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ZHANG, Hantian <<http://orcid.org/0000-0003-2759-5609>>

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Behind the Scenes: Exploring Context and Audience Engagement Behaviors in YouTube Vlogs

Hantian Zhang¹[0000-0003-2759-5609]

¹ Sheffield Hallam University, Sheffield, S1 1WB, UK
Hantian.Zhang@shu.ac.uk

Abstract. Famous video bloggers (vloggers) on YouTube can develop large audiences, which can be related to the gaining of audience engagement (AE), manifested by the viewers' participation and consumption on YouTube. Studies have unveiled vloggers' behaviors for engaging audiences, or audience engagement behaviors (AEBs), in their videos, including interacting with viewers via comments, disclosing self-information, giving rewards, and offering other information. Meanwhile, video blogs (vlogs) are produced under "vlogging context" - situational elements involved in vlog production. Studies have shown the effect of context on the content of online media. However, while it can be argued that context can affect vlog content produced, the contextual factors that may shape vloggers' AEBs within the content have not been explicitly explored. This research aims to propose contextual factors that can condition vloggers' AEBs on YouTube. A qualitative case study on three popular vloggers was implemented. A thematic analysis was performed on sampled vloggers' videos to identify contextual factors that can condition the three vloggers' AEBs. The results propose that personal, environmental, and medium context are three main contextual factors that condition the three vloggers' AEBs. This research argues that how vloggers' AEBs are presented to the audience depends on their vlogging context. It expands the understanding of YouTube vloggers or similar streaming media creators' practices for AE by considering the role of context.

Keywords: Context, Vlogs, YouTube, Audience engagement

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1 Introduction

Video blogs (vlogs) are a type of online streamed media uploaded to the Internet, in which video bloggers (vloggers) document their daily activities or cover specific topics [1]. The founding of YouTube in 2005 encouraged vlog consumption [2] since it allows users to easily distribute online videos [3]. Vloggers who are operating on YouTube are also called YouTubers [4]. Today's vloggers on YouTube are producing videos covering various topics, including beauty, comedy, and gaming. Recent years has also seen a widespread consumption of vlogs [5]. Some vloggers have developed large audiences

with millions of subscribers on YouTube [6]. Vloggers' success in terms of viewership can be related to the gaining of *audience engagement (AE)*, manifested by viewers' participation (e.g., liking and commenting on videos) and the consumption of video content [7-9], creating continuous connections between vloggers and viewers. Previous research found that vloggers implement audience engagement behaviors (AEBs) to establish AE including responding to comments [10], disclosing personal stories [11, 12], promoting information that viewers may find useful [9] and providing rewards [13]. Those AEBs are existing in the vlog "content" – audio-visual information that is directly available to the audience in vlogs as in media [14].

This paper shifts attention from the content of vlogs that contains AEBs to the vlogging "context", which has rarely been discussed in vlogging. In general, context relates to situational elements that are critical to interpreting an object [15]. In information science, context was defined as "the quintessence of a set (or group) of past, present and future situations" [16, p.3], for which an "information horizon" consisting of a range of resources is determined for an individual to seek related information [16, p.8]. Context also refers to the information that indicates the situation of entities in Human-Computer Interaction (HCI) [17]. In (online) media, context relates to situational elements involved in content production, consumption, and distribution [18-20]. So, while vlog content refers to factors in vlogs that are directly received by the audience, this paper sees vlogging context as elements that reflect the circumstances of different entities involved in the vlog production process. The contextual factors can relate to the situations of vloggers, film locations, audiences, and the online platforms. However, while it can be argued that context can affect vlog content based on previous studies (e.g., [21, 22]), the contextual factors that may affect vloggers' AEBs within the content have rarely been explored.

This paper aims to explore the question: "What are the contextual factors that can condition vloggers' audience engagement behaviors in their videos?" The research implemented a qualitative case study of three popular vloggers on YouTube. In the study, contextual factors behind the vloggers' AEBs in their videos were observed. As mentioned, existing research mainly focused on the delivery of AEBs in vlog content. This paper, however, emphasizes the crucial role of context behind those AEBs. So, this research took an initial step to widen the understanding of YouTube vloggers or similar streaming media creators' practices for AE by considering the role of context in addition to content. Also, since the concept of context is rarely discussed in vlogging, this paper contributes to establishing an initial exploration of context in vlogging. Therefore, this paper contributes to the literature that explores context, content, and AE in streaming media. For practical implications, this study can help vloggers and potentially creators on other streaming media to build audience bases using strategies based on their production context.

2 Related Work

2.1 Vlogging Context

Limited studies have discussed context in vlogs specifically. Snelson [23] sees context as filming locations for vlogs. However, research in other media implies a broader concept of context in vlogs.

For example, in HCI, context is defined as any information that can indicate the situation of entities, including locations, people and object that is related to the user-computer interaction [17, 24]. Matuk et al. [15] defined context in computer-supported collaborative learning (CSCL) as situational elements involved in the CSCL process, which has focal, immediate, and peripheral layers. Each layer relates to elements like study tools, participants' status, and institutional environment. Context also relates to situational factors in the consumption, production, and distribution of (online) media. For example, in television studies, context is considered to be the environment where the audience consume television programs [25] or the presence of co-viewers (i.e., whether viewers are watching television on their own or with others) [19]. Regarding production, Lena's [18] research in music production refers "social context" to the music market environment, namely whether the market is dominated by independent or major labels. Furthermore, for distribution, Jaakonmäki et al. [20] see context or "contextual features" as relating to when and where the content is posted on the social media platforms.

Using YouTube to watch or distribute vlogs can be seen as a form of HCI between users and YouTube. Vlogs are also audio-visual media that are consumed and produced. Therefore, while vlog content refers to elements the audience can directly see or hear from a vlog including the vlogger, their (non)verbal behaviors and objects shown, based on the above definitions, the context in vlogs can be considered generally as factors that indicate the situations of the entities involved in the consumption, production, and distribution of vlogs on related online platforms.

This paper focuses on the effect of context on AEBs within the vlog content produced. Therefore, the author views vlogging context as elements that indicate the situations of entities that are involved in the vlog production process.

