and how does the online engagement differ from that on YouTube?

2.2. Motivations of engaging with video streaming

Investigating viewer's online engagement in LHH communities can help trace their participation pattern, which is, however, not adequate to understand why viewers watching LHH videos, especially when tapping into the Chinese case.

When referencing the motivation literature, the well-established Use and Gratification Theory (UGT) cannot be neglected. It refers to individuals with certain motivations and needs who tend to choose relevant media to fulfill their gratifications (Katz, 1959). Building on the concept, Katz et al. (1973) specified five categories of needs for media use (a) cognitive, (b) affective, (c) personal integrative, (d) social integrative, and (e) tension release needs. The categorized motivations have been extended and updated by other scholars throughout history, which also plays a significant role in the context of streaming media nowadays. For example, based on UGT, Hilvert-Bruce et al. (2018) identified eight motivations like entertainment and information seeking to explain Twitch viewers' live-stream engagement.

Also, Oliver and Raney (2011) supplemented the motivation literature that aside from hedonic purpose in entertainment motivation, there exists "eudaimonic concerns" for pursuing life meaningfulness (p. 984). Additional literature found motivations for streaming media, such as socialization on Twitch (Gros et al., 2017), immersion and escapism (Yee, 2006), which can be categorized under UGT as well.

The motivation literature for video streaming summarized can shed light on the possibility of digging into users' motivations and reasons for online engagement in the LHH community. Therefore, derived from the literature, the second research question is proposed,

RQ2: Why would young Chinese generations watch Lo-fi Hip Hop videos on Bilibili?

2.3. Sense of community

Sense of community is one of the important social motivations for live-stream viewers (Hilvert-Bruce, 2018), which generally equals to a sense of belonging

and comfort that bond with the virtual community (Kim et al., 2020). Specifically, based on UGT, Hilvert-Bruce (2018) incorporated the sense of community as one of the eight factors in the proposed socio-motivational model to explicate viewers' engagements on Twitch. Meanwhile, the sense of community is also deemed the primary component together with virtual space for a successful virtual community (Kim et al., 2020). Considering the LHH community on Bilibili as a virtual community with a large base of viewers for video streaming (8.715 million views) (Jachoy, 2018), whether the viewers are motivated by the sense of community to watch LHH videos and how they can experience it in the LHH community are worth discussion.

The sense of community as a concept in the psychology community was initially raised by Sarason (1974). Based on that, McMillan and Chavis (1986) proposed a theory of Sense of Community (SoC) for a face-to-face physical community, which generally refers to "a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (p. 9). According to them, the SoC has further developed into a framework with four essential dimensions, (a) membership, (b) influence, (c) integration, and (d) fulfillment of needs and shared emotional connection. The description of each dimension is as follows based on the given definition,

Membership refers to a feeling of belonging and security within the self-identified community boundary where it shares common symbols. *Influence* is defined as a bidirectional dimension, either to be influenced or to influence others. *Integration and fulfillment of needs* emphasized the reinforcement of achieved needs or goals and rewarded benefits or significance by joining the community. *Shared emotional connection* means a spiritual bond between community members deriving from high-quality interactions.

Ample research has used the SoC framework to inspect different communities in virtual space (Wang & Zhang, 2021; Kim et al., 2020). Hamilton et al. (2014) also suggested that the sense of community plays a vital role in the live streaming context. It helps audiences identify and friend with like-minded co-viewers via shared experiences within the participatory online communities. Moreover, scholars conceptualized SoC as Sense of Virtual Community (SOVC) (Blanchard & Markus, 2004; Koh & Kim, 2003) which is however under debate. Unlike Koh and Kim (2003)'s conceptualization, Blanchard and Markus (2004) and Obst et al. (2002) argued *influence* is less important in virtual communities. They (2004) also found *membership* may be different. Hence, in light of the

previous research, the LHH community, as a relatively untouched research area featuring online self-study and livestreams, is worth being grounded with McMillan and Chavis (1986) 's SoC framework. The four dimensions will be mapped out to examine if and how LHH video viewers on Bilibili can experience a sense of community. Thus, the third research question is proposed as follows,

RQ3: How is the sense of community manifested in the Lo-fi Hip Hop community on Bilibili?

