Beyond Reality: Unveiling the Hidden Drives of VTuber Devotion amongst the Youth

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Abstract—Since 2020, the prevalence of Vtubers has surged, exemplified by Jiaran's birthday party in 2022, which garnered over 16,000 memberships at a rate of 138 yuan per membership, and Vox Akuma's exclusive broadcast on Bilibili in 2023 [1], amassing a revenue of 1.1 million yuan. Against this backdrop, our research endeavors to elucidate the underlying factors contributing to the appeal of virtual YouTubers (VTubers), particularly among the adolescent demographic. Given the paucity of existing scholarly investigations on this subject, this study conducted in-depth interviews with 13 adolescents aged 14-25 who have been exposed to VTubers. The findings reveal that teenagers are primarily drawn to the meticulously crafted appearance and persona of VTubers, while additional intriguing factors, including social influences and the distinctive format of virtual anchor live broadcasts, contribute to their allure. This research seeks to address the existing gap in the literature regarding the phenomenon of VTuber addiction among adolescents.

Keywords—VTuber, motivation, in-depth interview, Chinese teenager, virtual idol

I. INTRODUCTION

In recent years, the proliferation of advanced 2D technology and the widespread adoption of webcasting platforms have given rise to a burgeoning phenomenon known as 'virtual anchoring'. The term 'virtual anchor' lacks a universally agreed-upon definition, but it broadly denotes a live presenter employing an avatar to engage audiences via video streaming platforms [2]. Technically, virtual anchors utilize electronic equipment to capture facial expressions and body movements, which are processed through specialized software, enabling the 2D or 3D avatar to mirror the anchor's actions [3].

Since 2022, the virtual anchoring landscape has witnessed an astounding surge, with more than 10,000 virtual anchors live-streaming on Bilibili, a popular video-sharing platform [4]. These virtual anchors are real individuals who inhabit the virtual realm on platforms such as Bilibili and YouTube. Notably, the debut of Vox Akuma, an English-speaking male virtual anchor launched by the Japanese company ANYCOLOR on Bilibili, garnered immense success, amassing 1.11 million RMB in revenue during a 1.7-hour live stream [5]. Furthermore, as of January 2023, Vox Akuma's annual revenue on the YouTube platform surpassed 7.5 million RMB [6].

This exponential growth has been driven by the consumption behavior of a substantial cohort of teenagers [7]. Consequently, it is essential to examine the implications of this heightened dependency on adolescents. To begin, it has been observed that virtual anchoring can serve as a catalyst for language acquisition, motivating individuals with limited proficiency in foreign languages to embark on the journey of

language learning, as evidenced by netizens expressing their intentions to learn Japanese. Furthermore, virtual anchoring has facilitated the formation of friendships, as numerous enthusiasts actively engage in online communities to connect with like-minded individuals, sharing their interests and favorite virtual anchors.

However, it is imperative to acknowledge the negative consequences of this phenomenon on teenagers. Exposure to unsuitable content, such as violent horror games, has the potential to evoke shock and psychological distress among younger viewers. Furthermore, some adolescents may misinterpret the dynamics between virtual anchors and their audiences, perceiving ambiguities in these relationships or believing that the virtual personas meticulously crafted by the anchors represent an idealized existence. This can foster unhealthy dependence and hinder authentic interpersonal connections.

In some instances, teenagers may engage in excessive spending, driven by the desire to receive personalized messages from virtual anchors, prolonging the visibility of their chat messages. Such behaviors can lead to financial imprudence, with some teenagers surpassing their budgetary constraints in pursuit of fleeting validation.

Remarkably, despite the growing prominence of virtual anchoring, there remains a dearth of comprehensive research on the underlying motivations of teenagers engrossed in this phenomenon. Consequently, this study endeavors to bridge this research gap. Employing in-depth interviews, we aim to uncover and elucidate the multifaceted reasons behind teenagers' affinity for VTubers.

II. LITERATURE REVIEW

The realm of Virtual YouTubers, or VTubers, has seen a phenomenal surge in popularity over recent years, captivating audiences with its distinctive blend of reality and virtuality. Remarkably, despite this burgeoning interest, scholarly literature remains notably sparse when it comes to understanding the adoption of VTubers, particularly by individuals, including adolescents. Within the limited scholarly discourse that does exist, several recurring themes have emerged, offering valuable insights into the motivations that drive VTuber engagement.