2.2 Vloggers' Audience Engagement Behaviors (AEBs)

Vloggers were found to encourage AE in their videos through different behaviors, especially AEBs. Four AEBs that can be identified in previous research are *interaction*, *self-disclosure*, *information offering*, and *rewards* [9-13].

Interaction relates to vloggers' behaviors that can trigger viewers' actions beyond watching videos, or vloggers' responses to viewers' actions. For instance, vloggers on YouTube were found to encourage viewers to comment on videos [9], ask viewers to suggest new videos ideas [10], and respond to viewers' comments [26].

Self-disclosure refers to vloggers' disclosure of personal information in their videos. For example, vloggers may show their daily life activities in videos [27, 28], or even talk about their life struggles [11]. Self-disclosure is associated with the feeling of

authenticity [11, 12]. This makes viewers feel a deep connection with vloggers [28], driving their ongoing YouTube activities [29].

Rewards are offered by vloggers to reward audiences' actions. Research has shown that vloggers ask viewers to like the videos [9] which could allow the audience to get more similar content. Some vloggers also announce giveaways of certain products to engage their viewers [13].

Finally, information offering refers to vloggers' providing information viewers may need or find useful. It is shown by previous research that vloggers promote information such as their social media sites [9, 10] in videos. Users' participation and consumption on social media are found to be affected by the need for information [30, 31]. Therefore, vloggers' information offering may engage viewers by satisfying such a motivation.

2.3 Vloggers' AEBs and Vlogging Context

Previous research suggests the effect of context on user engagement strategies on social media sites. Typically, Jaakonmäki et al. [20] suggested marketing professionals can choose online influencers and launch marketing campaigns by considering the context (i.e., days and hours) on social media. This suggests the impact of context on marketers' decisions on the engagement strategies, in the form of social media content. However, there is a lack of discussion regarding the contextual factors in vlogs on YouTube that may affect vloggers' AEBs.

On the other hand, studies show that context can affect (online) media production. Research suggests that vloggers' features such as their personalities and production skills may condition their non-verbal behaviors (e.g., gaze, facial expressions) in the videos, and further affect viewership of the vlogs [32]. Those features can be seen as vlogging context that affects vlog content. Context has also been seen as affecting the content uploaded to YouTube. Yarosh et al.'s [22] research showed that due to YouTube's moderation policies and age restrictions, youth-authored content on YouTube is less likely to be inappropriate compared with those on Vine. Similarly, Rieder et al. [33] indicated that YouTube's algorithmic structure can affect creators' production strategies including making longer videos. These studies reflect the effect of the context of YouTube on the content user produced. Research in written blogs also unveiled the effect of context on content. For instance, researchers found several motivations of bloggers, including documenting personal lives, expressing emotions, and presenting opinions [21, 34]. These motivations can be seen as connecting to the context of bloggers that affect blog creation. Furthermore, context also affects traditional media production. Typically, Lena's [18] research on the market context and content of rap music showed that song lyrics in the market dominated by independent labels are different from the ones in the market dominated by major labels. Since vlogging context relates to situational factors involved in vlog production, it can also be argued that vlogging context can affect the vlog content produced. Meanwhile, as AEBs are delivered by the content of the vlogs, it can be argued that the vlogging context can also condition vloggers' AEBs that are conveyed by the content.

However, there is still little research that has specifically examined the vlogging context that may influence vloggers' AEBs on YouTube. Therefore, this paper aims to

establish a starting point to fill this gap by exploring the question: “What are the contextual factors that can affect vloggers’ audience engagement behaviors in their videos?”

3 Research Method

The research focuses on exploring contextual factors behind the four vloggers’ AEBs derived from existing research mentioned, which are interaction, self-disclosure, rewards, and information offering. It is worth noting that AE is also related to the audience-centered Uses and Gratifications Theory (UGT), in which audiences engage with media due to their needs including social interaction, information seeking, entertainment, and personal identity [35, 36]. Audiences can also be producers on social media like vloggers, whose production behaviors are driven by their own needs and motivations [36]. It can be argued that audience motivation and gratification is important for AE on YouTube [8]. However, instead of focusing on the categories from UGT, the above AEBs the author chose to investigate are specific behaviors vloggers are implementing that may help them to gain AE on YouTube, although some of them may still relate to UGT.

A qualitative case study on three popular vloggers was implemented. A case study allows researchers to investigate subjects in detail in real-life situations [37], without separating them from their environments [38]. Since vlogging context is behind the production of vlog content, a way to identify those contextual factors is to have an in-depth observation of vloggers’ natural practices of AEBs within YouTube. Therefore, a case study fits the research requirement.

Three popular vloggers on YouTube were selected: Zoe Sugg (beauty vlogger), Daniel Middleton (game vlogger), and Lilly Singh (comedy vlogger) [39]. Each vlogger had reached over 10 million subscribers in 2017 on YouTube. As of 2020, only 700 out of 37 million YouTube channels recorded have 10 million subscribers [6]. The subscribers reflect those vloggers’ high AE, since subscribing to a YouTube channel “demonstrates that a user desires a continued relationship with that YouTube personality” [28, p.89]. The three vloggers are focusing on different topics namely beauty, gaming, and comedy, presenting the nature of vloggers’ topic diversity on YouTube. This makes the shared patterns discovered from the vloggers more important than focusing on only one vlogger. All vloggers started uploading videos from 2012 or earlier. This reflects these vloggers’ long production histories and ensures the richness of information obtained from them [40, 41].

3.1 Sample Collection

The study targeted the vloggers’ YouTube channels: *Zoella* by Zoe Sugg [42], *DanTDM* by Daniel Middleton [43], and *Lilly Singh* by Lilly Singh [44]. Videos uploaded by the vloggers before August 2017 on their channels were collected. The collection tool was Link Klipper, a Google Chrome extension. In total, 3,495 videos were extracted. Among them, 346 are from Zoella, 2,535 are from DanTDM, and 614 are

from Lilly Singh. Each vlogger features multiple video types. Hence, to achieve a sufficient vision of the featured videos on the vloggers' channels, the videos have been categorized based on their format and topics [39]. After the categorization, one video was selected from the beginning or close to the beginning of each year in each video type, up to the year 2017. In total, 200 videos were collected as the final samples. There are 76 videos from Sugg, 50 videos from Middleton, and 74 from Singh [39].