3. Method²

Given the context that LHH videos have been transported from YouTube to Bilibili, investigating the phenomenon through comparative studies would be significant. Previous literature mostly used qualitative methods with exploratory coding to approach the topic (Taber et al., 2020; Wang, 2020), which supports current study in using a mix-method qualitative approach combining comment analysis with in-depth interviews. The approach could examine the issue from multi-dimensions, generalizing characteristics while digging into viewers' deeper understandings.

3.1. Crawled data collection

Regular video comments, live chat and Danmaku comments were collected on February 15, 2022, from the most viewed videos/live chat similarly featuring the "lofi girl" in content on YouTube and Bilibili to understand how people engage with videos in LHH communities.

On Bilibili, the video transported from YouTube in 2018 is titled "[Study with you] Open the video and learn with you quietly for two hours [study/reading/relaxation music]" (Jachoy, 2018). The Octoparse crawling tool was employed to scrape all 6927 regular video comments without replies to the date of data collection. SocialSensor, a crawling tool developed by the Chinese University of Hong Kong, was used to scrape 16030 Danmaku comments, matching with the displayed number of "loaded Danmaku comments."

On YouTube, the selected video, titled "1 A.M Study Session - [lofi hip hop/chill beats]" (available since 2019) was for video comments collection (Chillhop Music, 2019). An R package was used to collect all 41799 video comments in English excluding replies to the date. Another live video, titled "lofi hip hop radio - beats to relax/study to" (streamed live since

2020) was selected for live chat collection (Chillhop Music, 2020). An observation method was applied in February to record 700 live chats out of a chat box beside the live video.

3.1.1. Sampling. There is no commonly accepted sample size for qualitative comment analysis. Considering the relatively repetitive nature of the short comments, 5% of all the collected comments were sampled using a systematic sampling approach with an interval of 20. Specifically, 347 regular video comments and 802 Danmaku comments on Bilibili, as well as 2091 video comments on YouTube, were generated. The data of 700 live chats is an exception using convenience sampling. The observation lasted for a week and 100 live chats were recorded each time, which was performed randomly every day of the week. The saturation of the data has been reached in later analysis, suggesting an optimal sample size (Guthrie et al., 2004).

3.2. Interview data collection

To gain further insights of Bilibili viewers' perceptions of LHH videos and their reasons for usage, also considering the nature of this mix-method study and the niche community, 12 participants were recruited for in-depth interviews starting from March 3rd till 13th, 2022. The semi-structured interview questions examining SoC were adapted from McMillan and Chavis (1986)'s definitions and partly referenced Abfalter et al. (2012)'s measurement of SOVC. Other questions concerning basic demographics, users' motivations, emotions, and LHH videos usage were also included. Each interview lasted for around 30 minutes, was conducted in Mandarin, audiotaped, and manually transcribed for data analysis. They all strictly followed the interview ethics.

3.2.1. Sampling. The 12 participants were recruited through volunteer sampling, specifically via posted ads in the Bilibili video comment area and other related online forums. They all met the interview requirements of having prior experiences with LHH videos on Bilibili.

3.3. Analysis

Both comment and interview data were analyzed primarily using an inductive open-coding approach (Strauss & Corbin, 1998). Deductive coding was also involved, particularly for interview data concerning SoC. After datasets coding, two researchers as both

²https://osf.io/vhsu7/?view_only=6bed95b284f440a7836d1630888974c4 (See the link for demographic summary, interview questions and detailed codes.)

native mandarin speakers met to discuss emerging themes and updated the codebook every week until all the discrepancies were resolved. The whole process ended when both researchers acknowledged the existing themes had achieved saturation and adequate conceptual depth.

4. Findings

The findings are composed of thematic analysis of comments and in-depth interviews. The former demonstrated characteristics of both Bilibili and YouTube users' online engagement with LHH videos. The latter explored the reasons and motivations of young Chinese generations using the LHH video on Bilibili.

4.1. Thematic analysis of comments – RQ1

The section concluded five common themes from both asynchronous (YouTube and Bilibili regular video comments; Bilibili Danmaku comments) and synchronous types of comments (YouTube live chat). It also distinguished different responses on the two platforms, aiming to answer the first and third research questions.

4.1.1. Self-regulation. The theme means positive self-managed reasons that drive users forward, including *study goals* and *self-encouragement*. However, it mainly appears in asynchronous type of comments on the two platforms. Compared to YouTube users, Bilibili users tend to post motivating comments, concerning school-specific study tasks and goals such as the mention of “college entrance examination.” Bilibili users are also inclined to express motivations for their loved ones (e.g., girlfriend) and idols or celebrities, like “Shen Zhou, wait for me.”