A. Self-Identity as a Central Motivation

A recurrent and central theme in the existing body of scholarship revolves around the concept of self-identity, which features prominently in nearly all scholarly works concerning VTubers. Chen and Song's research in 2022 [2] emphasizes how VTubers serve as a platform for individuals to construct and align with an identity that transcends the boundaries of reality and virtuality. This innovative paradigm

hinges on bidirectional interaction, online sharing, and fan empowerment, offering users a unique and immersive experience. The allure of VTubers lies in their ability to satisfy psychological needs while enabling individuals to explore new facets of their identity. This notion of self-identity forms the foundation of VTuber engagement and frequently evolves into deeper emotional connections. In Wang's article [8], he points out that there are generally two kinds of virtual anchor's persona, one is close to life, such as high school students, and the second is inclined to the virtual, such as vampires, but no matter what kind of persona will bring the audience's identity and emotional identity. This is because only by maintaining the virtual anchor's persona when interacting can we gain identity and pull in the psychological distance between the anchor and the audience. In the article by Song and Qiu in 2021 [9], the authors put forward the concept of adolescents' self-fragmentation, however, because of the new interaction method of live virtual image broadcasting as a way to seek self-identity, the fragmented identities of adolescents can be reorganized in the network era. In Yan's and He's article [10], the author argues that "the meaning of virtual idol worship is to realize self-identity, and it is also an important way for youths to project self-mirrors, obtain identity markers, and create self-worth."

B. Leveraging Immersion and Interactivity

The second critical facet of VTuber engagement centers on the immersive experience facilitated by the seamless integration of the virtual and the corporeal. Luo's work in 2022 [11] underscores the captivating appeal of live streaming, where interaction becomes intuitive and real-time. Virtual anchors bring forth a secondary image that breaks away from conventional live broadcast formats, offering viewers a more engaging and immersive experience. Interactions with virtual anchors transcend two-dimensional screen, bridging the gap between the real and the virtual. Zhang's research in 2022 [12] further highlights the significance of authenticity and interactivity in webcasting, which propels fan engagement and high viewership. The virtual anchors' ability to traverse the boundaries between the digital and physical worlds enhances viewers' immersive experiences, compelling them to form emotional connections. This paradoxical duality between the artificiality of the virtual and the authenticity of emotional exchange intrigues scholars and viewers alike.

C. The "IP Effect" and Broadening Horizons

Ma's work in 2022 [13] introduces a distinct concept known as the "IP effect", shedding light on the multifaceted role of VTubers. This concept extends beyond live broadcasts, encompassing domains like commercial performances, program recordings, ACG culture-related merchandise sales, IP image licensing, and more. VTubers not only function as entertainment figures but also serve as the face of a burgeoning culture, influencing and driving fan-driven secondary creation and promotional activities. This multifaceted approach not only engages viewers but also underscores the transformative power of VTubers in contemporary media. In Yan's work in 2023 [10], the author argues that virtual idols, having birthdays, and performing their talents are both characteristics that only "living people"

possess, and that this choice and consumption of media immersed in the logic of technology has viewed the digital and technological nature of the virtual idol as a convertible consumer resource.

D. Participation and Community Building

Another significant motivation underlying VTuber engagement is the profound sense of participation they offer, as elucidated by Wang's research in 2022 [8]. This sense of involvement sets VTubers apart from their real-world counterparts. Several factors contribute to the perception of greater participation in VTuber communities. First, the unfiltered nature of live broadcasts and the propensity for controversy, including personal insults, tend to dissuade individuals from engaging with real anchors. Second, the inherent characteristics of virtual anchors play a pivotal role. The concealed identities of virtual anchors permit fans to conjecture and construct interpretations regarding the anchor's persona, while the operational methods of virtual anchors, influenced by Japanese counterparts, rely on subtitle groups for translation and live editing. Furthermore, the simplified nature of the virtual image and its anime-style attributes facilitate facile secondary creation. Wang in 2022 [8] underscores the concept of "stems", which serve as coded communication within the community. This unique form of communication fosters a sense of community and identity among VTuber fans.

E. Unique Motivations among Adolescents

While many of these motivations are consistent across different age groups, our study has uncovered two distinctive motivations specific to teenagers. Firstly, adolescents often turn to VTubers as a means of emotional release and to alleviate real-life stress, a phenomenon commonly described as "avoidant resistance". Guo's study in 2020 [3] underlines the significance of this coping mechanism for adolescents. Unlike the distinctive stylistic attributes of virtual anchors, adolescents find solace in the virtual realm, where they can construct a robust self-identity, providing emotional relief and fostering a form of "resistance" to the pressures of reality. This form of resistance differs from earlier subcultures, such as the British punk movement, in that VTuber enthusiasts tend to create their sanctuaries rather than vying for dominance in social discourse.