One thing that the author would like to address is that the collection of the main video data happened back in 2017. This creates a potential limitation regarding the timeliness of the results. On the other hand, each vlogger had already reached an extremely high AE reflected by their subscriber amount back in 2017, which is also maintained. Since AEBs are implemented by vloggers to encourage AE, it can be argued that the AEBs of the vloggers up until that period are extremely important for their overall success in terms of audience base. This also makes the contextual factors behind those AEBs equally important. Therefore, the results from the data are still relevant by unveiling critical contextual factors behind the AEBs of those vloggers during the period when their high AE has already been built. This also opens future research opportunities to compare the results with later data. Furthermore, research rarely directly addresses the relationships between contextual factors and vloggers' AEBs. Hence, this research will still contribute to the field.

3.2 Examination

The video samples were analyzed through thematic analysis (TA). According to Braun and Clarke [45], TA is used to find patterns in a range of texts that is crucial and relevant to the research question. Although Braun and Clarke mainly introduced TA in psychology such as analyzing interviews and focus group transcripts, they mentioned that the method is widely used beyond psychology and can be used in audio-visual works. In this case, using TA is suitable to identify important patterns of both AEBs and related contextual factors.

The examination took two steps. The first step is identifying vloggers' AEBs in their videos. The research is focusing on pre-defined behaviors in vlogs based on existing literature (interaction, self-disclosure, information offering, rewards). A deductive thematic analysis was adapted on sampled videos to identify these behaviors in the vlog data. All video samples were watched in full, and the four AEBs were applied to relevant content as codes. If the AEBs were delivered verbally (e.g., asking for comments as interaction), transcripts were extracted and coded. Related non-verbal factors (e.g., showing daily activities as self-disclosure, and providing some information in the video description) were transformed into the textual description and coded [39].

Step two was following a more inductive TA approach to identify the merge of themes that reflect the influence of contextual factors on the AEBs. The vlogs were re-evaluated with coded AEBs. Since vlogging context can relate to any element in the vlog production, the evaluation was done by identifying how each AEB can be affected by elements within the three broad layers of context adapted from Matuk et al. [15]: focal, immediate, and peripheral context. The focal layer involves elements that are essential to the vlog content that may influence the AEBs. These may include the

activities, people, objects that are directly presented in the video, and YouTube as a tool for distributing vlogs. The immediate layer involves elements that are outside the focal context but may still be important for the AEBs. These may include the experience of vloggers, and their relationships with other people when producing the video. Finally, peripheral context involves broader environments when vlog productions take place. These three layers of context were originally introduced in CSCL [15]. However, the author considers these three layers of context can be adapted as a general guideline to evaluate the vlogging context. It is because producing and distributing vlogs on YouTube for viewers to consume is also a form of computer-mediated communication with similar entities as CSCL such as participants (e.g., audience and vloggers), tools (e.g., YouTube), and the environment.

Based on this guideline, contextual factors that may influence the AEBs were primarily identified from the video content analyzed, including the AEBs themselves and other content delivered around the behaviors. Resources besides video content were also used in the evaluation for more evidence, such as other videos on the vloggers' channels, their social media sites, and the YouTube environment. For instance, if the vloggers indicated a specific environment have affected their video production, such as trends, further exploration on the internet was also conducted to provide additional evidence of this trend. After the evaluation, codes were applied as descriptions indicating how each AEB were affected by the elements within the vlogging context. Further comparisons between the descriptions were drawn to identify patterns. Similar descriptions of the contextual factors' effect on the AEBs were grouped and given a new code. For example, if vloggers' relationships with other people were seen as affecting the AEBs, the contextual factor was coded as *social relationships* within the *vlogger context* [39].

3.3 Reliability

The author conducted the solo coding process without the second coder, which may cause potential problems regarding reliabilities of the results. To minimize the issue, strategies have been implemented. One is the repeated review and analysis of the data [46]. The whole analysis process was executed at least twice with a time gap of at least two weeks in between each analysis [47]. This allows the author to evaluate similarities and differences in the coding results to further justify outcomes. The second strategy is using triangulation by referring to multiple resources for data interpretation [48, 49], meaning the evidence from other related resources, including vloggers' social media, YouTube comment sections, and other videos were also used to justify the results.

4 Results

Three main contextual factors that can affect the three vloggers' AEBs were identified through the coding process: *personal*, *environmental*, and *medium context*. Within these three main factors, multiple contextual factors were identified.

4.1 Personal Context

Personal context involves *vlogger* and *audience context*.

Vlogger Context. Vlogger context refers to vloggers' situations during the vlog production. Factors in the vlogger context that can affect AEBs mainly refers to the situations of vloggers' *social relationships*, *personal experiences*, and *social characteristics*.

Social relationships relate to the situation in which vloggers has specific relationships with other people, such as being family members and friends with others. The results show that all vloggers have involved other people in the video due to their relationships, which affect their AEBs, especially self-disclosure and information offering.

For example, in Sugg's vlogs, she involves other people to answer questions set by her. In a video, she asks her boyfriend and brother about her past (v1)¹, including her first childhood holiday and her first job. However, in another similar video with her boyfriend and another friend, the questions are related to her status such as her favorite food and zodiac sign (v2). The involvement of these questions that will unveil Sugg's personal information can be seen as a form of self-disclosure as an AEB. The choice of questions may be conditioned by the people she involved. Therefore, in this case, social relationships as a contextual factor conditioned Sugg's self-disclosure.

Singh also involves other people in her video production. For instance, she invites her family members and asks them about her childhood stories (v3). Asking the questions that will unveil Singh's childhood stories can be seen as self-disclosure, conditioned by her relationship with her family. Singh also involves other vlogger friends in videos but resulted in different types of content, such as comedy sketches (v4). In those videos, she promotes her friends' channels. This can be seen as information offering conditioned by Singh's relationships with those vloggers. Promoting other vloggers' channels may not only drive viewers to subscribe to those vloggers but also lead viewers to continuously engage with her content to get more related information regarding what other vloggers they might be interested in subscribing to.

