Live streaming viewing as functional alternatives to interpersonal interaction: Who do you think he/she is?

by

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Abstract

Based on the Uses and Gratifications (U&G) approach and Parasocial Interaction (PSI) theory, this study examined how people use live streaming platforms in China. Uniquely, it sought to understand the effect of romantic relationships on how and why people watch Host Live Shows (HLSs) and explored the relationships between Chinese audiences and live-streamers.

Through an online survey, four viewing motivations were identified: Community Building, Ego-boost, Escape, and Bandwagon. Ego-boost is a relatively new motivation of media use, which means audiences watch and interact with HLSs to get compliments, self-confidence, self-validation, and ego-boosts. This study found audiences' perceived realism and PSI were both very neutral. However, emotion projection of audiences onto streamers was observed – most viewers highly agree that streamers are their friends. Moreover, this study found the quality of interpersonal communication is affecting audiences' HLS dependence and the degree of PSI, while the quantity of interpersonal communication might not be – the more satisfied a person is about his/her interpersonal communication, the heavier he/she depends on HLSs and the stronger his/her PSI is. As expected, the degrees of both romantic relationship status and romantic relationship satisfaction influence people's HLS use. While compared with females, males are affected by romantic relationships more, both the status and satisfaction level. Lastly, when it comes to people's romantic lives and social lives, HLSs are more likely to be used as alternatives to meet their unsatisfied needs from their "real partners."

Keywords: *social live streaming services, uses and gratifications approach, parasocial interaction theory, media as functional alternatives, media dependency*

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Dedication

To the new era of communication technology and media technology.

Chapter 1 - Introduction

When Shage, a 24-year-old Chinese man, was asked who Lele Tao, a famous female live-streamer he has watched continuously for years, was to him, he said confirmedly, "Lele is like family to me, nothing less than a family member" (Grewal & Zuo, 2018). Although Lele Tao is absolutely a real person to Shage and to all her audiences, is the relationship here equivalent to an actual interpersonal relationship? Is the communication happening via live-streaming platforms equal to interpersonal communication? What other roles, if any, are assigned to live-streamers?

In 1956, Horton and Wohl stated in their eloquent study about Parasocial Interaction (PSI) that one of the prominent characteristics of the mass media is that they provide the illusion of face-to-face communication and real relationships with the media character, which compensates for people's real-life situations and relationships. Decades later, although audiences take media consumption (e.g., television viewing) as a quotidian behavior now, the dependency on, and the attachment to, media figures did not decrease with the increasing familiarity of mass media. A reasonable guess is that media users have been experiencing higher and higher levels of "realism," from newspapers and books, to radio and television programs. Now, they are immersing themselves in a new media form – Social Live-streaming Services (SLSSs), which do a better job of giving audiences a false sense of face-to-face communication with a new type of media character – live-streamers. As claimed by Scheibe, Fietkiewicz, and Stock (2016), SLSSs are a new kind of Social Networking Service (SNS), which provide the opportunity for users to broadcast their own "reality show" in real time by using either mobile devices or webcams. SLSSs have reformed the way an audience interacts with media and content providers, as well as with other viewers. Since the audience can interact (e.g., chatting or rewarding) with the streamer

while watching live video streaming – all user activities happen at the same time – SLSSs are synchronous social media. In other words, these personal broadcasts are not simply videos that fans watch, but more interactive experiences. Analyzing and describing SLSSs and their audiences is a new and intriguing media-related research field. As claimed by Song (2008), information and communication technologies are forming a fundamental part of social and economic changes, and have rearranged the structure of social relations and the rhythms of everyday life.

Six Rooms (or 6.cn) may have been the first to provide live-streaming as a service for the public in China. It started as a video-sharing website, but when it failed to secure a new round of funding after burning through money in 2008, Liu Yan, its CEO and co-founder, turned to live-streaming. Because of the 2007-2008 financial crisis, many Internet companies with problematic business models saw live-streaming as a way to survive ("Life is but," 2017). It turned out that Liu Yan's decision was advisable; 2016 had been a golden year for SLSSs in China (Xiang, 2017). Almost simultaneously, Chinese SLSSs such as YY live, Tudou, and Kuaishou became hugely popular nationally. Notably, China's live-streaming market grew 180% in 2016, which was estimated to be around $3 billion (Xiang, 2017), and it was predicted that it will expand up to RMB 60 million (over 9 million USD) by 2020 (Lee, 2017). As mentioned by Kelly and Wang (2017), live streaming has become a backbone of the Chinese media diet. Now more than 100 companies offer the service ("Life is but," 2017). In addition to this industry's fast growth rate and big market potential, SLSSs in China are enjoying an unprecedented high penetration rate; nearly half (45.6%) of Chinese netizens (343 million) – a habitual internet user – are live-streaming users (China Internet Network Information Center [CNNIC], 2017). Along with this explicit statistical data, there has been a remarkable increase of reporting in the news about the

large salaries of some live-streamers in China and also their large effect on Chinese society. In Kelly and Wang's (2017) report, they asserted that live streaming has become a lucrative way to increase one's income globally, but nowhere is it more popular than in China. Some top Chinese live-streamers can earn more than 10 million RMB (over 1.5 million USD) annually (Luca, 2017). Then, one may ask, what makes Chinese SLSSs and live-streamers unique and noteworthy?

One of the noticeable differences between Chinese and Western live-streaming platforms is the virtual gift-giving feature (Xiang, 2016). The American live-streamers make money off of ads, endorsements, and direct donations from the viewers or subscription fees, while for Chinese live-streamers, most of their money comes directly from fans in the form of virtual gifts. These virtual gifts are bought with real money by viewers, and can be converted back into cash by streamers. Thus, the key to live streaming in China is the interaction between the streamer and the viewer; the sales productivity of virtual gifts is directly connected to the extent of audience-engagement (Lee, 2017).

There are three broad live-streaming categories: Host Live Show (HLS), Live Game Broadcasting, and Other (CNNIC, 2017). Amongst these, HLS is the most popular and lucrative genre. It generated 70.8% of the industry revenue in 2015 and was expected to engender 37.9% in 2018 (iiMedia Research, 2016). As of June 2017, this genre had 173 million viewers, which accounts for 23.1% of all netizens (CNNIC, 2017). Also, it is the most face-to-face and conversational genre of live streaming, as the host sits in front of a webcam and talks, while the spectators watch him/her on a screen. Its content mainly serves a social and interactive purpose, and is centered on the communication and interaction between the audience and the host (iiMedia Research, 2017). More intriguingly, HLS is the media's favorite genre. News reporters

and bloggers have been increasingly telling stories about the large salaries of attractive female live-streamers in China and their significant influence on Chinese culture. Live-streaming platforms are treated as a new "easy money" machine for Chinese millennials, especially for pretty young women. The media, both Chinese and Western, depict Chinese SLSSs as platforms used by lonely boys and single men to interact with their favorite female live-streamers. As reported by many news stories, Xiang (2016) found that gift buyers in China on live-streaming platforms are oftentimes males and gift receivers are overwhelmingly female. It would be unsurprising to read news stories or watch documentary films about how easily young women are making big money from their male devotees via live-streaming platforms. For instance, in 2016, a Chinese man reportedly stole 490,000RMB (77,266 USD) from his boss to not only support himself, but also to buy expensive virtual gifts for his beloved female live-streamer (Yu, 2016). Likewise, in 2017, a 17-year-old Chinese boy reportedly stole 33,000RMB (5,200 USD) from his classmate to buy his favorite female live-streamer virtual gifts (Yu, 2017). Hence, instead of examining all three genres, this study will look into HLSs specifically. Besides being the most popular genre, HLS is the most face-to-face and communication-centered genre, which would present PSI more clearly and purely, as well as a mixed set of reactions, such as the desire to learn gaming skills from online game players.

In addition to its synchronous characteristic, compared to other media forms, SLSSs provide the audience an easier way to achieve intimacy through their media use and a greater expectation that the audience will be a part of the performer's life. Back in the era when television and radio were called "new mass media," Horton and Wohl (1956) mentioned that the media gives audiences an illusion of "directness and immediacy of participation" (p. 219). However, with SLSSs, the directness and immediacy may be true instead of an illusion. In the documentary,

Lele Tao called Shage's personal phone to tell him a trouble of hers (Grewal & Zuo, 2018). We don't know how common this phenomenon is between live-streamers and viewers, but if you search "how can I add live-streaming hosts as WeChat (i.e., a messaging app in China) friends" in Chinese via Google, over 900,000 results appear, showing that a lot of people are curious as to how they can get to know the live-streamers on a more personal level. So, one obvious question is, do the majority of live-streaming audiences think streamers are "real," namely, "within reach"? If so, who do they think the streamer is?

Although we have a great deal of statistical data and news stories to show how big and important this industry is in China, barely any academic studies have focused on what the popularity of SLSSs in China is trying to tell us. Also, how do Chinese people use SLSSs? Why do they watch HLSs? According to Quan-Haase and Young (2010), "one of the most successful theoretical frameworks from which to examine questions of 'how' and 'why' individuals use media to satisfy particular needs has been the Uses and Gratifications (U&G) theory" (p. 351). Thus, U&G theory (Katz, Blumer, & Gurevitch, 1974) was utilized in this study, along with PSI theory (Horton & Wohl, 1956).

In sum, the purpose of the present study was to understand what motivates Chinese people to watch HLSs, how they use SLSSs when watching HLSs, and more importantly, the roles of the streamer assigned by the audience. This study was an initial attempt to extend the understanding of the relationship viewers develop with streamers, and to probe into to what extent these relationships resemble individuals' day-to-day social relationships.

Understanding why half of the Chinese population started using SLSSs and their media-related activities allows not only for significant insights into audiences' viewing motivations and SLSS uses, but also a refined understanding of this new and growing industry, as well as the

psychological and social demands behind it. This study also adds knowledge to a growing body of literature on both global and national levels of digital media use and the effect of romantic relationship status on media consumption. Lastly, it provides a necessary starting point for related research questions, such as those concerning positive or negative impacts of using SLSSs and online communication satisfaction.

Chapter 2 - Literature Review

This study examined how and why people watch Host Live Shows (HLSs) and explored the relationship between the audience and the live-streamer in China.

This chapter reviews the literature relating to new media use, especially Social Live Streaming Service (SLSS) use; Uses and Gratifications (U&G) theory, particularly why and how media are used as functional alternatives to people's needs satisfaction; and Parasocial Interaction (PSI) theory, specifically the relationship between audiences and media characters. It also sheds light on the literature-driven research questions and hypotheses concerning HLS use in China.

Social Live Streaming Services

Scheibe et al. (2016) argued that Social Live-streaming Services (SLSSs) are a new type, and the only kind, of synchronous Social Networking Services (SNSs) that have emerged in the last few years. By using live-streaming platforms and their own mobile devices or PCs and webcams, everyone has a chance to produce and broadcast his/her own *The Truman Show* in real life. While streamers broadcast, messages from viewers flash across the screen in real time and all user activities happen simultaneously. Distinctively, the audience may reward the streamer while watching, for example, with badges or money. Additionally, scientific research about the Chinese live-streaming industry is extremely rare. Although there is literature about SLSSs – for example, studies about information behavior on SLSSs (Scheibe et al., 2016), streamers' motives (Friedländer, 2017), a dataset of Twitch and YouTube live (Pires & Simon, 2015), the business aspect of live streaming for content publishers (Brouwer, 2015), possible law infringements of using YouNow to stream (Honka, Frommelius, Mehlem, Tolles, & Fietkiewicz, 2015) and

general analysis about a live-streaming platform called YouNow (Stohr, Li, Wilk, Santini, & Effelsberg, 2015) – there is no study purely focused on the viewer side of SLSSs.

Uses and Gratifications Theory

According to Katz et al. (1974), U&G theory is concerned with "(1) the social and psychological origins of (2) needs, which generate (3) expectations of (4) the mass media or other sources, which lead to (5) differential patterns of media exposure (or engagement in other activities), resulting in (6) need gratifications and (7) other consequences, perhaps mostly unintended ones" (p. 20). It takes an audience-centered perspective and believes people's subjective initiative of media using – they are goal-directed in their media behavior and actively try to gratify needs or motives by using mass media. Thus, the psychological and social origin of audiences' needs and motives for communicating, the audience's initiative, and the role of media as functional alternatives in the gratification process are the key elements of U&G theory (Rubin & Windahl, 1986). This approach highlights the subjective initiative of the audience, the initiative to make media choices and interpret media effects (Rubin, 1993). Compared with some early theories (e.g., the magic bullet theory), which assume that audiences are passive information receivers who are vulnerable to, and easily influenced by, media content, U&G theory emphasizes that people are active audiences (Katz, Gurevitch, & Haas, 1973); they are "active, discerning, and motivated in their media use" (Quan-Haase & Young, 2010, p. 351) and have particular needs that stimulate selection of certain types of media (Sundar & Limperos, 2013). In other words, influenced by their motivations and past media gratifications, people are purposively choosing and interpreting media content (Bondad-Brown, Rice, & Pearce, 2012). This approach focuses not on media exposure per se, but on the social and psychological factors that stimulate media exposure (Johnstone, 1974). Altogether, as claimed by Sundar and

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Limperos (2013), the primary goal of U&G theory is "to understand the interaction between the origins of media user needs and context" (p. 506). It is an approach to perceive why and how individuals actively choose to use specific media to satisfy specific needs. It also underscores the connection between media use and people's social and psychological needs; pre-existing needs generate expectations from media use or other sources, which lead to different media exposure or other non-media activity engagement, resulting in need gratifications and other consequences.

Some U&G researchers, based on the common belief that needs or expectations drive certain media use or need gratification, have focused on identifying people's media use motivations and gratifications (Palmgreen, Wenner, & Rayburn, 1980; Sundar & Limperos, 2013). Others have tried to find social and psychological variables as determinants of motivation to use certain media. For example, in Rubin's (1993) essay, he mentioned that loneliness results in a strong reliance on electronic media. This finding also indicates that when an audience has a need expected to be satisfied (e.g., reducing loneliness), there's a big possibility they will choose specific media to gratify this need. Hence, from people's media selection and use, we gain not only an insight into the role media serves the audience but also an understanding of their social and psychological needs and expectations.

Furthermore, Rubin (1993) noticed media audiences have oftentimes been seen at extremes: being "passive," they are easily influenced by media; or being "active," they can make rational decisions about accepting and rejecting certain media content. But in reality, a valid view may lie somewhere in-between. He asserted that, in addition to understanding audiences are active communicators, if we want to explain certain media effects, we must first comprehend audience motivation and behavior. Thus, to know why live streaming has such a high penetration rate in China, we must understand people's motivation to use it and their media use behavior.

McQuail and Gurevitch (1974) proposed three approaches to explore audience behavior, namely the *Functional Perspective* (FP), the *Structural/Cultural Perspective* (SCP), and the *Action/Motivation Perspective* (AMP). They further suggested researchers should adopt one or the other each time because these three perspectives have their own focuses. AMP is related to individuals' motivations, SCP is concerned with cultural and societal factors, and FP is about people's social situations and opportunities. Because of this, they further concluded that these three approaches were "irreconcilable" (p. 300). However, these three perspectives are strongly interrelated. First, they have a common theoretical aspect: audiences are active communicators. Based on their needs, audiences are purposively choosing and understanding media content (Bondad-Brown et al., 2012), no matter if those needs are about personal, structural/cultural, or functional factors. Second, both the generation of motivation and the occurrence of media consumption can and should be explained from all three levels: personal, societal, and situational. No one is isolated from his/her motivations, cultural/societal background and social situations. Therefore, in this study, we adopted all three perspectives.