Secondly, adolescents discover a sense of belonging within the virtual community. As Wang's research in 2022 [8] expounds, the personal style of the virtual hosts takes a backseat in comparison to the representation of the fanbase, which holds particular allure for adolescents. Hosts, in turn, make efforts to understand the cultural preferences of their audience, thereby strengthening the sense of community and fostering a deeper connection.

This synthesis of prior research underscores the consensus among scholars regarding the fundamental motivations behind VTuber usage, including identity formation, the unique engagement afforded by interactions between the tangible and virtual realms, and the pronounced sense of participation experienced by fans. Additionally, some scholars have revealed that VTubers offer an escape from the pressures of reality and provide a means for individuals to seek recognition. However, a noticeable gap in the existing literature pertains to Chinese adolescents' utilization of

VTubers. Consequently, this study aims to delve deeper into the motivations driving Chinese adolescents to use, and in some cases, become addicted to VTubers, employing in-depth interviews as a primary research method. This research question is proposed as follows:

Research Question (RQ): What are the key motivations and underlying factors that initially prompt Chinese adolescents to use and subsequently develop a stronger reliance on VTubers?

Through this comprehensive exploration, this paper seeks to unravel the nuanced motivations of adolescents, offering a deeper understanding of their engagement with VTubers and the unique factors that drive their reliance on this emerging form of entertainment. By doing so, we aspire to contribute to the body of knowledge surrounding VTubers and shed light on an understudied but significant aspect of this digital phenomenon.

In conclusion, this literature review illuminates the multifaceted motivations underpinning VTuber engagement, from the construction of self-identity to the immersive experiences offered by virtual anchors, the "IP effect", and the profound sense of participation and community building. Furthermore, it highlights the unique motivations that drive Chinese adolescents to engage with VTubers, including their role as a form of emotional release and a source of belonging within a virtual community.

As scholarly interest in VTubers continues to grow, it is essential to understand the diverse factors that draw individuals, particularly adolescents, to this digital realm. This understanding can inform future research, potentially leading to new insights and developments in the world of VTubers and digital entertainment.

III. METHOD

To investigate the underlying factors contributing to adolescents' addiction to VTubers, we opted for the research approach of in-depth interviews. The choice of in-depth interviews was guided by several considerations. Firstly, our research question is fundamentally exploratory, and we do not possess a preconceived understanding of the phenomenon at hand. Consequently, it is not feasible to predetermine a fixed range of responses. In employing in-depth interviews, we maintain the flexibility to explore a wide spectrum of perspectives, allowing for a more organic and holistic understanding of the subject.

Secondly, in-depth interviews were preferred over other methods, such as surveys, due to their capacity to elicit rich and nuanced insights from the participants. Interviews enable a dynamic and interactive exchange, fostering a deeper level of engagement with the respondents. This heightened interaction allows for a more profound exploration of their thoughts, experiences, and emotions related to VTuber addiction. Consequently, in-depth interviews are particularly effective in tapping into the intricate motivations and complexities that underlie adolescents' attraction to VTubers.

IV. DATA COLLECTION

In the process of participant selection, this paper initially attempted to recruit interviewees through social media platforms such as Weibo and Xiaohongshu but encountered

limited success in this regard. Subsequently, redirecting the efforts towards identifying potential interviewees within online communities or groups dedicated to the purchase of Japanese merchandise for international shipping, eventually yields a more fruitful response. The interviews were conducted through three distinct modalities: Voice, written correspondence, and face-to-face interactions. It is worth noting that while this process initially reached out to 23 potential interviewees, only 13 ultimately participated in the interviewe. The demographic characteristics of the interviewees are detailed in the following Table 1:

Table 1. Demographics of interviewees

No.	Name	Gender	Age	Job	City
1	Anna	Female	16	Student	Beijing
2	Mary	Female	17	Student	Beijing
3	Abby	Female	16	Student	Beijing
4	Nancy	Female	23	Student	Shanghai
5	Candy	Female	20	Student	Jiangxi
6	Wendy	Female	24	Human resources	Shanghai
7	Vicky	Female	18	Student	
8	Daisy	Female	Under 18	Student	Beijing
9	Cherry	Female	17	Student	Henan
10	Hannah	Female	17	Student	Chengdu
11	Ivy	Female	18	Student	Tianjin
12	Jenny	Female	20	Student	Chengdu
13	Judy	Female	Under 18	Student	

The interview protocol consisted of three distinct segments. The first segment focused on gathering fundamental demographic information from the interviewees, encompassing details such as age, gender, and occupation.