In the sampled data, there is one video of Middleton meeting his friend. The whole video shows him picking up his friend and taking part in different activities together. The video is a self-disclosure of his life (v5). However, the specific events disclosed in the video would not exist or be different if Middleton had not built a friendship with the person involved. Therefore, social relationships also condition Middleton's AEBs in his video.

Personal experiences refer to situations in which vloggers are experiencing or have experienced something when making vlogs. It was found to affect AEBs, especially interaction and self-disclosure. For example, all vloggers show their life activities in their videos. Sugg started a life vlog series on her channel Zoella and now constantly updates it on her other channel *Zoe Sugg*. Singh also records her experience on her channel Lilly Singh, with some latest similar videos uploaded on her second channel

¹ Videos are referenced using their numbers in the Appendix. For the full list of videos referenced in the paper, please see Table 1 in the Appendix.

Lilly Singh Vlogs. Middleton also records footage of him attending gaming events in his early videos. These videos directly disclose the vloggers' life to their audiences as self-disclosure. However, without the context in which the vloggers are experiencing the activities, the vlogs would not be made in the first place. Their experiences may also affect their decisions of what to show to viewers in the videos.

Furthermore, all vloggers have answered questions sent by viewers about their experiences as interaction. For example, Sugg answers questions about the special dream she used to have (v6). Singh was asked about her travel experience in New Zealand (v7). Middleton answers a question regarding his video-making process (v8). Vloggers can choose the questions to answer when producing the video. If the vloggers did not have related experiences, certain questions might not be picked or answered in the video to interact with their viewers.

Finally, vloggers' social characteristics relate to their social features such as interests and hobbies. The results showed that the social characteristics lead to the three vloggers' self-disclosure. For example, in one video, Sugg discloses multiple things about herself, including her interests such as favorite food (v9). Middleton in a gameplay video mentions that the game mode he is playing is one of his favorites (v10). Singh also discloses her interests in videos, such as asking her family about her favorite drink (v3). It can be argued that the action of sharing these interests as self-disclosure is driven by their context of having these interests in the first place.

Audience Context. The results propose that the situations of the three vloggers' audiences, or audience context, also affects their AEBs. The results showed that the audience context that can affect AEBs are related to the situations of *audience experiences* and *interests*.

Audience experiences refer to the situation in which viewers experienced things that vloggers may be aware of when making the videos. All vloggers' productions have been affected by audience experiences, which also affect their AEBs. For example, in a video about skincare, Sugg says that the reason she has made this video is that people have similar skin problems to hers (v11). This indicates that the video production was driven by viewers' experience. This has been further evidenced by messages people sent to Sugg on Twitter regarding their skin problems that may influence Sugg's decision to make the video. This leads to her disclosing her skin issues as self-disclosure and information offering regarding the skincare techniques.

Certain comedy videos produced by Singh are about relations between parents and children. At the end of the video, she usually asks viewers to comment under the videos to say if they can relate to the content (v12). This may indicate that she has noticed that her audience has similar experiences when she makes such a video. The evidence was shown in her interview with CBC in 2014, in which she indicates that when she talks about her experiences with her parents, her fans always mention their similar experiences [50]. Encouraging comments in those videos can be seen as a form of interaction. However, it can be argued that such an AEB was conditioned by Singh's awareness of audience experiences.

Middleton usually asks for gaming advice from his audience, which is the interaction for encouraging AE. For example, in a gameplay video, he has encountered some

difficulties when doing an in-game task. He then asks his viewers what he has done wrong (v13). It indicates that Middleton knows his viewers are playing the same game. This has been further evidenced by the viewers' advice provided in the comment section in his previous gameplay video of the same game (v14). This reflects the context of audience experience affecting Middleton's interaction with viewers in the video.

Audience interests refer to the situation in which viewers are interested in specific video content. This contextual factor was identified to mainly affect the interaction and rewards. For instance, at the start of a video in which Sugg showcases items she kept in her bag (v15), she says this video is highly requested. Singh, at the beginning of a video where she reviews the Grammy Awards, also mentioned the video was requested by the viewers (v16). It can be argued that the requests from the audience are conditioned by their viewers' interests in certain video content. This consequently drives vloggers' responses to the requests as the interaction for AE. Middleton in a gameplay video also indicates he made this video because the viewers liked the last one (v17). This indicates viewers' interests has led to Middleton making more similar videos as rewards to viewers' likes.

The effect of audience interest can also be identified from the audience's actions towards vloggers. An example is when vloggers answer viewers' questions. Without audience interest, the questions might not be asked, and the vloggers might not be able to pick those questions to answer and hence interact with their viewers.

4.2 Environmental Context

Environmental context relates to the situation of vloggers and audiences' surroundings that can affect the production of videos, which involves the situations of *social* and *physical environments*. Both environments may alter vloggers' productions and hence their AEBs.

Social Environment. Social environment refers to the situation in which some social activities happen around vloggers and audiences. The analysis found that the situational factors within this context that can condition vloggers' AEBs are mainly *YouTube trends* and *social events*.

YouTube trends refer to periods when creators are making a similar type of video on the site due to its popularity. All vloggers have made videos following certain trends, resulting in different AEBs. For instance, Sugg made a video series called "My Brother Does My Make-up" (v18). The whole video series was initially made as a response to viewers' requests. On the other hand, the "who does whose makeup" has been a popular challenge since 2010 [51]. This trend may have driven the audience to request the video from Sugg, resulting in her response to the request as a form of interaction. Similarly, one video shows Singh doing her makeup, but with her vlogger friend as the voice-over (v19). The video was made in the context of another trending happened on YouTube [52]. The video results in Singh promoting the friend vlogger's channel, which can be seen as an information offering. Middleton made a video to show his reaction to fan-made remix videos of him (v20). The production of this fan-made video may be driven

by the popularity of making vlogger-related remix videos. This trend may then drive Middleton to react to the fan creations as a form of interaction.