Media consumption as functional alternatives. According to Rosengren and Windahl (1972), functional alternatives are those that do not use typical resources, like individual and societal ones, to satisfy needs. The idea that using mass media as functional alternatives to "other more 'natural' ways of need fulfillment" has always attracted U&G researchers (Rubin & Windahl, 1986, p. 192). They believe that treating media as functional alternatives to other ways of satisfying human needs is beneficial. Since human needs are not "basic and stable" but "situational and context-bound" (Rubin & Windahl, 1986, p. 186), "even media-related needs must be viewed in the larger context of human needs" (Katz et al., 1973, p. 176). Identifying the role of mass media (e.g., a substitute for interpersonal communication) helps researchers find

audience needs and motives, as well as track their societal and psychological origins. For instance, Papacharissi and Rubin (2000) found that people who were socially anxious were more likely to use online chat rooms, while those who found interpersonal communication gratifying were more likely to use the Internet for information and entertainment needs. Likewise, in Armstrong and Rubin's (1989) study, they noticed that radio listeners who called in to the program thought face-to-face interaction was less rewarding than those who just listened. In these instances, those who think face-to-face interaction is fruitless use the media as a functional alternative.

In studying the role of television, there were three distinguished functions mentioned in Cazeneuve's (1974) essay: a) "those typical of industrial society"; b) "those that are provoked by TV itself"; and c) those that coincide with general needs "which could and do find satisfaction by means other than television" (p. 215). The third function encompasses all other media, too. When we say television has certain functions, we are actually assuming that there are interrelationships between media use (e.g., TV viewing) and the subjective initiative of an audience. Cazeneuve (1972) also argued that media use can be explained by a person's desire to accept their condition, in which they find gratifications to achieve satisfaction, or psychological balance. To put it simply, by using certain media, users can reach a fulfilled psychological status, where there is "the achievement of a synthesis between the need to remain in this condition and the need to escape from it." So, media may be treated as "a world of substitute reality." Just like the famous theory of Bernardin de Saint-Pierre states, "everything in the world must have a purpose" (as cited in Cazeneuve, 1974, p. 213-219), the motives for watching or using a medium projects people's need origins, which are harder, or sometimes even impossible, to gratify in the real world. For instance, according to Rosengren and Windahl (1972), people with lower interaction

potential (e.g., having fewer social and interpersonal ties) may rely on the media to substitute for the lack of real social interaction. Likewise, Nordlund (1978) found that when feeling lonely and stressed, people's media interaction might lead to a heavier reliance on the mass media. Thus, to understand and be capable of identifying the relationships between media use and the audience, we must understand what audiences seek in media and why they are motivated to use them.

Audience media dependency. Dependency has been defined as "a relationship in which the satisfaction of needs or the attainment of goals by one party is contingent upon the resources of another party" (Ball-Rokeach & DeFleur, 1976, p. 6). Hence, it has been suggested that media dependency is a relationship showing how people's goals are conditional upon the resources media afford (Sun, Rubin, & Haridakis, 2008). Rosengren and Windahl (1972) gave media dependency a clearer name – "degree of dependence on functional alternatives for need satisfaction," and further defined it as "individual and environmental possibilities to interact face-to-face with real human beings" (p. 183). In their study, they treated mass media consumption as a functional alternative to interpersonal communication and discussed dependency as a consequence of personal and societal unfulfillment. They assumed that when a man has a high potential for real interaction, he would be less likely to depend on functional alternatives, such as mass media.

Since individual and societal conditions affect the origins of dependency, dependency perspective enables U&G researchers to examine audience-media-society relationships and social-structural conditions that affect media uses and gratifications – it is the connecting point for the U&G approach and societal contexts and systems. *Audience Dependency* adds a more macro-perspective angle to U&G theory. It relates individual media behavior to the origin and structure of audience needs and motives, as well as the role of functional alternatives and the

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effects or consequences of media use. As modern societies become more and more complex and diverse, direct experience is limited. However, media provide the opportunity for immersing oneself in diversity and first-hand experience. Thus, researchers often use the dependency perspective to analyze audience needs and motives, and their societal origins. Also, audience dependency is a key variable in explaining media effects: as dependency on a medium increase, its media effects may increase. Audiences expect media to deliver them certain content. The more noticeable the needs for certain content, the stronger the motivation is to use the media to meet these needs, and the heavier the dependency is on the medium, then the greater the likelihood is for the media to influence audiences' cognitions and behavior (Ball-Rokeach & DeFleur, 1976; Rosengren & Windahl, 1972; Rubin & Windahl, 1986).

Previous researchers have identified several basic components of audience dependency. High media exposure, low use of functional alternatives, an affinity with the medium, and high perceived reality, namely "degree of reality proximity of the content consumed" (Rosengren & Windahl, 1972, p. 176), might be the most vital ones (Rubin, Perse, & Powell, 1985). According to Rubin (1993), attitudes about a medium and its content affect media use and its effects. For example, perceptions of the reliability and importance of a medium influence people's involvement and interaction with the medium and its content. These factors would influence whether a message has the chance to affect the audience. Potter (1986) argued that heavy television viewing cultivates people's impression of the real world, especially when people think the media content is realistic. In his study about perceived reality and victimization estimate (e.g., the chance of being murdered), he found that perceived reality has a direct effect on the audience. The perceived reality measures were related to victimization estimates even more strongly than the amount of television viewing did. If people do not think the information a

medium provides is real or believable, that medium has less impact on the audience than those people believe (Rubin et al., 1985). With regard to live video streaming, a live-streamer is both the information provider and the content viewers consume. If high perceived reality denotes that people believe what happened in a crime TV show is real and could actually happen to them, then for SLSSs, it should mean the streamers are perceived as real to the audiences – people who may be in their actual social circles and can be trusted. Therefore, before asking the roles of live-streamers, a question for understanding "how true to life" (Rubin, 1981a, p. 152) HLSs are to the audience is needed. Then, the following research question was addressed:

RQ1: How realistic do viewers believe the content of HLSs is?

Besides, Rubin et al. (1985) argued that media dependency might play an intervening role between people's needs and media related outcomes. Rosengren and Windahl (1972) found that a person's reliance upon a mass medium for need satisfaction and his/her availability of functional alternatives are negatively related. Likewise, according to Rubin and Windahl (1986), reduction in personal interaction should result in reliance on certain available media. For example, unemployment decreases the possibility to interact with co-workers, which may further lead to heavy television viewing. They also mentioned that in addition to the number of available communication channels, the quality of these channels also affects audience dependency. Thus, it is reasonable to assume that the greater the quantitative and qualitative mix of available communication sources, the lesser the dependency is on a specific medium. Thus, the following hypotheses are proposed:

H1a: The number of interpersonal relationships and HLS dependence will be negatively related.

H1b: The amount of interpersonal communication and HLS dependence will be negatively related.

H2: The degree of satisfaction of interpersonal communication and HLS dependence will be negatively related.

Viewing motivations. The statement that "individuals are guided by their motives and expectations when using the media" embodies the magnitude of motivations (Rubin & Perse, 1987a, p. 76). Audience motives affect not only what kind of media and content are selected, but also why and how the medium and its content are used, processed, and interpreted (Rubin & Windahl, 1986). Because U&G theory assumes audiences are active, their motives are key factors in their media-related activity (Kang, 2002). Needs are embodied in motives; motives further result in behaviors (Rubin & Windahl, 1986). For example, a need for being informed may generate a motive to read newspapers to get information. Additionally, as claimed by Rubin (1983), motivations are not isolated but entail a set of interactive needs and expectations, namely media use motivations are interrelated. Since the societal and individual circumstances contribute to people's motives for using a certain medium, the patterns of people's media use are influenced by several interconnected motivations. Thus, when looking into media use motivations, it is inappropriate to treat them as a singular phenomenon (Katz et al., 1973; Rubin, 1983; Rubin & Windahl, 1986).

Researchers have identified many "motivations" of traditional media in the past, for instance, television (Cooper & Tang, 2009; Kang, 2002; Rubin, 1981a; Rubin, 1983) and radio (Armstrong & Rubin, 1989). However, because of the comprehensive use of digital media, more and more research about new media is emerging (Quan-Haase & Young, 2010), for example, SNSs (Shade, Kornfield, & Oliver, 2015; Sundar & Limperos, 2013), and SLSSs (Brouwer,

2015; Friedländer, 2017; Scheibe et al., 2016). According to Williams, Strover, and Grant (1994), one of the reasons that U&G theory is particularly germane for new communication technologies is because of its crucial concept – the active audience. Without the agreement that audiences are active, it is hard to explain why people choose certain mediums among others. New technologies provide the audience with increasingly complex choices and "the capability to interact with media" (as cited in Kang, 2002, p. 333). Then, what are the audiences' motives for watching HLSs? How would the audience's motives change as their choice of communication platforms change? Asking these questions will not only free our understanding of new media from previous U&G findings but also save our efforts to connect people's media use to their social and psychological expectations.

Moreover, in U&G theory, one of the most pressing difficulties for researchers is failing to distinguish "gratifications obtained" and "gratifications sought" (Palmgreen et al., 1980). According to Quan-Haase and Young (2010), "gratifications sought" (also called "needs" or "motives") refers to those gratifications audiences expect to get from using a medium: namely, their expectations. "Gratifications obtained" refers to those satisfactions that audiences actually experience through the use of a medium. Notably, expectations and satisfaction may differ from each other. A good example is video game play. Video games provide players the opportunity to gain a sense of control; it enables the player to participate and control the game world (Grodal, 2000). In Lucas and Sherry's (2004) study, they found that compared to young males, female players felt less enjoyment in competition games because they got a lesser sense of control than they did in other activities. Based on this conclusion, they assumed that when the game is designed in a way that female players can meet their primary gratification of control, they would play more often. Hence, one can see that motivations influence not only the selective and active

actions people take to seek and use media, but also the resulting gratifications and possible media effects (Bondad-Brown et al., 2012). Since we hardly have any prior studies looking into the media use of Chinese SLSSs, let alone any of their motivations and gratifications, an investigation of the motivations for watching and interacting with SLSSs is significant. If we do not know people's motives to adopt and keep using SLSSs, it is hard for us to get a deeper understanding about their resultant gratifications, satisfaction/dissatisfaction levels, and the outcomes of using them. Thus, instead of asking a broad question about people's motivations and gratifications, this study chose to examine viewers' motivations for watching HLSs. Hence, the following research question was addressed:

RQ2: What motivations do Chinese live-streaming audiences have for watching HLSs?

Audience activity and media use. Since different communication motives lead to different behaviors, and they work together to result in different media effects (Rubin & Windahl, 1986), another core element of U&G theory, besides motivation, is audience activity (Bondad-Brown et al., 2012; Rubin, 1993). In general, audience activity connotes media involvement and affects media influence (Rubin, 1993). Levy and Windahl (1984) identified two dimensions of audience activity: the qualitative orientation (audience selectivity, audience involvement, and audience "use") and the temporal dimension (before exposure, during exposure, and after exposure). They also pointed out that audience activity has been most commonly used for media selection activities. This definition is consistent with other researchers' findings. More commonly, audience activity refers to the (a) utility, or individuals' motivations (or reasons) for communicating; (b) intentionality, for example, was considered as "sharing, recommending, and discussing content with others" in the study conducted by Bondad-Brown et al. (2012) about

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online user-shared video (OUSV) use (p. 474); (c) selectivity, or communication and media choice; and (d) audience involvement with the media (Rubin, 1993).

Then, what could the interrelationships between media use and audience activity be? Windahl (1981) suggested a way to operationalize media use: "(a) how much of a given content is used; (b) what kind of content is used; (c) what relationships exist between the audience member and the media content (e.g., what kind of involvement); (d) in what way the content is used (as a primary or secondary activity) (as cited in Rubin & Windahl, 1986, p. 195). According to Bondad-Brown et al. (2012), media use frequency is correlated with audience activity; for example, more OUSV use is positively correlated with more intentional and selective audience activity, such as using keywords, and negatively with more passive activity, like receiving a video clip from others. So, besides exploring the reasons to watch HLSs, if we want to know how people get involved in and interact with this genre, as well as its media influence, we must find out viewers' media use and audience activity, broadly, how the audience watches HLSs. So, the following research question was addressed:

RQ3: How do Chinese live-streaming audiences of HLSs use SLSSs?

Romantic relationship and media use. In the past, socio-economic status, education, and age were considered the key variables vis-à-vis new media and new technology use (Kang, 2002; Coyne, Stockdale, Busby, Iverson, & Grant, 2011). The "digital divide," namely the accessibility gap of information and communication technologies between higher and lower socio-economic groups, was the key factor pertaining to new media and media technology use (Strasburger, Wilson, & Jordan, 2009). Also, higher education brings people the ability and confidence to better understand and master those new media technologies; younger individuals were found to

use new media services more frequently (Joinson, 2008; Quan-Haase & Young, 2010) and have fewer limitations to using them (Kang, 2002).

However, recently, the gap between these groups has been less and less obvious (Strasburger et al., 2009). Coyne et al. (2011) mentioned that in the last decade, the gap between socio-economic groups has been shrinking, so the accessibility gap between these groups is decreasing, too. In December of 2016, the Internet usage rate reached 54.3% in China, and Chinese rural netizens accounted for 27.4% of the national total, reaching 201 million, up by 5.26 million since the end of 2015 (CNNIC, 2017). It seems that more and more Chinese people have access to new communication technologies.

Since this study is about a newer medium and technology, it is necessary to consider individual traits of the users beyond the traditional ones. Considering HLSs are very similar to interpersonal communication, plus the large amount of news stories about how generous live-streaming audiences are to their beloved streamers, it is reasonable to emphasize romantic relationship status regarding HLS viewing.

Researchers have found evidence that romantic relationships are an important element in media studies. For instance, Lucas and Sherry (2004) found that online video game players, "who may appear to others to be playing alone," sometimes can establish romantic relationships through the computer-mediated communication provided by the game (p. 501). Coyne et al. (2011) found that people in different romantic relationship statuses have different reasons to contact their romantic partners. Also, they found that dating couples' contact through technology is less frequent than that of married couples because they have less perceived responsibility to discuss issues of relationship and family.

Rehman and Holtzworth-Munroe (2007) argued that the size of couple communication was significantly correlated with relationship satisfaction. One of the reasons that marital status is a key variable in U&G studies is that "being married" indicates "going steady." Those who are married at least have someone to interact with. So, they may have a lower degree of dependence on functional alternatives to real-life interaction (Rosengren & Windahl, 1972, p. 184). Besides, Pujazon-Zazik and Park (2010) discovered that females use social media more to talk to friends about their romantic relationships than males. Cohen (1997) also insisted that males who are anxious about their current romantic relationships might turn to media for support, while females, in the same situation, would focus on fixing the problematic relationship instead of depending on media. Because men and women think differently about love and their romantic relationships (Bailey, Hendrick, & Hendrick, 1987), gender is an indispensable variable when considering the effect of romantic relationships on media use.