4.1.2. Check-in activities. This theme describes users' different registrations of online presence on the two platforms. Taking precise checking-in actions (e.g., “first time viewing”) seems to have become an important attribute of LHH videos on Bilibili, aiming to report a general study progress. In comparison, YouTube users focus on depicting their current studying/working situation in detail while using the video, like “just vibing to this while I draw is perfect.” Moreover, the displayed comments on the two platforms are quite similar regarding *reports of study plans, content, and progress*. However, for *record of time/identity*, unlike YouTube users, Bilibili users would disclose their real names rather than use an ambiguous identity (e.g., students). Apart from those,

users on both platforms resemble in reporting the exact activity time, which is another symbol of checking in with others/the video itself for presence.

4.1.3 Social interaction. The theme emphasizes six kinds of interactions under the video genre. First, *caring and support* were randomly delivered by strangers in the public space without aiming at a particular person. Interestingly, Bilibili users would convey *caring and support* through the storytelling of personal experiences. Second, *mutual supervision* is a spontaneous action to promote each other's study efficiency among the community, sharing similar representations on the two platforms like “Stop scrolling. Get back to work.” Third, as for *presence and companionship*, Bilibili users tend to pay much attention to “how many people are watching with you” displayed below the video, given the platform affordance. Comparatively, YouTube users are more active in initiating conversations with others like “Who's here in 2021?” Fourth, due to the nature of live chat, YouTube users tend to greet strangers (*greetings*) for possible dialogues, while it's not that evident on Bilibili users. Fifth, users usually “*ask for help*” on Bilibili for concrete solutions to problems, unlike people on YouTube who need more emotional support at a spiritual level. Lastly, *influence* indicates appreciation by users on both platforms: users appreciate uploaders' contributions to the LHH community; they also appreciate the mutual encouragement from peers.

4.1.4. Commenting on the video. The theme is categorized into two aspects of responses to LHH videos. Firstly, users from both platforms were consistent in their responses to the music aspect of LHH. They would comment on the rhythm, the sampling of the human voice, the beat, and anything pertinent to the music itself. Secondly, except for Danmaku comments that have no direct mention of the LHH video content, other types of comments all refer to the animation of LHH videos. Users tend to build connections with the animated figures and surroundings, such as the balcony and the figure's cat in the visuals. They even resonate with the animation, “she has been studying continuously with no breaks.”

4.1.5. Sharing. Users would disclose their mental activities. Bilibili users would complain about the concrete difficulty and frustration in lives, contrasting with abstract narration of feelings like “I'm crazy” produced by YouTube users. Nonetheless, positive feelings on both platforms are consistent, such as agreement, emotional release, and encouragement. Moreover, confessions can be deemed the most emotional sharing under the theme. Users on both

platforms tend to write lengthy stories to disclose thoughts, vulnerability, and experiences. The only difference in content is that the stories on Bilibili are mainly about the study, while those on YouTube would also mention something else in life.

4.1.6. Random chat. This theme concluded the comments with no meaning. Many YouTube comments use the identical sentence structure of “...because...” and are filled with random words.

4.2. In-depth interviews – RQ2 & RQ3

The section entails two categories. The first category is inductive and classified as “Motivation,” focusing on Chinese young generations’ non-community-related motivations for using LHH video on Bilibili, primarily answering the second research question. The other category is “Community,” where four themes echo the four dimensions in the SoC framework, *membership, influence, integration and fulfillment of needs, and shared emotional connection* (McMillan & Chavis, 1986). It is deductive to answer the third research question regarding how SoC is manifested through LHH communities on Bilibili.

4.2.1. Motivation. This category concludes reasons and motivations for young Chinese generations.

Mood management. The theme consists of relaxation, boosting moods, immersion, nostalgia, and a sense of ritual. Most participants reflected that LHH could soothe the nerves and improve moods. For example, P2 specified, “the video makes people space out, not think about things that get them emotional, and moods will become much better.” Moreover, immersion can take viewers to an ambiance created by the LHH video. Some participants defined it as “a trippy feeling” that is hard to escape (P8, P9). Besides, nostalgia feelings mainly come from participants’ resonance with the video and music, “recalling the memory about my childhood” (P4). Lastly, the sense of ritual to P2 is a moment of “wrap(ping) the day with a LHH video.”