Social events typically refer to situations in which there are public or popular events, such as festivals and (inter)national days. For example, Sugg uploaded an Easter DIY video (v21), containing different AEBs including providing guides for Easter DIYs as information offering, asking viewers to like the videos for more similar videos as rewards, and encouraging viewers to tweet her their reproduction of her DIYs as interaction. The existence of these AEBs can be seen as being affected by Easter as a social event that drives Sugg's video production. Singh finished a New Year's video by using her audiences' clips (v22) as a form of collaboration or interaction. The key contextual factor that drives such a collaboration is the New Year as a social event. One of Middleton's videos is about him attending a gaming event (v23). This video is his self-disclosure of his experience to his viewers, and the primary driver of video production is the gaming event as a social event.

Physical Environment. Physical environment represents situations of artificial or natural environments. This specifically refers to the *locations* around the vloggers during the vlog production.

The results show that locations lead all vloggers to make videos that disclose their life activities. For instance, a video from Sugg presents her activities in different locations, such as her friend's home (v24). Similarly, Middleton shows his trip to Australia, including showing his hotel view (v25). Singh's video in which she travels to New Jersey shows several locations, such as showing a sports stadium (v26). Sugg and Middleton also filmed tours of their offices to disclose their production environment (v27, v28). In these cases, it is the features of the locations that drive vloggers to show particular footage to their audience as self-disclosure.

4.3 Medium Context

Finally, based on the coding process, the results show that YouTube, as the medium for vlogging, also has its context that can affect vloggers' AEBs. For instance, YouTube offers functions that allow vloggers to engage viewers with interaction, such as using comment sections. YouTube also has features that directly affect the ways of producing and consuming videos. For example, Singh and Middleton did live streams on YouTube. The live stream function gives vloggers the chance to interact with viewers in real-time. It can be speculated that YouTube's algorithmic structure also plays an important role in vlog production. For example, as mentioned, vloggers have created videos following YouTube trends, leading to different AEBs embedded in the video content. The making of these videos can be affected by the trends as social environmental context. However, vloggers may also know that trending videos can be recommended to the viewers by the algorithm. Overall, it can be argued that the medium context of YouTube regarding its functions is critical for vloggers to engage their audience.

5 Discussion and Implications

What are the contextual factors that can condition vloggers' AEBs in their videos? Based on the results from the case study on three popular vloggers, this paper proposes that personal, environmental, and medium context are three critical contextual factors that affect vloggers' AEBs in their videos.

Personal context involves vlogger and audience context. Vlogger context refers to the situations of vloggers in vlog production. These involve the situations of vloggers' social relationships, personal experiences and social characteristics as three vlogger contextual factors. The results propose that the situation in which vloggers have different social relationships with other people can drive vloggers' content production and condition their AEBs due to the specific content produced. The situation of vloggers' personal experiences when making the video also determines what content they will show to the viewers, resulting in AEBs that tight to those content. Finally, the situation of vloggers' social characteristics, such as their interests and hobbies also condition their content produced, and hence the AEBs within those content. Audience context refers to situations of audience-related factors that vloggers are aware of in vlog production, namely the situations of audience experiences and interests as two audience contextual factors. The results propose that vloggers make specific content that accommodates the status of their audience experience and interests, within which related AEBs are embedded.

Similar to previous research, the above results indicate the effect of personal context on vlog content. For example, research by Biel and Gatica-Perez [32] indicates that vloggers' non-verbal behaviors such as their facial expressions, eye contact, and the distance to the cameras when making the videos can be conditioned by vloggers' features including personalities and production skills. Researchers in blogs also found that different motivations of bloggers such as the willingness to document their lives, discuss opinions or form communities, lead to different types of written blog content [21, 34]. These are similar to how vlogger context affects vlog content in the results. Furthermore, Pries et al. [53] in their research on youth usage of YouTube, found that different purposes such as being entertained or learning lead young audiences to consume different content on YouTube. This could potentially lead YouTubers to make videos to accommodate those needs, which can be seen as similar to an audience context affecting the vlog content in the results. However, instead of just showing the effect of personal context on vlog content, the above results further propose the specific personal contextual factors that can condition vloggers' AEBs within the content.

Environmental context relates to the situations of the surroundings in video production, which comprises social and physical environment. The contextual factors in the social environment are the situations of YouTube trends and social events. The results propose that the context in which different YouTube trends and social events are happening drives vloggers to produce specific content to follow those events and trends, leading to the implementation of AEBs in those videos. The physical environment mainly refers to the situation of locations for vlog production. The results propose that the status of the locations, such as their features, drive vloggers to make video content about the location, leading to AEBs in those content.

The results are similar to previous research that showed the effect of environmental factors on media production. For instance, Lena's [18] research in rap music showed that the music content is influenced by the market context in which whether major or independent labels dominate the market. This can be seen as a form of the social environment around the media production, similar to the YouTube trend or social events that affect the production of the vlogs. However, the results in this paper further propose the factors in the social environment that can affect vloggers' AEBs within the content.

Locations have also been specifically emphasized as an important contextual factor in vlogging. Snelson [23] studied students' vlogging behaviors and categorized vlogging context as different filming locations. The researcher found that vlogs made in classrooms are involving vloggers and other people showing school life, while vlogs filmed at home involves vloggers talking about school experience such as making complaints. Similarly, the results on the three vloggers show that the vloggers content is conditioned by the filming locations. However, the results further propose the effect of locations on vloggers AEBs within the content.

Finally, medium context refers to the features of YouTube as an online medium for delivering vlogs to the viewers including its functions such as live streaming and technical structures such as algorithms. According to Calder et al. [54], users' experience of online media "is thought to be more active, participatory and interactive" (p.323). Similarly, YouTube as an online medium provides vloggers and viewers with functions to engage with each other, just like other platforms such as Twitch and Mixer (now known as Facebook Gaming) [55]. Previous research has also shown the effect of YouTube context on its content. For instance, Yarosh et al.'s [22] research on YouTube and Vine indicate that the platform policies of YouTube, such as its age restrictions and the content moderation method led to less inappropriate content on YouTube than Vine. Reider et al. [33] indicate YouTube's algorithmic structure affects not only creators' strategies in video production but also their overall behaviors on the site. These include making longer videos, networking with other channels, and changing publishing timetables. While results in this paper are comparable to the existing research where the context of YouTube as a medium altered the creators' behaviors and content, this paper proposes the medium context's effect on vloggers' AEBs.