However, although there is sufficient evidence to say that romantic relationship status, romantic relationship satisfaction, as well as gender, are significant variables concerning media use, the attempts to probe into SLSSs use have been less satisfactory. Little knowledge is established pertaining to how these factors affect HLS viewing. So, the following research questions are addressed:

RQ4: How does the status of romantic relationship influence male and female HLS viewing motivations and use?

RQ5: How does romantic relationship satisfaction influence male and female HLS viewing motivations and use?

Parasocial Interaction

"One of the ways people integrate media into their social lives is by establishing symbolic, or para-social, relationships with media characters" (Cohen, 1997, p. 516). Parasocial Interaction (PSI) in many ways is very similar to social interactions and relationships (Horton & Wohl, 1956; Rosengren & Windahl, 1972; Rubin & McHugh, 1987). Because of the outstanding para-interpersonal feature of SLSSs, for the need to figure out the relationship between people's social lives and their live stream viewing, as well as the roles of streamers to the audience, the concept of PSI was adopted.

PSI denotes a type of relation between the audience and the persona (i.e., media figures, such as performers, presenters, actors, and celebrities), which in short is "the interaction with somebody of the mass media world more or less as if he were present in person" (Rosengren & Windahl, 1972, p. 173). To put it clearer, PSI is one of the interactions between media users and "representations of humans appearing in the media," to which the user responds to as "a typical social relationship" (Giles, 2002, p. 279). After its first appearance in a study conducted by Horton and Wohl (1956), PSI as a media phenomenon has become fairly well established in media and communication literature (Giles, 2002). Horton and Wohl (1956) explained PSI as a seemingly face-to-face relationship – a viewer's one-sided but direct feeling of friendship or intimacy with a remote media figure. This definition indicates that when audiences are experiencing PSI, they retain their self-identity and interact with the character, which is different than the idea that they imagine themselves as the actual media character. Thus, PSI is more of an interpersonal interaction for viewers. One can hardly imagine media content having any effect on the audience without this interaction (Cohen, 2001). The persona in the media world offers a sense of intimacy to its audience; although such feelings may be just an imitation or a glimpse of

an ordinary relationship, they are very powerful and satisfying to those who feel them. Like what U&G theory advocates, PSI argues that audiences are not involved in passive observation, but they "know" the persona in somewhat of the same way they know their friends. The persona and his/her performance are objectively perceptible, so even if audiences are "implicated imaginatively," the image of, and sentiments for, the persona are not fantasy. In addition to the high level of perceived realism, the relationship is also a continuing relationship – the persona's appearance is a "regular and dependable event, to be counted on, planned for, and integrated into the routines of daily life." The shared history and experiences add more profound meaning to this relationship and deeper intimacy with the persona (Horton & Wohl, 1956, p. 216). These two characteristics are what make PSI influential to the audience.

Although PSI has such a long history, it was not until the advent of the U&G theory in the early 1970s that there was significant interest in it (Rosengren & Windahl, 1972; Giles, 2002). In McQuail, Blumler, and Brown's (1972) U&G study of British TV audiences, they found that audiences saw the performers' situations and behaviors as ways of understanding their own lives (as cited in Giles, 2002, p. 280). After that, most PSI research has used it as a behavioral variable in U&G models predicting media use. For example, according to Rubin et al. (1985), PSI was defined as "interpersonal involvement of the media user with what he or she consumes," which "may take many forms including seeking guidance from a media persona, seeing media personalities as friends, imagining being part of a favorite program's social world, and desiring to meet media performers" (p. 156-157). They further developed a 20-item PSI scale and confirmed a single-factor solution so that PSI could be better measured as a variable to predict media use by more subsequent media researchers.

Then, what is related to the development of para-social relationships? Cohen (1997) insisted that para-social relationships develop through ongoing interaction between personas and the audience. Rubin et al. (1985) believed that the features of television hearten PSI within audiences by providing them with face-to-face settings that mirror interpersonal communication and attract interactive responses. They further explained that instead of a single factor, a combination of factors foster the para-social relationship; for example, the degree of reality approximation (or perceived realism); frequency of appearance of the persona and the media; viewing intention; a sense of intimacy created by the conversational, face-to-face atmosphere and some production techniques, such as close-up shots. All these factors work together to make the persona a "role partner" (p. 156) for the viewer.

The parasocial role of a persona. Cohen (1997) argued that when watching television, audiences' feelings and reactions develop from their real-life experiences (p. 516). In other words, how an audience responds to the media varies depending on his/her real social interaction. This is the reason those relationships people develop with media characters are noteworthy. Without this interaction, how can people cry during *Titanic* while smiling during *The Pursuit of Happiness*?

PSI is analogous to interpersonal, actual interaction. Audiences are expected to contribute to the relationship by believing in and giving their loyalty to it (Horton & Wohl, 1956). Researchers have found that para-social relationships are in many ways similar to an actual social relationship (Rubin & McHugh, 1987). Several studies suggest that it is profitable to liken para-social relationships to actual social relationships (Cohen, 1997). When Rosengren and Windahl (1972) discussed the relationships between PSI and media functions, they stated the following:

…… this degree of involvement should tend to be found when …… mass media are used as a complement to real interaction, in order to obtain compensation for or escape from a societal or individual situation characterized by certain, sometimes mild, sometimes strong, deficiencies. (p. 182).

From this, we can see that the para-social roles of personas are mainly derived from the audience's real-life relationships and related to the demands originating from his/her every-day-life social situations, including the expectations of others. The persona may be an idealized version of someone, or those roles may no longer be possible in the real world. For instance, Cortez (1992) found that "physical and social attraction, shared values, attitudes, background and similarity in communicative style" of a newscaster can predict the development of PSI of a viewer, which suggests that para-social relationships are very similar to interpersonal relationships, and para-social attraction is analogous to interpersonal attraction, too (as cited in Cohen, 1997, p. 518). In their study about PSI and television news viewing, Rubin et al. (1985) argued that the development or formation of para-social relationships over time might connect partly to the "socially learned expectations of interpersonal interaction" – those audiences "who have watched a persona over time may perceive a sense of intimacy" developing from their expectations in past interpersonal experiences (p. 156). In Giles's study (2002), he advocated that once people have made judgments about or attributed characteristics to a media figure, they will respond to that figure as if it occupies their physical space afterward, thereby that media figure becomes incorporated into people's social network. Then it is reasonable to expect that para-social relationships have similar psychological processes to those found in face-to-face relationships. In Gleich's (1996) research, which compared the relationships between audiences and their friends, neighbors, as well as favorite media figures, he found that the ratings people

reported on the relationship quality of best friends were much higher than those for favorite media figures on most dimensions, including confidence, proximity, idealism, and strength of character, but the ratings for a good neighbor and favorite media figure were closer than those for friends. And on dimensions like passion and sociability, favorite media figures were scored more highly than good neighbors. Besides, according to Cohen (1999), teenagers' favorite characters are likely to be seen as pseudo-friends instead of idolized and imitated figures. This is the main meaning of the para-social roles for spectators – they are playing vicarious and actual roles to the audience. Based on this, an audience member would see himself/herself as the lover or father figure of the persona based on his/her primary actual relations, and vice versa, the persona can be given any assigned roles by the audience (Horton & Wohl, 1956).

Moreover, researchers assume that when interpersonal interaction (or its accessibility) is limited, people tend to use mass media for the satisfaction of this need, thus, may generate para-social relationships (Rubin et al., 1985). Unfortunately, there is very little direct evidence across studies for this statement. For example, Yanof (1991) found that women who were heavy TV viewers had stronger para-social relationships than the light and non-viewers, and they were less involved in their interpersonal relationships. However, those heavy viewers were not found to be less satisfied with their social lives (as cited in Cohen, 1997, p. 518). Therefore, specifying the nature of PSI is a pressing issue, especially to a new, more "real" media form. We can see a more valid correlation is estimated between PSI and the amount of media usage, but what about the satisfaction level of interpersonal communication? Is it possible that para-social relationships are treated as actual relationships, and therefore increase people's satisfaction degree of interpersonal communication? Thus, the following hypotheses are proposed:

H3a: The number of interpersonal relationships and the degree of PSI will be negatively related.

H3b: The amount of interpersonal communication and the degree of PSI will be negatively related.

H4: The degree of satisfaction of interpersonal communication and the degree of PSI will be negatively related.

On-line interaction, PSI and romantic relationships. Despite the similarity of PSI and actual social interaction, is online interaction regarded as "functionally equivalent to face-to-face social interaction" (Giles, 2002, p. 285)? Initial research of computer-mediated communication (CMC) advocated that since online communication lacks social context and nonverbal cues, online relationships are hard to form. Whereas more and more recent studies indicate a positive answer – that people can achieve closeness through communicating online (Anderson & Emmers-Sommer, 2006). With the fast development of communication and media technology, the media have become better and better at imitating and forming interpersonal communication settings. For example, as mentioned before, television personas encourage para-social involvement with audiences by using a conversational style to mirror face-to-face settings to generate a sense of intimacy, so that the para-social relationship can be magnified (Rubin et al., 1985). But now, newer media technologies, such as online chat rooms and live video streaming, allow all communication activities to happen simultaneously – communication is synchronous, which means it is not simply imitating conversational settings anymore but expanding the spectrum of interpersonal communication. Second, CMC has been observed to conquer many of the barriers that people used to think of when communicating at a distance, such as delays and costs. Also, social support is found to occur within online communities by members who have

never met in person (Lea & Spears, 1995). Thus, one can conclude that people have basically the same cognitive process in both interpersonal and mediated communication (Perse & Rubin, 1989).

For both face-to-face communication and CMC, gratifying communication happens when people's expectations for interaction are fulfilled (Anderson & Emmers-Sommer, 2006). With the new ability of synchronous interaction at a distance offered by online interaction, there has been a relatively bigger possibility for "meeting the media figure" in person someday, which is very significant for the generation of PSI (Giles, 2002, p. 286). In particular, SLSSs may be the newest and easiest way for audiences to get satisfying communication and establish personal relationships with the live-streaming hosts.

PSI was originally conceptualized as compensation for social interaction by Horton and Wohl (1956). They mentioned that because personas are easily available to the audience as objects of love, the para-social relationship is always taken as a complement to normal social life. Furthermore, they mentioned a successful radio program, *The Lonesome Gal*, in their writing to support a pre-assumption that people who lack a sexual partner may consume certain media programs that present their characters with "an erotic suggestiveness" (p. 224). The female host of the show using a conversational style and intimate words like "Darling" and "Lover" formed the image of a lonely girl to her listeners, which are shy, lonely men expecting to find a woman to comfort them. To them, media consumption is not only a way to escape from their unsatisfactory reality, but also a move to gain self-esteem. PSI is evidently manifested in media use regarding romantic relationships, maybe because sexual suggestiveness is one of the easiest and most obvious ways to form a sense of intimacy. However, although Rubin et al. (1985) found PSI and television reliance were related positively, they found no correlation

between loneliness and PSI. A sound explanation for this discrepancy is that different people might have different understandings and experiences of para-social relationships. Thus, individual differences should be considered when discussing how para-social relationships are perceived by viewers, such as differences in gender and romantic relationships (Cohen, 1997).

Again, when we discuss romantic relationships, inevitably, we have to consider sex differences. For instance, compared with men, women were found to have a stronger overall PSI in a study by Bailey, Hendrick, and Hendrick (1987). Another gender difference, found by Cohen (1997), was that women treated para-social relationships as ways to expand their social network while men resorted to these kinds of relationships when dealing with anxiety about their future social relationships. Hence, we have reasons to make a plausible conjecture that people with different romantic relationship statuses, romantic relationship satisfaction levels, and of different genders assign different roles to the live-streamers. Then, to figure out what roles have been given to live-streamers, the following research question was addressed:

RQ6: What roles do male and female audiences, with different romantic relationship statuses, assign to the live-streamers of HLSs they constantly watch?

RQ7: How does romantic relationship satisfaction influence male and female audiences' perceptions of the roles of live-streamers?

Chapter 3 - Methodology

This study examined how and why people watch HLSs, especially, the effects of romantic relationships on HLS use. It also explored the relationship between audiences and live-streamers in China. This chapter explains in detail the research sample, the recruitment method, and the overall methodology employed in the data collection and analysis process. Data were collected using an online survey utilizing the conceptual frameworks of U&G theory and PSI. All personal information collected about participants was anonymous and confidential. Data were analyzed using SPSS software.

Sample Description & Data Collection Procedure

An online, anonymous, self-administered survey was conducted in China via Sojump, the biggest and one of the most professional Chinese online survey instruments for producing, distributing, and collecting surveys. Sojump has a free version (users must recruit participants by themselves) and a paid version (Sojump will recruit respondents and ensure sample validity). We chose the latter one. Thus, the sample for this study was recruited by Sojump from its membership list. It has the personal information (e.g. demographics) and contact information (e.g. e-mail addresses) of those who have previously participated in studies distributed via Sojump so that it could accurately find those who meet the requirements of this study (i.e., only adults) and use a simple random sampling method to email them the link to the survey. To ensure we were able to exclude non-live-streaming viewers and non-HLS viewers, questions of "do you watch live streaming?" and "do you watch *Host Live Shows*?" were asked at the beginning of the questionnaire.

The standardized questionnaire was first developed in the English language and then translated into Chinese by a native Chinese speaker. After that, in order to ensure there was no

unclear wording of questions caused by translation, a Chinese graduate student translated the Chinese version questionnaire back into English. The result showed that there was no distortion caused by translation. Then, a final Chinese language questionnaire was distributed to the target population.

Data collection was conducted from August 23 until August 28, 2018. There were 518 participants in total. However, 197 were excluded for failing some attention checks set up by Sojump to prevent random answers and not being a SLSS or HLS viewer. In the end, data were collected from 321 Chinese HLS viewers. The sample break down was 35.51% male ($n=114$) and 64.49% female ($n=207$). The mean age of the respondents was 28.81 years ($SD=7.65$), with a range from 18 to 58. Among the participants, 75.39% of them had bachelor's degrees ($n=242$). With respect to employment and income, 83.18% of the participants had a job ($n=267$), and 25.23% said their monthly income ranges from 4000RMB to 5999RMB ($n=81$), followed by 23.99% and 17.45% making 6000-7999RMB ($n=77$) and 0-1999RMB ($n=56$) per month, respectively. Most of the respondents were married (42.06%, $n=135$) or single (39.56%, $n=127$). 17.13% were in a romantic relationship ($n=55$), 0.003% were separated ($n=1$), and 0.009% were divorced ($n=3$). In regard to what kind of contact audiences have with the host, 96.3% chose *Watching the Streamer Stream*, 64.8% chose *Chatting via Text Messages or Messaging Apps*, 53.6% chose *Attending an Event to Meet the Streamer*, 36.1% chose *Talking on the Phone*, 28% chose *Hanging out in Person for Having Fun Together*, 26.5% chose *Dating (for Romance)*. In terms of ethnicity, because the survey was only distributed to Chinese people, we did not ask a question about their ethnicity.