Functionality. The theme concludes viewers’ functional purposes of using LHH videos. Specifically, most participants use the video to increase efficiency, improving self-regulation. For example, P7 described, “when I use my phone to play the video, it can prevent me from using the phone.” Additionally, several participants rely upon the Danmaku comments for companionship and emotional bond, reducing dullness. Moreover, a niche and superior feeling are identified among some participants. “Most people don’t know about the LHH, which makes me a minority that has an elegant taste, and I feel somehow superior to others,” P6 admitted. The functionality of the LHH video further

explains why participants focus more on personal user experiences than interactions with other users in the community.

Social environment. It denotes the political and economic environment that imposed living pressure on people, making them want to escape. For example, P1 stated, “We live in a fast-paced society with the hustle and bustle so that people would turn to this kind of video for a moment of peace.” Apart from that, some participants also referred to an overall change of trend in study music. For example, “the public taste of self-study music switching from techno to quiet music” (P4), as well as “currently such quiet music with immersion is pretty popular on the Internet” (P12).

Music. The theme indicates unique characteristics of LHH music. Some participants mentioned the peaceful rhythm that helps them stay focused, “in the beginning, the music is soothing, letting people quickly enter the study zone; while later, when people feel a bit exhausted, the music turns upbeat and cheers people up” (P3). Another important trait is low fidelity, which creates a blurry and trippy feeling. P4 elaborated on it with a metaphor, “The low-fidelity detail feels like a little match burning in winter, which sounds comfortable and fits the working condition.” P5, a game audio engineer, revealed that the LHH is produced by sampling the classical jazz and human voice from old TV and films. The sampling of familiar sounds, loops of rhythm, and beats makes it easier for people to accept LHH and more memorable. Moreover, compared to other study music, “LHH has more variations” (P12), “situating itself in a perfect balance of maintaining the focus and relaxing” (P5).

Connection to visuals. The theme concerns individual’s connections with the visual facet of LHH videos. Many participants found the visual aesthetics appealing and healing. “The cover photo of the video always attracts me the first,” P3 confessed, “(after entering the video page) the overall tone of the visual usually conveys a sense of serenity, and the setting in the visual can echo my current condition, making me comfortable.” Some participants also specified the loops of animation, and the generated social presence is powerful. For example, P10 discovered that “although there is no interactive relationship with the animating figure in the visual, it seems that we are synchronizing.”

Platform attributes. This theme refers to users’ motivations attributed to the Bilibili platform. For example, P1 indicated that Bilibili has become a top choice for video watching in China and has high-quality users. Others like P6 noticed that LHH video quality on Bilibili is higher than other platforms such as NetEase Music. He disclosed that Bilibili has better LHH videos for creative inspiration for music-making. Another observation is the joint effect of both visuals and music

on users thanks to the platform attribute. Participants realized the importance of having music intertwined with the visuals for the LHH. P12 described it as a “multi-sensory experience.”

4.2.2. Community. The SoC framework’s four dimensions are mapped out to match with the interview content.

Membership. Participants showed the feeling of membership, particularly when they identified themselves as a part of the community. For example, P11 identified herself with “a group of insomniacs” in the LHH community, saying they usually have a common representation in interaction, “(they) always hope to get rid of insomnia and could sleep like normal people.” Other participants perceived the membership is weak. P3 pointed out, “I think there is a sense of community. But still, this group is a bit scattered, not fixed, say there will not always be the same people here. So, it is quite fluid with uncertainty.” Noteworthy, *membership* is mentioned the least in interview content compared to other dimensions in the SoC framework.

Influence. The two sides of *influence* are spotted. Participants identified that they are influenced by others, falling into conformity. For example, P1 specified, “there are people sending Danmaku comments, containing ‘clock in’ and ‘studying,’ and then I will follow them by sending the same thing.” P1 further mentioned she would have also exerted influence on others during interactions, “Like some replies, I may have others ‘like’ me after I have replied to them, so I feel that I have impacted others.” P7 supplemented, “I feel that this kind of influence is reciprocal,” and “when other people see my Danmaku comments, they should also receive the goodwill or strength that I conveyed.”

Integration and fulfillment of needs. Most participants agree that people use this video to share common goals or needs. For instance, “people are looking for others who have similar interests” (P2); “people have to prepare for exams such as midterms and college entrance exams or have to finish their homework for the day” (P3). On the contrary, some participants indicated a deficiency in fulfilling people’s social needs. As P8 talked about, “using the video is more of a personal thing for me. I don’t want to use it for social purposes.”