When it comes to implications, previous research mainly focused on vloggers' AEBs in the video content. This paper shifts the attention to the vlogging context, which can help to build a widened understanding regarding the building of AE between vloggers and audiences on YouTube. The results argue that although vloggers can employ different strategies to engage their viewers, how or whether these factors are presented to the audience depends on various contextual factors involved during the vlog production. This reflects the context-dependent nature of AE in vlogging. It highlights the importance of context on AEBs and the vloggers' building of audiences, and how an audience can be influenced by the vloggers. This paper opens new directions on researching vloggers and similar streaming service producers' behaviors for building their audiences. It contributes to the existing literature in content, context, and AE in streaming media.

Researchers have also suggested marketing professionals take context into account when implementing user engagement strategies on social media (e.g., [20]). Therefore,

for practical implications, this study may help vloggers and potentially creators on other steaming media to consider their production context when building a audience bases using different strategies. The research can contribute to creating a production guideline for creators to implement AEBs based on their production context for AE. In addition to guidelines, the research can also contribute to the design of video templates for the YouTube platform for creators to foster AEBs based on their context.

The paper also has certain limitations. First, the main video data were gathered in 2017. Analyzing these data initially addresses the research aim to explore important contextual factors for the three vloggers' AEBs, based on their practices during that period in which their audience base has already been built. As YouTube is a fast-changing platform, future research could focus on more recent vlogging practices and compare them with the current research outcome, to see whether there are similar or new discoveries to be made. Second, future research could examine the vloggers from other fields. Third, the results might not indicate the levels of efficiency of those contextual factors. For example, whether the personal context is more effective than the environmental context on AEBs. Future research could consider comparing these factors. Finally, contextual factors that may affect the creator's AEBs on other streaming or video platforms such as Twitch or Tiktok, can also be considered in the future study.

Appendix

Table 1. List of the videos referenced in the paper

Video no.	Video Title	URL
v1	Boyfriend VS Brother Zoella	https://www.youtube.com/watch?v=aLPI2G-epfw
v2	Best Friend VS Boyfriend Zoella.	https://www.youtube.com/watch?v=aalyr7v0t14
v3	My Family Answers Questions About Me	https://www.youtube.com/watch?v=WXYdIarPN2s
v4	The 5 Stages to Becoming a Fangirl (ft. Grace Helbig)	https://www.youtube.com/watch?v=mvVz4p7LCbQ
v5	WE SAVED A RABBIT..	https://www.youtube.com/watch?v=BQQmUso6eZE
v6	The Questions I've Never Answered Zoella	https://www.youtube.com/watch?v=7Y9hldc2ZFs
v7	#AskSuperwomanLIVE (01/11/16)	https://www.youtube.com/watch?v=2AvpV7o6vEM
v8	YOUTUBER CONFESSIONS TDM Vlogs #29	https://www.youtube.com/watch?v=UnSztuERMS4
v9	50 Facts About Me Zoella	https://www.youtube.com/watch?v=9NGQm9i33Mc

v10	Minecraft YOU WANT EGGS WITH THAT BACON?!	https://www.youtube.com/watch?v=UNNjFQZ25HQ
v11	My Makeup Routine For Problem Skin Days Zoella	https://www.youtube.com/watch?v=1VgLebKlqDU
v12	The Difference Between You and Your Parents.	https://www.youtube.com/watch?v=6BxbaVjnMSM
v13	"OIL EXTRACTION" Diamond Dimensions Modded Survival #65 Minecraft	https://www.youtube.com/watch?v=UhJzbbtU9aM
v14	"I BUILT A ROCKET!" Diamond Dimensions Modded Survival #64 Minecraft	https://www.youtube.com/watch?v=VawUPTt_DZI
v15	What's In My Bag? Zoella	https://www.youtube.com/watch?v=x59f-EPEaFY
v16	Jay Z Almost Poops Grammys 2015 Review	https://www.youtube.com/watch?v=n3lGVDc7qVo
v17	SCARIEST OLD MAN IN MINECRAFT!!!	https://www.youtube.com/watch?v=2PIkgL_Tsd8
v18	My Brother Does My Make-up	https://www.youtube.com/watch?v=-6-axi3jprE
v19	Boy-FRIEND Does My Makeup Voiceover (ft. Ryan Higa)	https://www.youtube.com/watch?v=Wo-Ux6fmQyk
v20	DANTDM SINGS?!?!	https://www.youtube.com/watch?v=lASIY-vZOQ4
v21	6 Quick & Easy Easter Treats Zoella	https://www.youtube.com/watch?v=pxKJPk2GX4
v22	2016...That Is A Wrap! (ft. #TeamSuper)	https://www.youtube.com/watch?v=xrZlIVqdMrQ
v23	EUROGAMER 2013 EVENT MONTAGE! – TheDiamondMinecart	https://www.youtube.com/watch?v=hLkraPc6faI
v24	VLOG: My week with Louise (feat. FleurdeForce & Baby Glitter)	https://www.youtube.com/watch?v=TRTBg_BfbAI
v25	AUSTRALIAN JET BOAT RIDE!!!	https://www.youtube.com/watch?v=pqkrZqKGT00
v26	Jersey Vloggity!	https://www.youtube.com/watch?v=nc3m2zGKMXE
v27	OFFICE TOUR!! TheDiamondMinecart	https://www.youtube.com/watch?v=qiyPLS_phN4
v28	My Office Tour 2016 Zoella	https://www.youtube.com/watch?v=gTUi5iUqQ_I