Variables of Interest and Measurement

Dependent variables. The dependent variables in this study included five aspects: SLSS use, perceived realism, viewing motives, media dependency, PSI, and roles of live-streamers. Detailed information for each aspect is addressed below.

SLSS use. SLSS use of Chinese HLS viewers was measured by asking audiences' viewing levels, expenses of virtual gift giving, and application preferences. The operationalization of the variables was:

Viewing level. Viewing level was assessed by asking participants' viewing time and frequency. Viewing time and frequency were estimated by averaging responses to two pairs of questions requesting the latest and usual viewing behavior ($r_{frequency}=.86$, $p_{frequency}=.00$; $r_{time}=.43$, $p_{time}=.00$). The use of this measure is supported in previous research (Rubin, 1983). Viewing level was asked by the following four questions:

1. On average, how many days a week do you watch *Host Live Shows*? (1 day=1, 2 days=2, 3days=3, 4 days=4, 5 days=5, 6 days=6, 7 days=7)

2. Please recall last week, how many days did you watch *Host Live Shows*? (1 day=1, 2 days=2, 3days=3, 4 days=4, 5 days=5, 6 days=6, 7 days=7)

3. On average, how many hours do you spend on watching *Host Live Shows* when you watch it? (input a numerical number)

4. Please recall last week, how many hours did you spend on watching *Host Live Shows* when you watched it? (input a numerical number)

Expenses of virtual gift giving. Participants were asked to input their monthly expenses of virtual gift giving by the following question:

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1. About how much do you reward *Host Live Show* host(s) by sending virtual gifts per

    month, in RMB? (input a numerical number)

Application preferences. Application preferences are defined as activities viewers would do while watching *Host Live Shows* in this study. Items were assessed on a 5-point, Likert-scale ranging from 1) never to 5) always:

1. When you watch *Host Live Shows*, how often do you do the following activities?

Items were:

1) Just watch.

2) Chat with the host while watching.

3) Type comments while watching.

4) Follow the host on the platform.

5) Share the link of the live stream I'm watching.

6) Ask personal contact information from the host.

7) Reward the host by sending virtual gifts.

8) Send private messages through the platform to the host.

9) Other (can input specification).

Perceived Realism. To understand how realistic live video streaming is to Chinese audiences, participants were asked to respond to a modified version of the Perceived Realism Scale (Rubin,1981b) developed by Rubin (1981a) originally. Items were assessed on a 5-point, Likert-scale ranging from 1) strongly disagree to 5) strongly agree. The 5-item realism scale had a mean of 3.02 (*SD*=.81) and a .83 Cronbach alpha. The question was:

1. Here are several statements about how true *Host Live Show* is to you. For each

    statement, please mark the number that best expresses your own feelings.

Items were:

1) *Host Live Shows* present things as they really are in life.

2) If I see something in *Host Live Shows*, I can be sure it really is that way.

3) *Host Live Shows* let me really see how other people live.

4) *Host Live Shows* show life as it really is.

5) *Host Live Shows* let me see what happens in other places as if I were really there.

Viewing motives. 55 HLS viewing motivation items utilized in prior U&G studies – the Internet &Television Video Viewing Motives Scale (Cha, 2013), the Television Viewing Motives Scale (Rubin, 1983), the Internet Using Gratifications Scale (Sundar & Limperos, 2013), and the Tinder Motives Scale (TMS) (Timmermans & Caluwé, 2017) – were modified for this study. Subjects were asked to indicate their agreement with all items on a 5-point, Likert-scale ranging from 1) strongly disagree to 5) strongly agree:

How much do you agree with the following statements concerning the question that "I watch *Host Live Shows* because ...." (The items are included in Appendix A).

Media Dependency. The Television Dependency Scale developed by Grant (1996) was adapted to measure HLS dependence. The 18-item dependency scale had a mean of 3.37 (*SD*=.51) and a .84 Cronbach alpha. Subjects were asked to respond to all statements in terms of usefulness on a 5-point, Likert-scale ranging from 1) not helpful at all to 5) extremely helpful:

1. Please indicate in your daily life, "how helpful is *Host Live Show* to....". For each statement, please mark the option that best expresses your own feelings.

Items were:

1) Stay on top of what is happening around me.

2) Unwind after a hard day or week.

3) Gain insight into why I do some of the things I do.

4) Discover better ways to communicate with others.

5) Decide where to go for services such as health, financial, or household.

6) Relax when I am by myself.

7) Find out how the country is doing.

8) Imagine what I'll be like as I grow older.

9) Give me something to do with my friends.

10) Figure out what to buy.

11) Think about how to act with friends, relatives, or people I work with.

12) Have fun with family and friends.

13) Observe how others cope with problems or situations like mine.

14) Keep up with world events.

15) Be a part of events that I enjoy without having to be there.

16) Get ideas about how to approach others in important or difficult situations.

17) Plan where to go for evening and weekend activities.

18) Have something to do when nobody else is around.

PSI. To assess the intensity of the para-social relations viewers developed with live-streamers, subjects were asked to respond to a 10-item scale (α= .76, *M*= 3.56, *SD*= .55) adapted from a short version PSI Scale developed by Rubin and Perse (1987b). This short version PSI Scale was adapted from an original 20-item PSI Scale developed in an earlier study of local television news (Rubin et al., 1985). Respondents indicated their agreement with each statement on a 5-point, Likert-scale ranging from 1) strongly disagree to 5) strongly agree:

1. Here are several statements about watching *Host Live Shows*. For each statement, please mark the number that best expresses your own feelings about your favorite live-streamer(s).

Items were:

1) I feel sorry for my favorite live-streamer when he/she makes a mistake.

2) The live-streamers make me feel comfortable, as if I am with friends.

3) I see my favorite live-streamer as a natural, down-to-earth person.

4) I look forward to watching my favorite live-streamer later today on his/her live streaming channel.

5) If my favorite live-streamer appeared on another streamer's live-streaming channel, I would watch that channel.

6) When my favorite live-streamer says something, he/she seems to understand the kind of things I want to know.

7) If there were a story about my favorite live-streamer in a newspaper or magazine, I would read it.

8) I miss seeing my favorite live-streamer when he/she is on vacation.

9) I would like to meet my favorite live-streamer in person.

10) I find my favorite live-streamer to be attractive.

Roles of the live-streamers. To identify the roles audiences assign to live-streamers, participants were asked to indicate who the streamers are to them. Items were assessed on a 5-point, Likert-scale ranging from 1) strongly disagree to 5) strongly agree:

1. How much do you agree with the following statements concerning the question that "I think the streamer(s) I have been constantly watching is/are my …"?

Items were 1) peer, 2) just a live-streamer, 3) friend, 4) family member, 5) stranger, 6) girl/boyfriend, 7) idol, 8) wife/husband, 9) celebrity, 10) advisor, 11) Other (can input specification).

Independent variables. The independent variables in this study were about two aspects: interpersonal communication and demographic characteristics. The latter one consists of romantic relationship conditions, which includes the status of romantic relationships and the satisfaction of them, and other demographic information. Detailed information for each aspect is addressed below.

Interpersonal communication. To understand the relationships between people's interpersonal communication conditions and media dependency level as well as PSI degree, questions about participants' interpersonal relationships and communication were asked. Interpersonal communication is defined as the amount of interpersonal communication and the satisfaction level of interpersonal communication. The operationalization of the variables was:

The amount of interpersonal communication. The amount of interpersonal communication was estimated by first, summing up two questions requesting the number of interpersonal relationships a participant has in different conditions; second, asking respondents to input their previous day's actual hours spent on interpersonal communication:

The number of interpersonal relationships was asked by the following questions:

1. How many people do you communicate with, in person and by telecommunicating, when you at work or school? (input a numerical number)

2. How many people do you communicate with, in person and by telecommunicating, outside of work or school? (input a numerical number)

The amount of time spent on interpersonal communication was asked by the following question:

Please recall yesterday, how many hours did you spend on communicating with others? (input a numerical number)

Communication satisfaction. To understand the degree of participants' interpersonal communication satisfaction, Communication Satisfaction Scale (Rubin & Rubin, 1989) was adapted, which was developed by Hecht (1978) originally. For item 1 to item 11: strongly disagree = 1, disagree = 2, disagree some and agree some = 3, agree = 4, strongly agree=5. Item 12 to item 16 were worded oppositely, so these were: strongly disagree = 5, disagree = 4, disagree some and agree some = 3, agree = 2, strongly agree=1. Thus, higher scores will reflect greater communication satisfaction. The 16-item communication satisfaction scale had a mean of 3.55 (*SD*=.44) and a .78 Cronbach alpha. The question was:

1. Here are several statements about your general interpersonal communication and conversion satisfaction. For each statement, please mark the option that best expresses your own feelings about your satisfaction degree.

Items were:

1) Other people let me know if I communicate effectively.

2) Other people express a lot of interest in what I have to say.

3) Other people genuinely want to get to know me.

4) My conversations flow smoothly.

5) Other people show me that they understand what I say.

6) I am very satisfied with my conversations.

7) In conversations, we each get to say what we want to.

8) In conversations, I feel that we can laugh easily together.

9) I feel like I can talk about anything with other people.

10) During conversations with others, I am able to present myself as I want others to view me.

11) I would like to continue having conversations like the ones I have now.

12) I have better things to do than converse with others.

13) I do not enjoy conversations.

14) Nothing is ever accomplished in conversations.

15) We usually talk about something I am not interested in.

16) I am very dissatisfied with my conversations.

Demographic characteristics. Demographic information was collected using the following questions:

Romantic relationship conditions:

1. What is your current romantic relationship status? [Single=1, In a relationship=2, Married=3, Separated=4, Divorced=5, Widowed=6, Other (can input specification)=7)

2. Romantic relationship satisfaction was asked by:

   1) How satisfied are you about your romantic life? [Measured by a 5-point, Likert-scale ranging from 1 (not at all satisfied) to 5 (very satisfied)]

   2) The desire to change the current romantic relationship state:

   - (Only those who chose *In a relationship* and *Married* on Q5 could see this question) To what extent do you want to have another different romantic partner? [Measured by a 5-point, Likert-scale ranging from 1 (not at all eager) to 5 (very eager)]

- (Only those who chose *Single*, *Separated*, *Divorced* and *Windowed* on Q5 could see this question) To what extent do you want to have a romantic partner? [Measured by a five-point Likert-scale ranging from 1 (not at all eager) to 5 (very eager)]

Other demographic information:

1. Please indicate what kind of contact or connection you have with the streamer(s) you constantly watch? [Measured by a 5-point, Likert-scale ranging from 1 (never) to 5 (always)].

Items were:

1) Talking on the phone

2) Chatting via text messages or messaging APPs (e.g., WeChat)

3) Hanging out in person for having fun together

4) Watching the streamer stream

5) Attending an event to meet the streamer

6) Dating (for romance)

7) Other (can input specification)

2. What is your gender? (Male=1, Female=2)

3. What is your age? (input a numerical number)

4. What is the highest degree obtained or level of school you have completed? [Less than high school=1, High school graduation (includes equivalency)=2, Bachelor's degree=3, Master's degree=4, Doctoral degree=5, Other (can type specification)=6]

5. Do you have a job, currently? (Yes=1, No=2)

6. What is your personal income per month? (¥0-¥1999=1, ¥2000-¥3999=2, ¥4000-¥5999=3, ¥6000-¥7999=4, ¥8000-¥9999=5, over ¥9999=6)

This chapter explains in detail the research sample, the recruitment method, and the overall methodology employed in the data collection and analysis process. The conceptualization and operationalization of both dependent and independent variables of interest were also elaborately explained.

Chapter 4 - Results

The purpose of the present study was to understand what motivates Chinese people to watch HLSs, how they use SLSSs when they watch HLSs and the roles of the streamer assigned by the audience.

This chapter presents the key findings gathered from the 321 qualified survey questionnaires. The results are organized in a way that answers the research questions and hypotheses asked in chapter 2 (see Table 10).

Host Live Show Viewing as Functional alternatives

Perceived Realism. For RQ1, how realistic do viewers believe the content of HLSs is, results showed that Perceived Realism Scale had a mean of 3.02 (*SD*= .81), with skewness of -.17 (*SE*= .136) and kurtosis of -.75 (*SE*= .27). Considering we measured this variable on a 5-point Likert scale, a mean of 3 indicates perceived realism was neither hyper-realistic nor unrealistic.

Media dependency and interpersonal communication. H1a, the number of interpersonal relationships and HLS dependence will be negatively related, was not supported. The two variables were not significantly correlated (*r*=.02, *p*>.05). H1b, the amount of interpersonal commination and HLS dependence will be negatively related, was not supported. The two variables were not significantly correlated (*r*= -.09, *p*>.05). H2, the degree of satisfaction of interpersonal communication and HLS dependence will be negatively related, was not supported. However, a medium, positive correlation was found between the degree of satisfaction of interpersonal communication and HLS dependence (*r*=.44, *p*<.001).

Viewing motives. For RQ2, what motivations do Chinese live-streaming audiences have for watching HLSs, a principal components factor analysis (PCA), using oblimin rotation, was

conducted. Prior to performing PCA, the suitability of data for factor analysis was assessed.

Inspection of the correlation matrix revealed the presence of many coefficients of .3 and above.

The Kaiser-Meyer-Olkin value was .84, exceeding the recommended value of .6 (Kaiser, 1970)

and Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance, supporting the

factorability of the correlation matrix.

All items in this analysis had primary loadings over .4 (Stevens, 1992). First, 16 extracted

factors were observed, but based on the Scree Plot, 4 factors were identified, explaining 34.51%

of the variance. Four eigen values were extracted: 9.94, 4.23, 2.53, 2.23: *Community Building* (2

items, α=.73, *M*=3.73, *SD*=.91), which accounted for 18.08% of the variance in the data; *Ego-*

boost (7 items, α=.84, *M*=3.09, *SD*=.79), which accounted for 7.68% of the variance; *Escape* (3

items, α=.73, *M*=2.50, *SD*=.92), which accounted for 4.61% of the variance; and *Bandwagon* (3

items, α=.63, *M*=3.46, *SD*=.73), which accounted for 4.14% of the variance in the data. Initially,

there were three items with primary loading over .4 of *Community Building*, but one had

negative loading, and the Alpha of all three items was .33. After recording the item with negative

loading into the opposite direction, the Alpha was still very low (α=.49), however, by eliminating

this item, the Alpha went up to .73, so this item was eliminated for further data analysis (see

Table 1).