Shared emotional connection. The theme seems to highly depend on individual experiences. Some participants were reported to have little interaction within the group and tend to pay more attention to themselves instead of others. For example, “I found no significance interacting. There is no need to say it out loud in comments although I do have some ideas in mind” (P5); “people will generally express their own emotions at the moment in Danmaku comments” (P3).

Other participants were aware of the shared emotional connection, but only when they felt resonated with someone else’s posts. For instance, “after browsing the video and comments, I would interact with others when I have similar thoughts” (P9). Overall, participants are not proactive in interacting with others. They would rather consume the video independently although they were conscious of such emotional connections.

5. Discussion

The present study attempts to answer the research questions through descriptions of the general participation in LHH online communities on Bilibili and YouTube, and Chinese youngsters’ motivations for engaging in the community on Bilibili. The discussion section explores why there are engagement differences on the two platforms from perspectives of platform affordance and socio-cultural background. It will also highlight some findings that answer the research questions.

5.1. The cultural difference and engagement difference with LHH videos

The cultural difference plays an important role in yielding the LHH video users’ engagement differences on Bilibili and YouTube. The distinctive exam culture in China is prominent. As the finding suggests, Bilibili users’ engagement characteristic appears to be study-oriented, contrasting with the YouTube case. Such a situation can be attributed to the longstanding exam-centric system in China (Kirkpatrick & Zang, 2011), where students face great pressure and are obligated to dedicate themselves to study, catering to the requirement of the strict pedagogy. Specifically, the College Entrance Examination (or Gaokao) is the same goal for all Chinese high school students. To attend elite universities, they must immerse themselves in excessive drills to get higher scores than other peers. As Stephen Wong (2009) said in the Asia Times, “it is possible that no other country has as many exams as China” (as cited in Kirkpatrick & Zang, 2011, p.39) The exam culture then encourages students to seek useful tools for their study and focus. The transported LHH videos on Bilibili with the inherent nature of “beat to study/relax” (Jachoy, 2018), spontaneously attracting them to express thoughts and feelings in response to the exams and study goals. The exam culture may cram Chinese students’ minds, so they could hardly turn themselves to things other than studying, which has been treated as a priority.

Apart from the exam culture, the booming fandom culture in China is also a crucial element in drawing the engagement difference. It helps explain why one of

Bilibili users' motivations is to study for their loved idols or celebrities, which is not for YouTube users. There are special groups on social media in Chinese fandom culture called *fanquan*, or "fan circles," who dedicate "everything" (including money, time, etc.) to building good images for the idols or celebrities they love (Liu et al., 2021). Members in the fan circles are mostly Generation Z, who share part of the active population with Bilibili users. Recently, the number of members has been increasing dramatically (Liu et al., 2021). This provides further support for the finding in comments that Bilibili users tend to express their motivations for celebrities and idols, while none of them occurs on YouTube. Therefore, cultural difference as a vital socio-cultural facet should be one of the most convincing interpretations in such a cross-regional issue.

5.2. Internal motivations and external incentives of using LHH videos on Bilibili

This section categorizes the reasons why Chinese youngsters watch LHH videos on Bilibili into internal motivations and external incentives.

Generally, unlike other similar music study videos such as songs or movie-themed music, the LHH video attracts viewers because of the less melodic change and low fidelity, interfering less into the study/work (P3, P4). Compared to instrumental music and white noise, it's also less monotonous (P12, P5). The distinctive sampling even makes it suitable for looping (P6). Quoting from P5, "it situates itself in a perfect balance of maintaining the focus and relaxing."

The theme of *mood management* as internal motivation, including *immersion* and *relaxation*, can match with the "affective needs" and "tension release needs" from UGT categories (Katz et al., 1973), and the "immersion" component (Yee, 2006). Also, *nostalgia* in LHH found by Wintson and Saywood (2019) is evident in the current study within the Chinese context, which contributes to its universality. Additionally, the study reveals that *nostalgia* as a subcategory to internal motivation would usually come along with users' immersion in the ambiance created by music and visuals (e.g., color, style).

The *social environment* and *platform attribute* as external incentives are also remarkable. The escapism manifested in the former can again echo the motivation literature (Katz et al., 1973; Yee, 2006). And the specific platform attribute of Bilibili allow users to enjoy an audio-visual feast to reach a "multi-sensory experience" (P12) compared to other audio distribution platforms such as SoundCloud and NetEase Music. The platform also plays a role in aggregating like-minded and high-quality users, encouraging them to contribute high-

quality works to the community, eventually leading to a virtuous circle.