References

1. Zhang, H.: Evoking presence in vlogging: A case study of U. K. beauty blogger Zoe Sugg. *First Monday* 23(1), (2018). <https://doi.org/10.5210/fm.v23i1.8107>
2. Kaminsky, M.S.: *Naked Lens-Video Blogging and Video Journaling to Reclaim the YOU in YouTube: How to Use Online Video to Increase Self Expression, Enhance Creativity, and Join the Video Regeneration*. Organik Media Incorporated, New York (2010).
3. Weaver, A. J., Zelenkauskaitė, A., Samson, L.: The (non) violent world of YouTube: Content trends in web video. *Journal of Communication* 62(6), 1065-1083 (2012). doi:10.1111/j.1460-2466.2012.01675.x
4. Corrêa, S. C. H., Soares, J. L., Christino, J. M. M., de Sevilha Gosling, M., Gonçalves, C. A.: The influence of YouTubers on followers' use intention. *Journal of Research in Interactive Marketing* 14(2), (2020). <https://doi.org/10.1108/JRIM-09-2019-0154>
5. DataReportal, Hootsuite, We Are Social.: Share of internet users worldwide watching vlogs weekly as of 3rd quarter 2021, by age and gender. Statista, <https://www-statista-com.hallam.idm.oclc.org/statistics/1254829/age-gender-reach-worldwide-watching-vlogs/> (2022), last accessed 2022/02/08
6. Funk, M.: How many YouTube channels are there? <https://www.tubics.com/blog/number-of-youtube-channels> (2020), last accessed 2021/01/16.
7. Burgess, J., Green, J.: *YouTube : online video and participatory culture*. 2nd edn. Politya, Cambridge (2018).
8. Khan, M. L.: Social media engagement: What motivates user participation and consumption on YouTube? *Computers in Human Behavior* 66, 236–247 (2017). <http://dx.doi.org/10.1016/j.chb.2016.09.024>
9. McRoberts, S., Bonsignore, E., Peyton, T., Yarosh, S.: Do It for the viewers! Audience engagement behaviors of young YouTubers. In: Read, J. C., Stenton, P. (eds.) *Proceedings of the 15th International Conference on Interaction Design and Children*, pp. 334-343. ACM, New York (2016). <https://doi.org/10.1145/2930674.2930676>
10. Tarnovskaya, V.: Reinventing personal branding building a personal brand through content on YouTube. *Journal of International Business Research and Marketing* 3(1), 29-35 (2017). <http://dx.doi.org/10.18775/jibrm.1849-8558.2015.31.3005>
11. Jerslev, A.: Media times| in the time of the microcelebrity: celebrification and the YouTuber Zoella. *International Journal of Communication*, p5233 (2016).
12. Marôpo, L., Jorge, A., Tomaz, R.: "I felt like I was really talking to you!": intimacy and trust among teen vloggers and followers in Portugal and Brazil. *Journal of Children and Media* 14(1), 22-37 (2020). <https://doi.org/10.1080/17482798.2019.1699589>
13. Rybaczevska, M., Jebet Chesire, B., Sparks, L.: YouTube vloggers as brand influencers on consumer purchase behaviour. *Journal of Intercultural Management* 12(3), 117-140 (2020). <http://dx.doi.org/10.2478/joim-2020-0047>
14. Odden, L.: What is Content? Learn from 40+ definitions. <http://www.toprank-blog.com/2013/03/what-is-content/> (2013), last accessed 2022/02/04.
15. Matuk, C., DesPortes, K., Hoadley, C.: Conceptualizing context in CSCL: Cognitive and sociocultural perspectives. In: Cress, U., Rosé, C., Wise, A. F., Oshima, J. (eds.) *International Handbook of Computer-Supported Collaborative Learning*, pp. 85-101. Springer, Cham (2021).
16. Sonnenwald, D. H.: Evolving perspectives of human behavior: contexts, situation, social networks and information horizons. In: Wilson, T., Allen, D. (eds.) *Exploring the Contexts of Information Behaviour*, pp. 176–190. Taylor Graham, London (1999).
17. Dey, A. K.: Understanding and using context. *Personal and Ubiquitous Computing* 5 (1), 4–7 (2001). <https://doi.org/10.1007/s007790170019>
18. Lena, J. C.: Social context and musical content of rap music, 1979–1995. *Social Forces* 85(1), 479-495 (2006). <https://doi.org/10.1353/sof.2006.0131>