Table 1 Factor Analysis for Viewing Motives

Motive (*M*, *SD*)	Factor 1	Factor 2	Factor 3	Factor 4	Variance Explained
Factor 1 - Community Building (3.37, .91)					18.08%
It is cheap to use	-.725				
I can connect with others	.582				
It allows me to expand my social network	.477				
Factor 2 – Ego-boost (3.09, .79)					7.68%
To get compliments from others		.802			
To get attention from others		.767			
To gain more self-confidence		.696			
To get self-validation from others		.637			

To build an emotional connection with the host	.610	
To make friends with the host	.487	
To get an "ego-boost"	.407	
Factor 3 – Escape (2.50, .92)		4.61%
By doing so, I can get away from what I'm doing	.823	
By doing so, I can get away from the rest of the family or others	.797	
By doing so, I can forget about school, work, or other things	.699	
Factor 4 – Bandwagon (3.46, .73)		4.14%
It comforts me to know the thoughts and opinions of others	.676	
It allows me to receive opinions of others before I make decisions	.650	
It allows me to compare my opinions with those of others	.524	
Total variance explained		34.51%

SLSS use. RQ3 asked how Chinese live-streaming audiences of HLSs use SLSSs. In the present study, SLSS use was defined in three dimensions: audiences' a) viewing level, which included viewing time and viewing frequency, b) expenses of virtual gift giving, and c) application preferences.

Viewing level. Results showed that viewing time had a mean of 1.41 hours (SD=1.04) and a median of 1.00, with skewness of 2.43 (SE=.14) and kurtosis of 9.01 (SE=.27), which indicated that the distribution of viewing time was skewed and peaked, and data were clustered to the left at the low values. Viewing frequency had a mean of 2.87 days (SD=1.42), with skewness of .66 (SE=.14) and kurtosis of .20 (SE=.27).

Expenses of virtual gift giving. The expense of virtual gift giving had a mean of 84.09 RMB (SD=301.39) and a median of 0.00, ranging from 0 to 3000, with skewness of 6.98 (SE=.14) and kurtosis of 53.80 (SE=.27). The skewness and kurtosis indicated that the

distribution of this variable was highly skewed and peaked, and data were clustered to the left at the low values.

Application preferences. The frequency scale of activities (1 to 5 scale), which has the highest mean to lowest mean, people do while watching HLSs were: "just watch" (*M*=3.86, *SD*=.93), "follow the host on the platform" (*M*=3.36, *SD*=1.05), "type comments while watching" (*M*=2.87, *SD*=1.03), "chat with the host while watching" (*M*=2.45, *SD*=.98), "share the link of the live stream I'm watching" (*M*=2.38, *SD*=.97), "reward the host by sending virtual gifts" (*M*=2.15, *SD*=1.06), "other" (*M*=1.90, *SD*=1.08), "send private messages through the platform to the host" (*M*=1.89, *SD*=.97), "ask personal contact information from the host" (*M*=1.71, *SD*=.93). For detailed parameters of all nine items see Table 2.

For people who chose "other," most of their answers were related to communication with others (mostly chatting with others, in person or through some chatting applications), eating, and playing games.

Table 2 Parameters of Application Preferences

	M (SD)	Never	Rarely	Sometimes n(%)	Most of the time	Always
Just watch	3.86(.93)	5 (1.6%)	24(7.5%)	60(8.7%)	153(47.7%)	79(24.6%)
Follow the host on the platform	3.36(1.05)	18(5.6%)	41(12.8%)	115(35.8%)	101(31.5)	46(14.3%)
Type comments while watching	2.87(1.03)	24(7.5%)	95(29.6%)	129(40.2%)	45(14%)	28(8.7%)
Chat with the host while watching	2.45(.98)	57(17.8%)	115(35.8%)	105(32.7%)	37(11.5%)	7(2.2%)
Share the link of the live stream I'm watching	2.38(.97)	61(19%)	120(37.4%)	103(32.1%)	30(9.3%)	7(2.2%)
Reward the host by sending virtual gifts	2.15(1.06)	114(35.5%)	83(25.9%)	90(28%)	29(9%)	5(1.6%)
Other	1.90(1.08)	157(48.9%)	78(24.3%)	57(17.8%)	20(6.2%)	9(2.8%)
Send private messages through the platform to the host	1.89(.97)	135(42.1%)	112(34.9%)	54(16.8%)	13(4%)	7(2.2%)
Ask personal contact information from the host	1.71(.93)	172(53.6%)	91(28.3%)	39(12.1%)	16(5%)	3(.9%)

The influence of romantic relationship status. To answer the first half of RQ4, how does the status of romantic relationship influence male and female HLS viewing motivations, a one-way between subjects ANOVA was conducted. Because of the small numbers of the separated, divorced, widowed and other (total $n=4$), data about romantic relationships were only adopted from those who were single, in a relationship, and married in this study for further analysis. Results showed that there was not a significant effect of romantic relationship status on audiences' viewing motivations at the p<.05 level (see Table 3).

Table 3 One-Way Analysis of Variance of Viewing Motives by Romantic Relationship Status

	Gender			
	Male [a]		Female [b]	
	F	p	F	p
Community Building	1.56 (2,110)	.21	1.69 (2,201)	.19
Ego-boost	2.48 (2,110)	.09	1.49 (2,201)	.23
Escape	1.34 (2,110)	.27	.09 (2,201)	.92
Bandwagon	2.39 (2,110)	.10	.55 (2,201)	.58

Note. [a] n=113, [b] n=204

Then, to answer the second half of RQ4, how does the status of romantic relationship influence male and female HLS use, one-way between subjects ANOVA tests were conducted. Results indicated that there was not a significant effect of romantic relationship status on both gender's viewing time [$F_{male}(2,110)=.17$, $p_{male}>.05$; $F_{female}(2,201)=.96$, $p_{female}>.05$] and viewing frequency [$F_{male}(2,110)=1.72$, $p_{male}>.05$; $F_{female}(2,201)=1.57$, $p_{female}>.05$]. Likewise, there was not a significant effect of romantic relationship status on both gender's expenses of virtual gift giving [$F_{male}(2,110)=1.30$, $p_{male}>.05$; $F_{female}(2,201)=.27$, $p_{female}>.05$]. However, there was a significant effect of romantic relationship status on the frequencies of *Just Watch* [$F(2,110)=3.20$, $p<.05$] and *Follow the Host on the Platform* [$F(2,110)=4.86$, $p<.05$] for males. Post-hoc comparisons using the Tukey HSD test indicated that for the former one, the mean

score for those who were single (*M*=3.52, *SD*=.89) was significantly different from those who were in a relationship (*M*=4.15, *SD*=.55); for the latter one, the mean score for those who were in a relationship (*M*=4.15, *SD*=.80) was significantly different from those who were married (*M*=3.16, *SD*=1.04). Other than these two relationships, there was no other significant effect of romantic relationship status on user Application Preferences (see Table 4).

Table 4 One-Way Analysis of Variance of Application Preferences by Romantic Relationship Status

	Gender			
	Male [a]		Female [b]	
	F	*p*	*F*	*p*
Just watch	3.20 (2,110)	.04*	.22 (2,201)	.80
Chat with the host while watching	.37 (2,110)	.69	.03 (2,201)	.97
Type comments while watching	.17 (2,110)	.85	.34 (2,201)	.71
Follow the host on the platform	4.86 (2,110)	.01**	1.78 (2,201)	.17
Share the link of the live stream I'm watching	2.50 (2,110)	.09	.54 (2,201)	.58
Ask personal contact information from the host	1.03 (2,110)	.36	.70 (2,201)	.50
Reward the host by sending virtual gifts	.23 (2,110)	.79	.56 (2,201)	.57
Send private messages through the platform to the host	.08 (2,110)	.93	.66 (2,201)	.52
Other	2.62 (2,110)	.08	.88 (2,201)	.42

Note. [a] n=113, [b] n=204

The influence of romantic relationship satisfaction. For the first half of RQ5 (see Table 6), how does romantic relationship satisfaction influence male and female HLS viewing motivations, one small negative correlation was found between men's romantic relationship satisfaction and *Ego-boost* (*r*= -.22, *p*<.05). Besides, there were two positive correlations, one is medium, and one is small, between a) single men's *Ego-boost* and their desire to have a romantic partner (*r*=.37, *p*<.05); b) women's, who were in a relationship or married, *Ego-boost* and their desire to have another different romantic partner (*r*= .23, *p*<.05).

For the second half of RQ5 (see Table 7), how does romantic relationship satisfaction influence male and female HLS use, several significant correlations were found. First, there was a negative correlation between men's expenses of virtual gift giving and their romantic relationship satisfaction ($r= -.20$, $p<.05$). Second, there were two correlations between men's romantic relationship satisfaction and the frequency of *Just Watch* ($r= .34$, $p<.001$) and *Send Private Messages through the Platform to the Host* ($r= -.19$, $p<.05$). Third, there were small positive correlations between women's, who were in a relationship or married, desire to have another different partner and their viewing time ($r= .26$, $p<.01$) and viewing frequency ($r= .25$, $p<.01$). Fourth, there were two small positive correlations between men's, who were in a relationship or married, desire to have another romantic partner and the frequency of *Reward the Host by Sending Virtual Gifts* ($r= .27$, $p<.05$) and *Send Private Messages through the Platform to the Host* ($r=.29$, $p<.05$). Lastly, there were three positive correlations between women's, who were in a relationship or married, desire to have another romantic partner and the frequency of *Chat with the Host while Watching* ($r=.19$, $p<.05$), *Ask Personal Contact Information from the Host* ($r= .31$, $p<.01$), and *Reward the Host by Sending Virtual Gifts* ($r= .18$, $p<.05$).

Parasocial Interaction

Degree of PSI and interpersonal communication. H3a, the number of interpersonal relationships and the degree of PSI will be negatively related, was not supported. There was no significant correlation found between these two variables ($r=-.01$, $p>.05$). Likewise, H3b, the amount of interpersonal communication and the degree of PSI will be negatively related, was not supported. There was no significant correlation found between these two variables ($r=-.05$, $p>.05$). H4, the degree of satisfaction of interpersonal communication and the degree of PSI will

be negatively related, was not supported. Nevertheless, a strong, positive correlation was found between these two variables (r=.87, p<.001).

Roles of the live-streamers. To answer RQ6, what roles do male and female audiences, with different romantic relationship statuses, assign to the live-streamers of HLSs they constantly watch, one-way between subjects ANOVA tests were conducted (see Table 5). For detailed descriptive data see Table 8. Results indicated that there was a significant effect of romantic relationship status on audiences' agreement on the role of live-streamers.

Table 5 One-Way Analysis of Variance of Agreement Scores on Roles of Live-streamers by Romantic Relationship Status

Roles	Peer	Live-streamer	Friend	Family member	Stanger	Girl/ Boyfriend	Idol	Wife/ husband	Celebrity	Advisor
F	.86	2.11	4.59**	1.22	2.66*	1.57	.07	.42	1.48	.95

Note. df_1=5, df_2=311
*=$p < .05$, **=$p < .01$

Friend. There was a significant effect of romantic relationship status on audiences' agreement that streamers are friends to them [F(5,311)=4.59, p<.001]. Post hoc comparisons using the Tukey HSD test indicated that the mean score for a) single females (M=2.96, SD=1.01) was significantly different than males, who were in a relationship (M=3.92, SD=1.04) or married (M=3.47, SD=.10); b) males, who were in a relationship (M=3.92, SD=1.04), was significantly different than females, who were in a relationship (M=2.90, SD=.91). See Figure 1.

Figure 1 Mean of Agreement Score on Friend

Mean of agreement on Friend
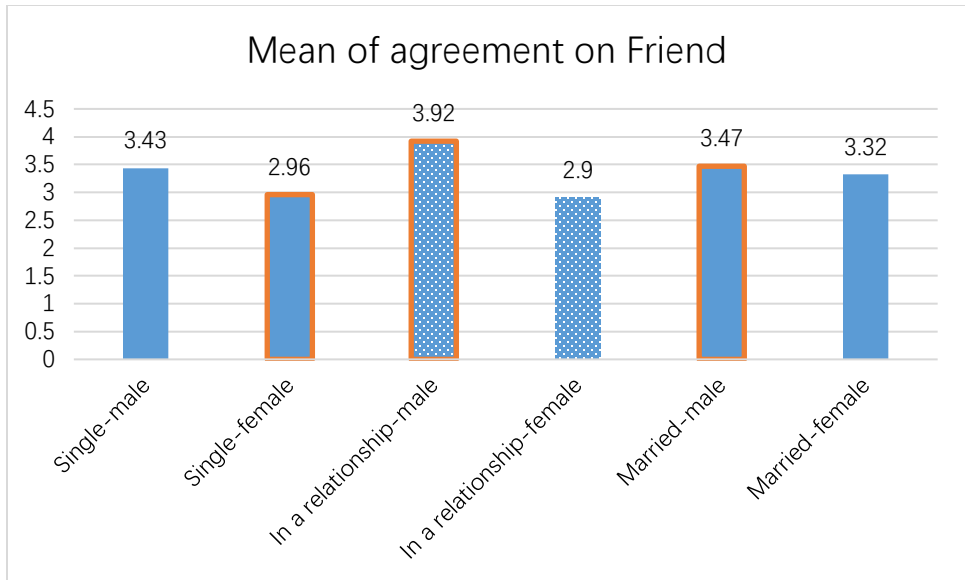
Stranger. There was a significant effect of romantic relationship status on audiences' agreement that streamers are strangers to them [$F(5,311)=2.66$, $p<.05$]. Post hoc comparisons using the Tukey HSD test indicated that the mean score for married females ($M=2.51$, $SD=.98$) was significantly different than females, who were in a relationship ($M=3.07$, $SD=1.09$). See Figure 2.

Figure 2 Mean of Agreement on Stranger

Mean of agreement on Stranger
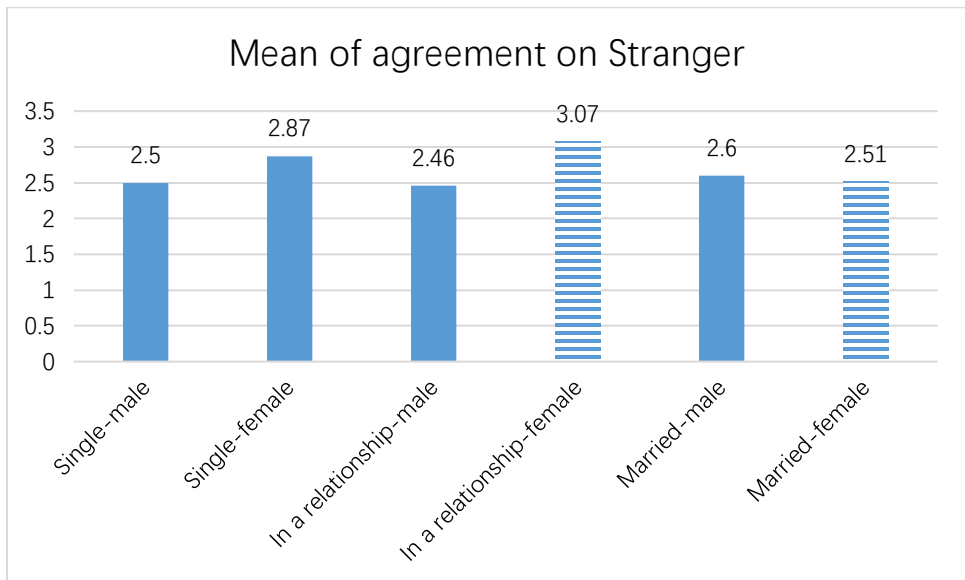
For RQ7 (see Table 9), how does romantic relationship satisfaction influence male and female audiences' perceptions of the roles of live-streamers, there was no statistically significant correlation found between relationship satisfaction and males' agreement on the role of streamers. However, there were three correlations between relationship satisfaction and the agreement that female audiences of streamers were a) peers ($r=.15$, $p<.05$), b) friends ($r=.20$, $p<.01$), and c) strangers ($r= -.19$, $p<.01$). Besides, three correlations were found between the desire of: a) males, who were in a relationship or married, to have a different romantic partner and the agreement that streamers were their wives ($r=.28$, $p<.05$); b) females', who were in a relationship or married, to have a different romantic partner and the agreement that streamers were their boyfriends ($r=.20$, $p<.05$); c) males, who were in a relationship or married, to have a different romantic partner and the agreement that streamers were their family members ($r=.29$, $p<.05$).