The second segment was dedicated to comprehending the interviewees' general engagement with VTubers, including aspects such as the duration of their involvement, the frequency of viewership, participation in online forums, and the acquisition of associated merchandise.

In the third segment, the primary objective was to delve into the specific motivations for the interviewees' engagement with VTubers. This section entailed tailored inquiries that varied based on the interviewees' earlier responses. For instance, interviewees who expressed an interest in VTuber communities were asked to elaborate on the specific content they engaged with within these communities. Conversely, interviewees who did not partake in these communities were directed toward alternative lines of questioning.

Of the interviewees, 53% were minors, 84% had been following VTubers for more than a year, and 76% reported extended viewership during the summer of '22. All interviewees were of the female gender, and the majority, specifically 69%, hailed from China's first-tier major cities.

V. RESULTS

The in-depth interviews with Chinese adolescents have unveiled a multifaceted landscape of motivations behind their reliance on VTubers. The participants' attraction to VTubers was found to be intricately tied to diverse factors, encompassing the allure of anchor traits, the immersive and interactive nature of VTuber content, the influence of social dynamics, and the presence of individual psychological drivers.

A. Vtuber's Trait

During the in-depth interviews, the participants revealed

their diverse motivations for engaging with VTubers. Notably, 23% of the respondents expressed a particular attraction to the auditory aspects of VTuber content. Abby, for instance, shared her preference for a pure British-accented subwoofer, emphasizing the significance of sound in her VTuber experience.

Conversely, the physical appearance of the VTuber anchors emerged as the most compelling factor, with 69% of the respondents highlighting its importance. For example, Wendy emphasized the allure of the VTuber avatars, stating that "their 'skins' (avatars) are very good-looking, and good-looking things will attract me more easily."

Furthermore, 23% of the respondents demonstrated an affinity for the anchors' background stories and settings. Participants like Nancy found these elements intriguing, as she mentioned that "xx's setting is just intriguing, and the voice I like, and there is a backstory to his debut, and after looking at these five, only xx has a full backstory."

The personality of VTuber anchors played a pivotal role in attracting 46% of the respondents. Daisy, for instance, was drawn to an anchor's charisma, describing them as "sober, authentic, caring while not going with the flow, and possibly a freewheeling airwave-based mind and superb singing game."

B. Live and Interactive

Interviewees revealed their engagement with the live and interactive aspects of VTuber content. Notably, 30% of the respondents found the unique format of virtual anchor live broadcasts alluring. Ivy appreciated that VTubers presented a secondary image, which she found more engaging than traditional live broadcasts. She remarked, "It shows me a secondary image, which is more appealing to me than the usual live broadcast format. But they're not completely paper-thin, they can have real interactions with us and give me a feeling of breaking through the secondary dimension wall."

Furthermore, 8% of the participants were intrigued by the interactions between anchors during collaborative activities. Mary found these interactions fascinating, stating, "The linkage werewolf killing, as well as linkage chat together, feel very interesting, is the interaction between the anchors."

Additionally, 8% of the respondents found the frequency of the anchors' live broadcasts appealing. Anna noted, "The content of the broadcasts is also appealing to me."

C. Social Factors

A significant social factor influencing respondents was the notion of idol stars collapsing, prompting them to turn to virtual anchors. Thirty percent of the respondents mentioned this phenomenon, exemplified by Candy's perspective. She explained, "I don't think all real men are good-looking nowadays, and they collapse easily. But I don't have such a problem with virtual anchors because the first thing I like about him is that his skin looks good, and virtual anchors are not so easy to collapse." For Candy, the virtual anchor's flawless image provided a sense of pan contact, shielding her from any unsightly aspects that real anchors might reveal.

D. Psychological Factors

The interviews also revealed individual psychological factors influencing the attraction to VTubers. Specifically,

23% of the respondents expressed their fascination with VTubers due to their novelty. Judy shared her perspective, stating, "It was kind of the first time she had formally met this type of anchor, and she hadn't seen them before, so it was kind of a novelty."

Moreover, 30% of the participants viewed watching VTubers as an opportunity to enhance their English language skills. Cherry, for instance, felt motivated to learn English better and attend offline meetings, stating, "Putting him in front of me, then watching him if I doze off in class, reminding me of my appointment to the offline meeting, and urging me to memorize my English words."