Overall, the co-construction of internal motivation and external incentive has prompted Chinese youngsters to watch LHH videos on Bilibili.

5.3. Reflections of the SoC in LHH community on Bilibili

The SoC framework by McMillan and Chavis (1986) was mapped out in the study to examine the manifestation of four dimensions (membership, influence, integration and fulfillment of needs, and shared emotional connection) in the context of the LHH community on Bilibili. Most of the findings support the previous studies investigating the SoC. This section will elaborate on the consistency and contradictions of findings with antecedents.

As for the *membership*, a weak "sense of belonging and identification" has been spotted since participants perceived a "scattered community" with fluidity (P3), which may result from a lack of "personal investment" (McMillan & Chavis, 1986, p. 10), as one of the important contributors of *membership*. The interview data also suggest *membership* is the least mentioned dimension among others. This result is probably because audiences gathered under the video due to the functionality, the ambiance and affiliated emotions, but there is hardly a meaningful cultural discussion that could be sparked and connect them altogether.

Influence dimension is mainly reflected through conformity in the LHH community on Bilibili. Specifically, there are many homogenous comments regarding check-in activities and motivation. This finding indicates that users in the LHH community are prone to be influenced. Besides, interview data (P7) also supports the existence of concurrent reciprocal influence, although the subjective influence appears relatively weaker. The finding challenges Blanchard and Markus (2004)'s research result that *influence* is less important in virtual groups. The special affordance of Bilibili platform like the anonymity of Danmaku comments may play a major role as viewers may be more willing to comment without worrying about others recognizing their identities. The anonymity in the online environment can coordinate well with peer influence to further reinforce the bidirectional influence including conformity (Gibbs et al., 2019).

In terms of *integration and fulfillment of needs* and *shared emotional connection* dimensions, they are embodied in the individual needs-oriented characteristic discovered in the LHH community. The individual needs-oriented characteristic can be seen in the thematic analysis of comments such as *community* ("asking for help"). Specifically, Bilibili users tend to seek concrete

and functional assistance more than abstract emotional support that deemed less practical. Some interviewees also reported that they would rather not actively interact with others and expect others to respond, even though they have already published comments or fulfilled their study goals in the community. In this case, the *shared emotional connection* is perceived weak as there exists no high-quality and clear interaction based on the definition (McMillan & Chavis, 1986).

6. Contributions and implications

The current study is vital in initiating a dialogue on the LHH community from perspectives of cross-culture and platform attributes by comparing the community on Bilibili and YouTube. It also helps to understand the LHH community in the Chinese context further. Moreover, this research can contribute to the SoC framework by extending the theory to an emerging niche online community. It also strengthens the argument made by previous researchers that *membership* in virtual communities may be not the same as offline communities. Finally, the finding on *influence* can further contribute to the SOVC as well that *influence* does play a role in the virtual space, deserving more attention. From a practical perspective, the findings suggested viewers' motivation for interaction is overshadowed by the utilitarian motivation. This may alarm the Bilibili platform to add more social features such as a live chat box (similar to the one in YouTube) to create more synchronous interactions, increasing the sense of co-presence of the LHH community. Bilibili could also improve notification of, and access to private message system, enabling people to be more motivated for socialization.

7. Limitations and future research

Since the study area is emerging, there is much space for future research to explore. For example, the parasocial relationship with the anime girl was found as one of the motivations for watching LHH videos on Bilibili. Both comments and interview data revealed that users could relate to the visuals, which matches the literature that there is a kinship between the viewers and the Study Girl (Lo-fi Girl) (Taber et al., 2020). The study thus provides evidence that the phenomenon is not culturally specific, which needs further research to elaborate on.

This research also has the following limitations. First, the study mainly discusses the audience or listener's perspectives, while it didn't investigate the group of LHH producers, which is the other important category in LHH online communities (Winston &

Saywood, 2019). Second, the present study only focuses on the video platform as an object which is not the only habitat for LHH users. Third, the research only collected English comments on YouTube which could exclude other languages and related cultural participation.

By studying the LHH community in the Chinese context, this study hopes to raise researchers' awareness of niche online communities and enable a better understanding of the kind of community from angles of socio-culture and technological affordance.

8. References

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