For those who chose "Other" on this question (roles of live-streamers), the majority of them indicated they have some interpersonal relationships with the live-streamer – overall, they saw the live-streamer as a person who they admire (mentor, 'IT' girl, etc.) and also who they could share secrets/pressures/problems with.

In this chapter, all the research questions and hypotheses of this study were answered and tested (see Table 6). Results of those statistical analyses were also displayed and elaborated.

Table 6 Results Summary

	Question	Result
RQ1	How realistic do viewers believe the content of HLSs is?	Neutral perceived realism ($M=3.02$, $SD=.81$)
RQ2	What motivations do Chinese live-streaming audiences have for watching HLSs?	1) Community Building ($M=3.37$, $SD=.91$) 2) Ego-boost ($M=3.09$, $SD=.79$)

		3) Escape (*M*=2.5, *SD*=.92) 4) Bandwagon (*M*=3.46, *SD*=.73)
RQ3	How do Chinese live-streaming audiences of HLSs use SLSSs?	1) Viewing level: 1.41 hours/day (*SD*=1.04) and 2.87 days/week (*SD*=1.42) 2) Expenses of virtual gift giving: ¥84.09/month (*SD*=301.39) 3) Application preferences: incline to passive interaction
RQ4	How does the status of romantic relationship influence male and female HLS viewing motivations and use?	It is influencing males' application preferences.
RQ5	How does romantic relationship satisfaction influence male and female HLS viewing motivations and use?	It is influencing both genders' *Ego-boost* and HLS use.
RQ6	What roles do male and female audiences, with different romantic relationship statuses, assign to the live-streamers of HLSs they constantly watch?	Status affects how much people see the host as friends and strangers.
RQ7	How does romantic relationship satisfaction influence male and female audiences' perceptions of the roles of live-streamers?	1) Satisfaction level is influencing how people see streamers as peers (*r*= .15, *p*<.05), friends (*r*= .20, *p*<.001, and strangers (*r*= -.19, *p*<.01). 2) The desire to have a different partner is positively correlated with females' agreement on streamers are their boyfriends (*r*= .20, *p*<.05) and males' agreement on streamers are their wives *r*= .28, *p*<.05) and family members (*r*= .29, *p*<.05).
H1a	The number of interpersonal relationships and HLS dependence will be negatively related.	Not Supported (*r*= .02, *p*>.05)
H1b	The amount of interpersonal communication and HLS dependence will be negatively related.	Not Supported (*r*= -.09, *p*>.05)

H2	The degree of satisfaction of interpersonal communication and HLS dependence will be negatively related.	Not Supported ($r= .44$, $p<.001$)
H3a	The number of interpersonal relationships and the degree of PSI will be negatively related.	Not Supported ($r= -.01$, $p>.05$)
H3b	The amount of interpersonal communication and the degree of PSI will be negatively related.	Not Supported ($r= -.05$, $p>.05$)
H4	The degree of satisfaction of interpersonal communication and the degree of PSI will be negatively related.	Not Supported ($r= .87$, $p<.001$)

Table 7 Romantic Relationship Satisfaction and Viewing Motivations: Correlation and Descriptive Statistics

	Romantic relationship satisfaction level (RRSL)				Desire to have a/a different romantic partner (DHRP)							
	All				Single				In a relationship & Married			
	Male [a]		Female [b]		Male [c]		Female [d]		Male [e]		Female [f]	
	r	M(SD)	r	M(SD)	r	M(SD)	r	M(SD)	r	M(SD)	r	M(SD)
RRSL	-	3.46(1.05)	-	3.60(.96)	.	2.64(.1.03)	.	3.21(1.07)	.	4.08(.64) &3.93(.72)	.	3.93(.84)& 3.91(.69)
DHRP	.	.	.	.	-	3.93(1.07)	-	3.38(1.07)	-	2.00(1.08)& 2.31(1.16)	-	2.29(1.09)& 2.10(1.23)
Community Building	.05	3.52(.97)	.09	3.28(.87)	.19	3.31(1.02)	-.15	3.25(.84)	-.09	3.54(1.16)& 3.66(.88)	.04	3.12(.97)& 3.42(.85)
Ego-boost	-.22*	3.28(.79)	.007	2.99(.78)	.37*	3.40(.81)	.95	3.02(.71)	.08	3.56(.97)& 3.13(.71)	.23*	2.80(.92)& 3.05(.77)
Escape	-.08	2.34(.85)	-.13	2.59(.95)	-.00	2.44(.86)	.07	2.60(.90)	.01	2.54(.59)& 2.21(.88)	.14	2.58(1.08)& 2.54(.94)
Bandwagon	.05	3.47(.83)	.00	3.46(.67)	.12	3.36(.93)	.09	3.45(.73)	-.16	3.92(.56)& 3.45(.78)	.05	3.39(.68)& 3.52(.60)

Note. [a] n=114, [b] n=207, [c] n=42, [d] n=85, [e] n=71, [f] n=119
*=$p < .05$, **=$p < .01$

Table 8 Romantic Relationship Satisfaction and HLS Use: Correlation and Descriptive Statistics

	Romantic relationship satisfaction level (RRSL)				Desire to have a/a different romantic partner (DHRP)							
	All				Single				In a relationship & Married			
	Male [a]		Female [b]		Male [c]		Female [d]		Male [e]		Female [f]	
	r	M(SD)	r	M(SD)	r	M(SD)	r	M(SD)	r	M(SD)	r	M(SD)
RRSL	-	3.46(1.05)	-	3.60(.96)	.	2.64(.1.03)	.	3.21(1.07)	.	4.08(.64) &3.93(.72)	.	3.93(.84)& 3.91(.69)
DHRP	.	.	.	.	-	3.93(1.07)	-	3.38(1.07)	-	2.00(1.08)& 2.31(1.16)	-	2.29(1.09)& 2.10(1.23)
Viewing time	-.04	1.43(1.00)	.00	1.40(1.06)	-.07	1.51(.85)	-.07	1.43(.93)	.14	1.34(.45)& 1.42(1.18)	.26**	1.58(1.35)& 1.30(1.04)
Viewing frequency	.07	3.16(1.44)	-.11	2.71(1.39)	.02	2.88(1.21)	.11	2.61(1.30)	.12	3.65(1.38)& 3.27(1.59)	.25**	2.51(1.47)& 2.92(1.34)

Virtual gift expense	-.20*	130.44(360.02)	-.07	58.57(261.09)	.08	201.07(494.18)	.08	56.47(326.83)	.12	58.85(69.35)&97.59(272.10)	.15	85.29(316.29)&48.58(110.00)
Just watch	.34**	3.77(.89)	-.01	3.91(.94)	-.22	3.52(.89)	.04	3.91(.95)	-.06	4.15(.55)&3.86(.93)	-.12	4.00(.94)&3.88(.92)
Chat with the host while watching	-.07	2.66(1.01)	-.02	2.33(.95)	.30	2.55(1.06)	.04	2.32(.92)	.18	2.69(.95)&2.72(1.01)	.19*	2.36(.98)&2.35(.98)
Type comments while watching	-.09	3.00(1.07)	.01	2.80(1.01)	.12	3.02(1.12)	.11	2.88(.99)	.12	2.85(1.21)&3.03(1.03)	-.03	2.76(1.01)&2.77(1.01)
Follow the host on the platform	.02	3.39(1.11)	-.08	3.34(1.03)	.00	3.50(1.19)	.10	3.51(.96)	-.20	4.15(.80)&3.16(1.04)	-.02	3.17(1.15)&3.30(1.00)
Share the link of the live stream I'm watching	.04	2.32(.94)	.01	2.42(.99)	.01	2.19(.89)	-.01	2.44(.99)	.05	2.85(.99)&2.31(.94)	.14	2.29(1.02)&2.48(.97)
Ask personal contact information from the host	-.13	1.94(.98)	-.13	1.59(.88)	.06	1.93(1.02)	-.06	1.59(.84)	.10	2.31(1.18)&1.88(.90)	.31**	1.48(.67)&1.68(1.02)
Reward the host by sending virtual gifts	-.13	2.40(1.07)	.08	2.01(1.03)	.16	2.33(1.05)	-.09	2.06(.99)	.27*	2.31(1.03)&2.47(1.11)	.18**	1.88(1.04)&2.08(1.06)
Send private messages through the platform to the host	-.19*	2.03(1.03)	.01	1.82(.93)	.21	2.05(1.10)	.14	1.78(.90)	.29*	1.92(.95)&2.03(1.01)	.09	1.98(.98)&1.82(.94)

Note. [a] n=114, [b] n=207, [c] n=42, [d] n=85, [e] n=71, [f] n=119

*=$p < .05$, **=$p < .01$

Table 9 Descriptives of Agreement Scores on Roles of Live-streamers

	M (SD)									
	Peer	Live-streamer	Friend	Family member	Stanger	Girl/ Boyfriend	Idol	Wife/ husband	Celebrity	Advisor
Single&male[a]	3.31(1.02)	2.95(1.01)	3.43(1.11)	2.12(.91)	2.50(.99)	2.14(.93)	2.79(1.16)	1.69(.87)	2.74(1.13)	2.90(1.12)
Single&female[b]	3.06(.98)	3.36(.95)	2.96(1.01)	2.14(.91)	2.87(1.06)	1.91(.98)	2.84(1.17)	1.65(.88)	2.86(1.12)	3.05(1.08)
In a relationship&male[c]	3.23(1.09)	3.46(.78)	3.92(1.04)	2.46(1.20)	2.46(.88)	2.46(1.13)	2.92(1.38)	1.92(.76)	2.77(.60)	2.70(1.38)
In a relationship&female[d]	3.36(.91)	3.55(1.02)	2.90(.91)	1.83(.91)	3.07(1.09)	1.93(1.18)	2.90(1.23)	1.60(.91)	3.12(1.13)	2.88(1.13)

	Male^e/Total									
Married&male[e]	3.19(.85)	3.50(.98)	3.47(1.00)	2.05(1.00)	2.60(1.06)	2.28(1.02)	2.79(1.18)	1.66(.83)	2.71(1.12)	2.83(.99)
Married&female[f]	3.29(.86)	3.30(.97)	3.32(.91)	2.19(1.04)	2.51(.98)	2.14(.98)	2.84(1.16)	1.77(1.05)	3.10(1.06)	3.14(1.02)
Totol	3.22(.93)	3.35(.98)	3.24(1.01)	2.11(.97)	2.79(1.04)	2.09(1.02)	2.84(1.18)	1.69(.91)	2.90(1.10)	2.97(1.08)

Note. n^a =42, n^b = 85, n^c =13, n^d =42, n^e =58, n^f =77

Table 10 Romantic Relationship Satisfaction and the Roles of Live-streamers: Correlation and Descriptive Statistics

	Romantic relationship satisfaction level (RRSL)				Desire to have a/a different romantic partner (DHRP)					
	All				Single				In a relationship & Married	
	Male [a]		Female [b]		Male [c]		Female [d]		Male [e]	Female [f]
	r	M(SD)	r	M(SD)	r	M(SD)	r	M(SD)	r	M(SD)	r	M(SD)
RRSL	-	3.46(1.06)	-	3.60(.96)	.	2.64(.1.03)	.	3.21(1.07)	.	4.08(.64) &3.93(.72)	.	3.93(.84)& 3.91(.69)
DHRP	.	.	.	.	-	3.93(1.07)	-	3.38(1.07)	-	2.00(1.08)& 2.31(1.16)	-	2.29(1.09)& 2.10(1.23)
Peer	-.03	3.25(.94)	.15*	3.20(.92)	.26	3.31(1.02)	.06	3.06(.98)	.11	3.23(1.09)& 3.19(.85)	-.03	3.36(.91)& 3.29(.86)
Live-streamer	.17	3.29(.99)	-.12	3.38(.97)	.02	2.95(1.01)	.01	3.36(.94)	-.09	3.46(.78)& 3.50(.98)	.14	3.55(1.02)& 3.30(.97)
Friend	.12	3.51(1.04)	.20**	3.08(.96)	-.00	3.43(1.11)	.01	2.96(1.01)	-.02	3.92(1.04)& 3.47(1.00)	.10	2.90(.91)& 3.32(.92)
Family member	.04	2.14(.99)	-.03	2.11(.97)	.03	2.17(.91)	.03	2.14(.91)	.29*	2.46(1.20)& 2.05(1.00)	.15	1.83(.91)& 2.19(1.04)
Stranger	.15	2.55(1.01)	-.19**	2.78(1.05)	-.16	2.50(.99)	-.03	2.87(1.06)	-.09	2.46(.88)& 2.60(1.06)	-.06	3.07(1.09)& 2.51(.98)
Girl/boyfriend	-.05	2.25(.99)	-.02	2.01(1.03)	.08	2.14(.93)	-.02	1.91(.98)	.21	2.46(1.13)& 2.28(1.02)	.20*	1.93(1.18)& 2.14(.98)
Idol	.04	2.79(1.19)	.05	2.86(1.17)	.12	2.79(1.16)	-.15	2.84(1.17)	-.01	2.92(1.38)& 2.79(1.18)	.07	2.90(1.23)& 2.84(1.16)
Wife/husband	-.02	1.69(.83)	-.04	1.70(.96)	.04	1.69(.87)	-.09	1.65(.88)	.28*	1.92(.76)& 1.66(.83)	.09	1.60(.91)& 1.77(1.05)
Celebrity	-.04	2.72(1.07)	.05	3.01(1.10)	.05	2.74(1.13)	-.21	2.86(1.12)	.00	2.77(.60)& 2.71(1.12)	.02	3.12(1.13)& 3.10(1.06)
Advisor	-.14	2.85(1.08)	.14	3.04(1.06)	.08	2.90(1.12)	-.08	3.05(1.08)	-.04	2.69(1.38)& 2.83(.99)	-.02	2.88(1.13)& 3.14(1.02)

Note. N_{RRSL}=321; N_{DHRP}=317; [a] n=114, [b] n=207, [c] n=42, [d] n=85, [e] n=71, [f] n=119

*=$p < .05$, **=$p < .01$

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Chapter 5 - Discussion and Conclusion, Limitations

The aim of this study was to examine how people use live streaming platforms in China. Specifically, the present study examined the effects of romantic relationships on how and why people watch HLSs and explored the relationships between Chinese audiences and live-streamers. This chapter includes a detailed discussion of each research question and hypothesis, based upon both findings from data analysis and previous literature. In conclusion, this chapter provides conclusions drawn from the study and discusses its limitations and future study recommendations.