VI. DISCUSSION

This research employed in-depth interviews with teenagers aged 14–25 years to investigate the motivations driving their attraction to VTubers. The findings encompassed four primary factors, each with multiple sub-points, shedding light on the diverse reasons behind adolescents' preference for virtual anchors.

The most prominent observation was that 69% of the surveyed teenagers were notably drawn to the aesthetically constructed appearances of the anchors. This can be attributed to two key factors. Firstly, in the current media landscape, where individuals are inundated with an overwhelming influx of information daily, visual appeal takes precedence when selecting which medium to engage with. With over 2.7 million bloggers on the Bilibili platform by December 2021, the allure of a visually captivating appearance becomes a significant determinant in media selection. Additionally, the virtual anchor image primarily consists of live 2D or 3D representations of secondary characters, aligning with the influence of secondary culture in China. The secondary culture, characterized by its "moe girls" orientation, has a substantial impact on the preferences of young individuals, creating a convergence with the aesthetics of virtual anchors. The concentration of secondary culture attributes in the virtual anchor image makes it particularly appealing to this demographic.

Another intriguing discovery was that 46% of the respondents were enamored by the personalities of the anchors. The deliberate construction of anchor personalities plays a pivotal role in catering to the preferences of the audience. As highlighted in previous research [14], the mid-zone performance, referring to the backstage behaviors exhibited in the public-facing realm, provides a glimpse into the virtual anchor's privacy. This degree of perceived intimacy greatly gratifies the fans' desire for voyeurism and fosters a deeper connection. Furthermore, adolescents experiencing real-life stress and a lack of confidence find solace and connection in virtual anchors. As suggested by live streaming satisfies [15], adolescents' psycho-emotional needs, allowing them to form self-identity and seek psychological solace within the content they consume.

Nonetheless, certain limitations within this study should be acknowledged. Firstly, the number of interviewees was relatively limited, and the depth of interviews could be further extended to enhance the comprehensiveness of our findings. Secondly, the exploration of VTuber's new media technology, while insightful, may benefit from further

in-depth investigation to uncover the full spectrum of its capabilities and implications.

In conclusion, our study unveils a complex interplay of factors driving adolescents' engagement with VTubers, encompassing appearance, personality, and the pursuit of emotional connection. While these findings provide valuable insights, the potential for additional research to delve deeper into the phenomenon of VTuber attraction remains significant.

VII. CONCLUSION

In the contemporary digital landscape, the phenomenon of VTubers has gained significant traction, particularly among Chinese adolescents. Our in-depth interview-based research delved into the motivations behind this growing reliance on virtual anchors, uncovering a multifaceted tapestry of attractions.

The appeal of VTubers was found to be anchored in four major facets: the aesthetics and traits of the anchors, the immersive and interactive nature of VTuber content, the influence of social dynamics, and individual psychological factors. Notably, the visually constructed appearance of the anchors emerged as a dominant factor, with nearly 69% of adolescents expressing attraction. This allure can be attributed to the visual appeal's prominence in the selection of media consumption, given the saturation of media information. Furthermore, VTuber aesthetics seamlessly align with the influence of secondary culture, creating a captivating resonance.

Another pivotal factor was the personality of the anchors, deliberately crafted to cater to the audience's preferences. The portrayal of an anchor's backstage behaviors, or the mid-zone performance, offered a sense of intimacy that resonated profoundly with fans. For adolescents, seeking psychological solace and a sense of identity, the virtual anchor provided an ideal avenue for connection.

Social dynamics played a notable role, with the phenomenon of idol stars' rapid rise and fall influencing the inclination to turn to more resilient virtual anchors. The allure of a "pan contact" experience, where the virtual anchor remains largely impervious to the imperfections of reality, drew many adolescents towards VTubers.

Individual psychological factors were significant as well, with the novelty of VTubers and their role in motivating English language learning found to be compelling for a substantial proportion of respondents.

However, it is essential to acknowledge the limitations of this study, including the relatively small sample size and the need for more extensive exploration of VTuber's new media technology.

In conclusion, this research offers valuable insights into

the complex array of motivations propelling Chinese adolescents towards VTubers. As VTubers continue to shape the landscape of digital entertainment and social connection, a deeper understanding of their appeal becomes paramount. Further investigation into the multifaceted world of VTubers, their impacts, and evolving trends remains a promising avenue for future research.

CONFLICT OF INTEREST

The author declares no conflict of interest.

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