19. Bickham, D. S., Rich, M.: Is television viewing associated with social isolation?: Roles of exposure time, viewing context, and violent content. *Archives of Pediatrics & Adolescent Medicine* 160(4), 387-392 (2006). doi:10.1001/archpedi.160.4.387
20. Jaakonmäki, R., Müller, O., Vom Brocke, J.: The impact of content, context, and creator on user engagement in social media marketing. In: Bui, T. X., Sprague, R. (eds.) *Proceedings of the 50th Hawaii International Conference on System Sciences*, pp.1152-1160. (2017). 10.24251/HICSS.2017.136
21. Nardi, B. A., Schiano, D. J., Gumbrecht, M., Swartz, L.: Why we blog. *Communications of the ACM* 47(12), 41-46 (2004). 10.1145/1035134.1035163
22. Yarosh, S., Bonsignore, E., McRoberts, S., Peyton, T.: YouTube: Youth video authorship on YouTube and Vine. In: *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing*, pp.1423-1437. ACM, New York (2016). <https://doi.org/10.1145/2818048.2819961>
23. Snelson, C.: Vlogging about school on YouTube: An exploratory study. *New Media & Society* 17(3), 321-339 (2015). <https://doi.org/10.1177%2F1461444813504271>
24. Farahbakhsh, F., Shahidinejad, A., Ghobaei-Arani, M.: Context-aware computation of-flooding for mobile edge computing. *Journal of Ambient Intelligence and Humanized Computing*, 1-13 (2021). <https://doi.org/10.1007/s12652-021-03030-1>
25. Rubin, A. M., Rubin, R. B.: Age, context and television use. *Journal of Broadcasting & Electronic Media* 25(1), 1-13 (1981). <https://doi.org/10.1080/08838158109386424>
26. Tur-Viñes, V., Castelló-Martínez, A.: Commenting on top Spanish YouTubers: “no comment”. *Social Sciences* 8(10), 266 (2019). <https://doi.org/10.3390/socsci8100266>
27. Berryman, R., Kavka, M.: ‘I guess a lot of people see me as a big sister or a friend’: The role of intimacy in the celebrification of beauty vloggers. *Journal of Gender Studies* 26(3), 307-320 (2017). <https://doi.org/10.1080/09589236.2017.1288611>
28. Ferchaud, A., Grzeslo, J., Orme, S., LaGroue, J.: Parasocial attributes and YouTube personalities: Exploring content trends across the most subscribed YouTube channels. *Computers in Human Behavior* 80, 88-96 (2018). <https://doi.org/10.1016/j.chb.2017.10.041>
29. de Bérail, P., Guillon, M., Bungener, C.: The relations between YouTube addiction, social anxiety and parasocial relationships with YouTubers: A moderated-mediation model based on a cognitive-behavioral framework. *Computers in Human Behavior* 99, 190-204 (2019). <https://psycnet.apa.org/doi/10.1016/j.chb.2019.05.007>
30. Buf, D. M., Ștefăniță, O.: Uses and gratifications of YouTube: A comparative analysis of users and content creators. *Romanian Journal of Communication and Public Relations* 22(2), 75-89 (2020). <https://doi.org/10.21018/rjcpr.2020.2.301>
31. Kamboj, S.: Applying uses and gratifications theory to understand customer participation in social media brand communities: perspective of media technology. *Asia Pacific Journal of Marketing and Logistics* 32(1), 205-231 (2019). <https://doi.org/10.1108/APJML-11-2017-0289>
32. Biel, J. I., Gatica-Perez, D.: Vlogsense: Conversational behavior and social attention in YouTube. *ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM)* 7(1), 1-21 (2011). <https://doi.org/10.1145/2037676.2037690>
33. Rieder, B., Coromina, Ò., Matamoros-Fernández, A.: Mapping YouTube: A quantitative exploration of a platformed media system. *First Monday* 25(8), (2020). <https://doi.org/10.5210/fm.v25i8.10667>
34. Jolly, J. L., Matthews, M. S.: Why we blog: Homeschooling mothers of gifted children. *Roeper Review* 39(2), 112-120 (2017). <https://doi.org/10.1080/02783193.2017.1289579>
35. Blumler, J.G., Katz, E.: *The Uses of Mass Communications: Current Perspectives on Gratifications Research*. Sage, Newbury Park (1973).
36. Zimmer F., Scheibe K., Stock W.G. A model for information behavior research on social live streaming services (SLSSs). In: Meiselwitz, G. (eds.) *Social Computing and Social Media. Technologies and Analytics. SCSM 2018. Lecture Notes in Computer Science*, vol

- 10914, pp. 429-448, Springer, Cham (2018). https://doi.org/10.1007/978-3-319-91485-5_33
37. Zainal, Z.: Case study as a research method. *Jurnal Kemanusiaan* (5)1, (2007).
 38. Yin, R. K.: Case study research and applications: Design and Methods, 4th edn. Sage, Thousand Oaks (2009).
 39. Zhang, H.: Data sets, analysis and descriptions for the case study. Zenodo, (2022) <https://doi.org/10.5281/zenodo.5975892>
 40. Patton, M. Q.: Purposeful sampling. In: Patton, M. Q. *Qualitative Evaluation and Research Methods*, pp.169-186. Sage, Beverly Hills (1990).
 41. Perry, C.: Processes of a case study methodology for postgraduate research in marketing. *European Journal of Marketing* 32 (9/10), 785–802 (1998). <http://dx.doi.org/10.1108/03090569810232237>
 42. Zoella [YouTube Channel], <https://www.youtube.com/user/zoella280390>
 43. DanTDM [YouTube Channel], <https://www.youtube.com/channel/UCS5Oz6CHmeoF7vSad0qqXfw>
 44. Lilly Singh [YouTube Channel], <https://www.youtube.com/channel/UCfm4y4rHF5HGrSr-qbvOwOg>
 45. Braun, V., Clarke, V.: Using thematic analysis in psychology. *Qualitative Research in Psychology* 3(2), 77-101 (2006).
 46. Pyett, P. M.: Validation of qualitative research in the “real world”. *Qualitative Health Research* 13(8), 1170-1179 (2003). <https://doi.org/10.1177%2F1049732303255686>
 47. Anney, V. N.: Ensuring the quality of the findings of qualitative research: Looking at trustworthiness criteria. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)* 5(2), 272-281 (2014).
 48. Krefting, L.: Rigor in qualitative research: The assessment of trustworthiness. *American Journal of Occupational Therapy* 45(3), 214-222 (1991). <https://doi.org/10.5014/ajot.45.3.214>
 49. Patton, M. Q.: Enhancing the quality and credibility of qualitative analysis. *Health Services Research* 34(5 Pt 2), 1189 (1999).
 50. Q on CBC: Lilly Singh: Superwoman of the internet. <https://www.youtube.com/watch?v=T9STyy1KNgY> (2014), last accessed 2017/12/12.
 51. RandomMan: My boyfriend does my makeup. <https://knowyoumeme.com/memes/my-boyfriend-does-my-makeup> (2020), last accessed 2021/06/11.
 52. Sasso, S.: The best video challenge since boyfriends putting on makeup. <https://www.refinery29.com/2016/11/131177/jenna-marbles-boyfriend-voiceover-challenge> (2016), last accessed 2018/09/13.
 53. Pires, F., Masanet, M. J., Scolari, C. A.: What are teens doing with YouTube? Practices, uses and metaphors of the most popular audio-visual platform. *Information, Communication & Society* 24(9), 1175-1191 (2019). <https://doi.org/10.1080/1369118X.2019.1672766>
 54. Calder, B. J., Malthouse, E. C., Schaedel, U.: An experimental study of the relationship between online engagement and advertising effectiveness. *Journal of Interactive Marketing* 23(4), 321-331 (2009). <https://doi.org/10.1016/j.intmar.2009.07.002>
 55. Zimmer, F., Scheibe, K., Zhang, H. (2020) Gamification elements on social live streaming service mobile applications. In: Meiselwitz, G. (eds.) *Social Computing and Social Media. Design, Ethics, User Behavior, and Social Network Analysis. HCII 2020. Lecture Notes in Computer Science*, vol 12194, pp. 184-197. Springer, Cham (2020). https://doi.org/10.1007/978-3-030-49570-1_13