Host Live Show Viewing as Functional Alternatives

    Host Live Show Dependence. Many U&G researchers believe that mass media have been functioning as alternatives to people's other more "natural" ways of need fulfillment (Rubin & Windahl, 1986, p. 192). Accordingly, it is rational to assume realism is one of the premises of media content being influential to people (Rubin et al., 1985; Rubin, 1981a). That was why, based on uses and gratifications literature, the very first research question raised in this study was how realistic HLSs are to the audience. Although the author expected a dramatic high score of perceived realism, the results indicated that the attitude of Chinese people towards HLSs was very neutral. They neither see it realistic or unrealistic. Another surprise is that we did not find evidence to support connections between the quantity of interpersonal communication and audiences' dependence on HLSs. In other words, how many interpersonal relationships a person has and how much he/she communicates with others do not relate to his/her dependence on HLSs. As for the quality of interpersonal communication, although results of this study did not confirm the relationship suggested by the literature that higher degree of satisfaction of interpersonal communication indicated lower dependence on media (Rubin & Windahl, 1986),

we found its opposite was plausible. To put it clearer, the more satisfied a person is about his/her interpersonal communication, the heavier he/she depends on HLSs, and vice versa. Given Chinese audiences see HLSs neither hyper-realistic nor unrealistic, they may not see live streaming as an apparent alternative to interpersonal communication. More likely, Chinese audiences treat HLSs as expansions of the real world to some degree; they do not have a strong feeling toward it but they also do not feel it is fake. Those who are recognized as socially successful in the real world would be more confident and willing to deal with more social activities, even in the live-streaming world.

Viewing Motives. With regard to Chinese audiences' motivations to watch HLSs, four motivations were identified in this study – *Community Building*, *Bandwagon*, *Ego-boost*, and *Escape*.

The first, ***Community Building***, got the highest mean of agreement score. Although live streaming is relatively new, just like other kinds of social media, people watch HLSs for social reasons, such as connecting with others and expanding social networks. Second, ***Bandwagon***. This means people want to know others' thoughts and opinions from HLSs for decision-making purposes. For example, by watching HLSs, the audience can review and compare the thoughts and opinions of others before they make their own decisions. Third, ***Ego-boost***. This one is relatively new compared to the other three motives found in this study. All items of this motivation were derived from the Tinder Motives Scale (Timmermans & Caluwé, 2017). Besides, most of the items (4/7) were from the *Social Approval* factor, however, *Ego-boost* in this study is different from *Social Approval*, which mainly stated people describe Tinder "as an ego-booster or a self-confidence booster" (p.8). Instead of merely getting an "ego-boost" through interaction, live-streaming viewers are also trying to build an emotional connection with the

streamer (from *Relationship Seeking* factor) and make friends with the streamer (from *Socializing* factor). Thus, *Ego-boost* in this study refers to both gaining social approval from others participating in live streaming interaction and building a close emotional connection with the streamer. Unlike those "older" motivations, the synchronous characteristic of live streaming makes *Ego-boost* possible. Besides, the feeling of ego-boost may be magnified by the signature feature of Chinese SLSSs – the virtual gift giving function. Because all interaction happens simultaneously, right after sending virtual gifts, others may make comments about this action, and the host would express his/her appreciation to the gift-sender immediately. Others' reactions heavily depend on how much the gift-sender spends; if the price is high, it is likely everyone will give him/her a "WOW." Moreover, *Ego-boost* is possibly indicating a trend here for the development of U&G theory in this new media era – as media technology is more and more interactive and the responding time is shorter and shorter (specially, the audience can get emotional responses faster than ever), audiences may use highly interactive, synchronous media for ego-boost more and more in the future. Hence, for future U&G researchers, considering *Ego-boost* is highly suggested by the present study. Last but not least, ***Escape***. People also watch HLSs to get away from pressure and troubles from the real world.

SLSSs Use. Regarding how people use SLSSs in China, we found that on average, Chinese audiences watch HLSs around three times per week and 1.4 hours each time, but most people's viewing time is less than the mean. The average monthly expense on virtual gift giving is around 84 RMB (around 12 USD), although most audiences spend zero on it, the range is very wide, from 0 to 3000 RMB (around 428 USD).

As mentioned before, the virtual gift giving feature is one of the biggest differences between Chinese and American live streaming services. So, what makes Chinese people love to

send cash gifts to the streamer? One angle to explain the popularity of this feature could be thinking about the meaning of cash to Chinese people. Cash has long been used as gifts in China. People give money to others to express their love, best wishes, and care, and cash is commonly used for special events like weddings, funerals, and baby showers. We can see that cash has a meaning of gifts in China. The boundary between cash and gifts is very vague in China compared to Western countries. However, people consider money as a gift only if it is "enough;" if the amount is too small, people think the giver is being rude. Although some virtual gifts can be sold for as much as $200 each, most of them are very cheap, for instance, a hug is worth half a cent and a kiss is worth one dollar. Live streaming practitioners wisely formed "sending cash" into "sending gifts" to make people feel more comfortable buying and sending cheap gifts. For example, instead of giving half a cent to the streamer, people would be way happier to see and show they just sent a kiss or a hug to the streamer. Although they spend the same amount of money, the feelings are totally different. It is a similar scenario for streamers. Although using cash as gifts is prevalent in China, it is not decent for people to directly express their appreciation for receiving money. Preferably, when receiving money from others as gifts in China, you should hold your happiness and excitement back and express your appreciation with restraint. Thus, for streamers, it is more comfortable to express their appreciation for "gifts" than "cash" in front of his/her audiences.

With regard to the activities people do while watching HLSs, they are inclined to interact in passive manners – the more an activity relates to communicating with others, the less frequently people will do it. For instance, most frequently, people watch live streaming and have zero interaction with the host or other audiences; they simply follow the host on the live-streaming platform. We can hardly say these activities most frequently happening during live-streaming

viewing count for "interaction" or "communication." Consistently, typing comments, chatting with the host (through typing comments), sharing the link with others, and rewarding the host had lower frequency scores. Not surprisingly, sending private messages to the host and asking for the host's personal contact information are the least frequent activities people engage in. Although it is intuitive to assume that live-streaming audiences would communicate and interact actively to fulfill their strong desire of establishing interpersonal relationships with the host, this finding may indicate that watching live-streaming is more a personal, private activity for most Chinese audiences. Audiences in China may be influenced by conservative Chinese culture and the guidance of public opinion (e.g., people who actively interact with the host are losers who cannot make friends in the real world), although they see live-streamers as their friends and watch HLSs for community building, most of them don't see live streaming as a proper and decent way to make friends. Considering *Community Building* is the biggest motivation for live-streaming viewing, it is possible that most Chinese audiences can get the satisfaction of being accompanied through passive live-streaming viewing.

Lastly, among the answers for other activities people do while watching HLSs, "eating" has frequently appeared. Unlike in Western countries, where dining alone is more common, in Asia, people think those who eat companionless are lonely and pathetic. In Asian cultures, eating is an extremely social activity – people eat with others to achieve social purposes, such as making new social connections and strengthening interpersonal relationships. On the contrary, eating alone is seen as a lack of social strength and social standing – "the kids who eat alone at school are the kids who don't have anyone to eat with" (Moss, 2014). From this perspective, HLSs (especially watching other people eating while dining alone) are helping Chinese people ease the social pressure and overcome a deep sense of shame from eating alone.

The Influence of Romantic Relationships. Media dependency literature argues that people's social and psychological characteristics "govern the potential to use functional alternatives" (Rubin & Windahl, 1986, 193). Accordingly, the author expected to observe different motivation and use patterns between people of different genders and romantic relationship status. Against the theoretical expectation, this study did not find people who were single, in a relationship, or married to have different motivation patterns. Likewise, viewing level and the expense of virtual gift giving did not differ by gender and romantic relationship status. The only difference influenced by relationship status is that the more stable relationship a male has, the more passive he reacts to HLSs. Males, who are in a relationship, *Just Watch* more frequently than single males, while they follow the host on the platform more frequently than the married ones. Nevertheless, romantic relationship satisfaction is found very influential to *Ego-boost* and HLS use.

Although we argued, from a more macroscopic point of view, that Chinese audiences treat HLSs more as expansion of the real world but an apparent functional alternative, evidence was found that when it comes to romantic relationship satisfaction, HLSs are more likely to serve as functional alternatives to the audience. The more unsatisfied a man is about his romantic relationship state, the more he watches HLSs for *Ego-boost*, and vice versa. Thus, males are affected by romantic relationship satisfaction more; they compensate for their unsatisfied romantic lives by getting an ego-boost from HLS viewing and participation. In addition, the more a single man wants to have a romantic partner, the more he watches HLSs for *Ego-boost*. On the contrary, the more a non-single female (in a relationship or married) wants to have a different romantic partner, the more she watches HLSs for *Ego-boost*. This may indicate that first, when a single man wants to have a romantic partner and a non-single woman wants to have

a different romantic partner, they lack ego-boost the most and getting ego-boost is the hardest need to gratify in the real world for them compared to other viewing motivations. Second, if we reverse the scenario, i.e. when a non-single male wants to have a different romantic partner and a single female wants to have a romantic partner, they may get ego-boost from other ways instead of live streaming viewing. For example, they may take more practical actions – single females may engage in more social events and date more for ego-boost; non-single males may try to fix the relationship instead of watching live streaming for filling an emotional void.

With regard to the effect of romantic relationships on HLS use, first, the more unsatisfied a male is about his romantic life, the more he will spend on virtual gift giving. Combined with the findings mentioned before about *Ego-boost*, we further assume that the more unsatisfied a man is about his romantic relationship state, the more likely he watches and participates in HLSs for getting *Ego-boost* by sending virtual gifts to the host. Second, we also found that the more satisfied males are about their romantic relationships, the more passive they are concerning HLS viewing. They *Just Watch* more frequently, while sending private messages to the host less frequently. Third, non-single females' HLS use is affected by the desire to change their current romantic partners. The more a non-single female desires to have a different romantic partner, the longer and more frequently she watches HLSs. Also, they chat with the host, ask personal contact information from the host, and reward the host by sending virtual gifts more. This may be because single females have other distractions from the pressure of romantic life. They have suitors and friends who neutralize their needs to have a romantic partner. On the contrary, in China, when people have a long-term and very stable romantic relationship, they spend less time on friends and social events. Hence, non-single females have fewer communication channels to vent about their current romantic relationship state. Consequently, when they are not satisfied

with current romantic life, or even want to have a different partner, they go to HLSs and talk to the host. Similarly, the more a non-single male desires to have a different partner, the more frequently he rewards the host by sending virtual gifts and private messages. Again, fewer communication channels may be the reason for this phenomenon.

PSI and Roles of live-streamers

Rubin et al. (1985) implied that when interpersonal interaction is limited, people tend to use mass media for the satisfaction of this need, thus, may generate PSI. The present study examined interpersonal interaction in two dimensions: how much people communicate with others and how satisfied people are about their interpersonal communication. We did not find evidence that the degree of PSI is related to the number of interpersonal relationships a person has, or to the amount of interpersonal communication a person has. What is more surprising, while consistent with the finding of HLS dependence mentioned before in this study (the more satisfied a person is about his/her interpersonal communication, the heavier he/she depends on HLSs), is that the more satisfied a person is about his/her interpersonal communication, the stronger his/her PSI is. A similar explanation may be that since audiences treat HLSs as expansions of the real world, those socially satisfied people depend on SLSSs more, and they have a stronger emotional connection to the host – they see the host more like someone they know, someone in their everyday lives. As they are more confident in dealing with interpersonal relationships, they are more likely to feel secure to have empathy and affection for the host.

Finally, with regard to roles audiences assign to the host, romantic relationship status and its satisfaction are both noteworthy, which is consistent with findings mentioned before. This is another piece of evidence that shows when it comes to romantic relationship satisfaction, people are more likely to use HLSs as functional alternatives. For instance, romantic relationship status

affects how much people in different statuses see the host as friends and strangers. Single females see the host less a friend than non-single males. Females in a relationship see the host less a friend than males in a relationship. Moreover, married females see the host more a stranger than females in a relationship. Then, as for romantic relationship satisfaction, we found that the more satisfied a female is about her romantic relationship, the more she treats the host as a peer and friend, and less as a stranger. Besides, the desire to change one's current romantic relationship state is even clearer proof of people using HLSs as alternatives to meet their romantic relationship-related needs. We found that the more a non-single male wants to have a different romantic partner, the more he treats the host as his wife and family member. Likewise, the more a non-single female wants to have a different partner, the more she treats the host as her boyfriend. There may be a subtle difference between "wives" and "boyfriends" in the degree of intimacy. In other words, compared with non-single females, non-single males think they have a closer affinity with the host, but in general, both genders, when non-single, are very likely to get gratifications, or compensation, from HLS viewing when they do not want to maintain their current romantic relationships anymore. With the addition of participants also treating the host as a person who they admire (a mentor, "IT" girl, etc.) and someone they could share secrets/pressure/problems with, streamers may be providing unhappy people in relationship a feeling of being listened to, understood, loved, and accompanied. This is a vicious cycle; those disappointed people in relationships who feel they can get little comfort, understanding and love from their partners, go directly to live-streamers to share their negative emotions about romantic life. As audiences trust and watch the streamer more, they may become more disappointed about their "real partners."

Conclusion

Although the author wanted to find out whether the relationship between streamers and audiences is equivalent to an actual interpersonal relationship, this study did not find enough evidence to make a conclusion. Audiences' perceived realism and PSI scores were both very neutral. At the beginning of this study, the author was expecting audiences' perceived realism and PSI towards HLSs to be at an all-time high, but unlike what was expected, Chinese live-streaming audiences neither see live streaming hyper-realistic nor unrealistic. However, neutral realism and PSI in this study do not contradict the generation of media engagement and emotion projection of audiences onto streamers. In other words, there is no connection between high perceived realism, as well as PSI level, and the generation of emotion projection onto live-streamers. Although audiences don't have a strong feeling towards the realism of live-streaming content nor streamers, they highly agree that streamers are their friends. Hence, this study argues that high degrees of realism and PSI are not necessarily premises for audiences to generate emotion projection onto live-streamers.

We found the quality of interpersonal communication affects audiences' HLS dependence, while the quantity of interpersonal communication might not. This may suggest two things. First, dividing interpersonal communication into two parts – the amount and the satisfaction level of interpersonal communication – is suggested when examining the effect of interpersonal communication on media use, especially media dependency, because they are different to the audience. Second, the more satisfied a person is about his/her interpersonal communication, the heavier he/she depends on HLSs. The audience may not see live streaming as compensation but as an expansion of their social lives; thereby those socially successful people would depend on live streaming more.

Then, four viewing motives were identified in this study: *Community Building*, *Bandwagon*, *Ego-boost*, and *Escape*. We did not find people of different genders and romantic relationship status to have different motivation patterns. Among the four viewing motives, *Ego-boost* is a relatively new motivation of media use. It means audiences watch and interact with HLSs for getting compliments, attention, self-confidence, and self-validation. We can make a bold prediction, since audiences can get emotional responses through media interaction faster and easier than ever now, that audiences may use highly interactive, synchronous media for *Ego-boost* more and more in the future. Meanwhile, this possibility rings a bell for us – as media technology has been experiencing an unprecedented rapid development since the 20th century, high-speed networks (e.g., 5G Network) could support high-speed communication as well as high-fidelity synchronous interaction. If people can get ego-boosts in the cyber-world immediately and easily with a click, why would they try to earn praises in reality patiently and assiduously?

With regard to HLS use in China, on average, audiences watch HLSs around three times per week and 1.4 hours each time, but most people's viewing time is less than the mean. The average expense on virtual gift giving is around 12 USD (84 RMB) a month; although most audiences spend zero on it, the range is from 0 to 428 USD (3000 RMB). Additionally, live-streaming interaction in China inclines toward passive interaction; people most frequently *Just Watch* and do nothing while watching HLSs, followed by following the host on the live-streaming platform. Other relatively more active activities people do while watching (e.g., type comments, chat with the host) all had relatively low scores.

The influence of Romantic Relationships was examined in two dimensions in this study: romantic relationship status and romantic relationship satisfaction; the latter one was further

divided into satisfaction level and the degree of desire to change current romantic relationship state. We did not find people who are single, in a relationship, and married to have different motivation patterns. Also, viewing level and the expense of virtual gift giving did not differ by gender and romantic relationship status. However, we found males in different romantic relationship statuses have different application preferences: males in a relationship *Just Watch* more frequently than single males, while they follow the host on the platform more frequently than the married males. Relatively speaking, romantic relationship satisfaction is a more influential factor on *Ego-boost* and HLS use.

Overall, males are affected by romantic relationships more, both relationship status and satisfaction, while with females, only non-single women are influenced by romantic relationship satisfaction when they want to have a different romantic partner. We found that the more dissatisfied a man is about his romantic relationship state, the more he watches HLSs for *Ego-boost*, and the more he pays to reward the host. Yet, the more satisfied a male is, the more often he just passively watches HLSs. Also, the more a single man wants to have a romantic partner, the more he watches HLSs for *Ego-boost*. Then, regarding non-single females, the more a non-single woman wants to have a different romantic partner, a) the more she watches HLSs for *Ego-boost*, b) she watches HLSs longer and more frequently, c) the more active she is in interacting with the host – she chats with the host, asks for personal contact information from the host, and rewards the host by sending virtual gifts. Likewise, the more a non-single male desires to have a different partner, the more active he is when watching HLSs – he rewards the host by sending virtual gifts and sends private messages to the host more frequently. Hence, when a non-single audience wants to have a different romantic partner, they are inclined to interact with the host more actively.

With regard to the relationship between interpersonal interaction and live-streaming viewing, the present study examined interpersonal interaction in two dimensions: how much people communicate with others and how satisfied people are about their interpersonal communication. The author did not find evidence that the degree of PSI is related to the number of interpersonal relationships a person has, and neither to the amount of interpersonal communication a person has. However, the more satisfied a person is about his/her interpersonal communication, the stronger his/her PSI is. Given what was mentioned above about romantic relationships, the author advocates that from a macroscopic point of view, when we see social life as a whole, Chinese people may not see HLSs as compensation for their social lives but more an expansion of it – people are keeping their social customs in the live-streaming world. Those socially satisfied people are more comfortable and feel secure enough to establish interpersonal connections with the host, so that they have a higher level of PSI. However, when taking a closer look, audiences do use live streaming to help them deal with negative experiences and emotions from their romantic lives. For this reason, considering the effect of romantic relationships on media use should be suggested for future studies.

Likewise, both romantic relationship status and satisfaction have significant effects on the role audiences project onto the host. Romantic relationship status affects how much people in different statuses see the host as friends and strangers. More interestingly, the more a non-single audience wants to have a different partner, the more likely he/she gets gratification from HLSs. To those disappointed people in relationships or married, live streaming may have a cumulative bad influence on them. They are already disappointed about their current lovers while seeing the streamer as their wives/boyfriends. Accordingly, streamers, in this case, are reinforcing the communication gap between depressed couples. As they trust and watch the streamer more, they

may become more disappointed about their "real partners" and be less patient and confident with their true, but problematic, romantic relationships.

Limitations and Future Research

Because the participants in this study were all from one survey instrument's membership list, and all self-selected to complete the survey, the sample population may be more homogeneous than desired. Since the survey was self-reported, there is the possibility of self-report bias, so an experimental study may be needed to confirm the results gained from this study. Additionally, this study only tested correlations between factors. Future studies should use predictive data analysis. Moreover, since the author found that romantic relationship satisfaction is a very influential factor to live streaming use, future research may pay closer attention to the unsatisfied population and *Ego-boost* when studying new, highly interactable, and synchronous media. Finally, this study lacks findings of separated, divorced, and widowed individuals due to insufficient sample size; future research could focus more on collecting data from these populations.

In this chapter, the author discussed the findings of this study and their possible explanations, and provided conclusions drawn from the study, as well as discussed its limitations and future study recommendations.

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Appendix A - Motivation Items

1. I know the content the host provides is real and not made up.

2. It is like communicating face-to-face.

3. The experience is very like real life.

4. It is new.

5. The technology is innovative.

6. The experience is unusual.

7. Social live streaming services and other media (e.g. TV, online video) offer different services.

8. Social live streaming services and other media satisfy different needs.

9. Social live streaming services and other media can be considered different media.

10. I can connect with others.

11. It allows me to expand my social network.

12. It makes me realize that I am part of a community.

13. It allows me to review opinions of others before I make decisions

14. It comforts me to know the thoughts and opinions of others.

15. It allows me to compare my opinions with those of others.

16. I expect to interact with the host.

17. I expect to interact with the other viewers.

18. I expect to interact with both the host and other viewers.

19. I feel active when I use it.

20. It is not a passive interaction.

21. The host is responsive to my requests.

22. The host responds well to my requests.

23. The host can anticipate my needs.

24. It gives me control.

25. It allows me to be in charge.

26. I am able to influence how the host works.

27. It is easy to use.

28. It is cheap to use

29. It passes time when I am bored.

30. I have nothing to do.

31. It's a habit, just something to do.

32. It's there, and I can use it.

33. I want to find constantly updated information.

34. I am interested in the current live-streaming content.

35. It extends my mind.

36. It lets me explore new things.

37. I am interested in the synchronism with which information can be obtained.

38. By doing so, I can forget about school, work, or other things.

39. By doing so, I can get away from the rest of the family or others.

40. By doing so, I can get away from what I'm doing.

41. It relaxes me.

42. It's a pleasant rest.

43. I won't have to be alone.

44. There's no one else to talk to or be with.

45. It makes me feel less lonely.

46. It entertains me.

47. It's enjoyable.

48. It amuses me.

49. To get an "ego-boost."

50. To get self-validation from others.

51. To get compliments from others.

52. To get attention from others.

53. To build an emotional connection with the host.

54. To gain more self-confidence.

55. To make friends with the host.

Appendix B - Survey (English)

1. Do you watch live streaming? (e.g. DouYu.com, YY Live) *

○ Yes

○ No

2. Do you watch Host Live Shows? (namely, mainly about the interaction between the host and the audience, not about streaming online game playing, educational, musical or sports events)*

○ Yes

○ Noå

3. On average, how many days a week do you watch Host Live Shows? *

○ 1　○ 2　○ 3　○ 4　○ 5　○ 6　○ 7

4. Please recall last week, how many days did you watch Host Live Shows? *

○ 1　○ 2　○ 3　○ 4　○ 5　○ 6　○ 7

5. On average, how many hours do you spend on watching
Host Live Show when you watch it? (Please input a numerical number, including zero. For example, if you watch 30-minute input 0.5, three hours input 3) *

_____

6. Please recall last week, how many hours did you spend on watching
Host Live Show when you watched it? (Please input a numerical number, including zero. For example, if you watch 30 minutes input 0.5, three hours input 3) *

_____

7. About how much do you reward Host Live Show host(s) by sending virtual gifts per month, in RMB? (Please input a numerical number and if you have never rewarded a host, please input zero) *

8. When you watch Host Live Shows, how often do you do the following activities? *

	Never	Rarely	Sometimes	Most of the Time	Always
1. Just watch	○	○	○	○	○
2. Chat with the host while watching	○	○	○	○	○
3. Type comments while watching	○	○	○	○	○
4. Follow the host on the platform	○	○	○	○	○
5. Share the link of the live stream I'm watching	○	○	○	○	○
6. Ask personal contact information from the host	○	○	○	○	○
7. Reward the host by sending virtual gifts	○	○	○	○	○
8. Send private message through the platform to the host	○	○	○	○	○
9. Other	○	○	○	○	○

9. If you chose "Other" for Q8, please specify what you would do while watching live streaming besides the options above? (e.g. watching TV while watching Host Live Shows)

10. How much do you agree with the following statements concerning the question that "I watch Host Live Shows because ..."? *

	strongly disagree	disagree	neither	agree	strongly agree
1. Realism					
I know the content the host provides is real and not made up	○	○	○	○	○
It is like communicating face-to-face	○	○	○	○	○
The experience is very like real life	○	○	○	○	○
2. Novelty					
It is new	○	○	○	○	○
The technology is innovative	○	○	○	○	○
The experience is unusual	○	○	○	○	○
3. Perceived substitutability					
Social live streaming services and other media (e.g. TV, online video) offer different services	○	○	○	○	○
Social live streaming services and other media satisfy different needs.	○	○	○	○	○

	strongly disagree	disagree	neither	agree	strongly agree
Social live streaming services and other media can be considered different media	○	○	○	○	○

11. How much do you agree with the following statements concerning the question that "I watch Host Live Shows because ..."? *

	strongly disagree	disagree	neither	agree	strongly agree
4. Community-building					
I can connect with others	○	○	○	○	○
It allows me to expand my social network	○	○	○	○	○
It makes me realize that I am part of a community	○	○	○	○	○
5. Bandwagon					
It allows me to review opinions of others before I make decisions	○	○	○	○	○
It comforts me to know the thoughts and opinions of others	○	○	○	○	○
It allows me to compare my	○	○	○	○	○

opinions with those of others					
6. Interaction					
I expect to interact with the host	○	○	○	○	○
I expect to interact with the other viewers	○	○	○	○	○
I expect to interact with both the host and other viewers	○	○	○	○	○

12. How much do you agree with the following statements concerning the question that "I watch Host Live Shows because ..."? *

	strongly disagree	disagree	neither	agree	strongly agree
7. Activity					
I feel active when I use it	○	○	○	○	○
It is not a passive interaction	○	○	○	○	○
8. Responsiveness					
The host is responsive to my requests	○	○	○	○	○
The host responds well to my requests	○	○	○	○	○
The host can anticipate my needs	○	○	○	○	○

9. Perceived behavioral control					
It gives me control	○	○	○	○	○
It allows me to be in charge	○	○	○	○	○
I am able to influence how the host works	○	○	○	○	○
10. Perceived ease of use					
It is easy to use	○	○	○	○	○
It is cheap to use	○	○	○	○	○

13. How much do you agree with the following statements concerning the question that "I watch Host Live Shows because ..."? *

	strongly disagree	disagree	neither	agree	strongly agree
11. Ritualistic orientation					
It passes time when I am bored	○	○	○	○	○
I have nothing to do	○	○	○	○	○
It's a habit, just something to do	○	○	○	○	○
It's there, and I can use it	○	○	○	○	○
12. Instrumental orientation					
I want to find constantly updated information	○	○	○	○	○

I am interested in the current live-streaming content	○	○	○	○	○
It extends my mind	○	○	○	○	○
It lets me explore new things	○	○	○	○	○
I am interested in the synchronism with which information can be obtained	○	○	○	○	○
13. Escape					
By doing so, I can forget about school, work, or other things	○	○	○	○	○
By doing so, I can get away from the rest of the family or others	○	○	○	○	○
By doing so, I can get away from what I'm doing	○	○	○	○	○

14. How much do you agree with the following statements concerning the question that "I watch Host Live Shows because ..."? *

	strongly disagree	disagree	neither	agree	strongly agree
14. Relaxation					
It relaxes me	○	○	○	○	○

	strongly disagree	disagree	neither	agree	strongly agree
It's a pleasant rest	○	○	○	○	○
15. Companionship					
I won't have to be alone	○	○	○	○	○
There's no one else to talk to or be with	○	○	○	○	○
It makes me feel less lonely	○	○	○	○	○
16. Entertainment					
It entertains me	○	○	○	○	○
It's enjoyable	○	○	○	○	○
It amuses me	○	○	○	○	○

15. How much do you agree with the following statements concerning the question that "I watch Host Live Shows because ..."? *

	strongly disagree	disagree	neither	agree	strongly agree
17.RR					
To get an "ego-boost"	○	○	○	○	○
To get self-validation from others	○	○	○	○	○
To get compliments from others	○	○	○	○	○
To get attention from others	○	○	○	○	○

	strongly disagree	disagree	disagree some and agree some	agree	strongly agree
To build an emotional connection with the host	○	○	○	○	○
To gain more self-confidence	○	○	○	○	○
To make friends with the host	○	○	○	○	○

16. (PSI) Here are several statements about watching Host Live Shows. For each statement, please mark the option that best expresses your own feelings about your favorite live-streamer(s). *

	strongly disagree	disagree	disagree some and agree some	agree	strongly agree
1. I feel sorry for my favorite live-streamer when he/she makes a mistake.	○	○	○	○	○
2. The live-streamers make me feel comfortable, as if I am with friends.	○	○	○	○	○
3. I see my favorite live-streamer as a natural, down-to-earth person.	○	○	○	○	○
4. I look forward to watching my favorite live-	○	○	○	○	○

streamer later today on his/her live streaming channel.					
5. If my favorite live-streamer appeared on another streamer's live-streaming channel, I would watch that channel.	○	○	○	○	○
6. When my favorite live-streamer says something, he/she seems to understand the kind of things I want to know.	○	○	○	○	○
7. If there were a story about my favorite live-streamer in a newspaper or magazine, I would read it.	○	○	○	○	○
8. I miss seeing my favorite live-streamer when he/she is on vacation.	○	○	○	○	○
9. I would like to meet my favorite	○	○	○	○	○

live-streamer in person.	○	○	○	○	○
10. I find my favorite live-streamer to be attractive.	○	○	○	○	○

17. How much do you agree with the following statements concerning the question that "I think the streamer(s) I have been constantly watching is/are my …"? *

	strongly disagree	disagree	disagree some and agree some	agree	strongly agree
peer	○	○	○	○	○
just a live-streamer	○	○	○	○	○
friend	○	○	○	○	○
family member	○	○	○	○	○
stranger	○	○	○	○	○
girl/boyfriend	○	○	○	○	○
idol	○	○	○	○	○
wife/husband	○	○	○	○	○
celebrity	○	○	○	○	○
advisor	○	○	○	○	○
Other	○	○	○	○	○

18. If you chose "Other" for Q17, please specify what you think the streamer is to you. (e.g., teacher)

19. How many people do you communicate with, in person and by telecommunicating, when you at work or at school? (Please input a numerical number and if you don't have anyone to communicate with, please input zero) *

20. How many people do you communicate with, in person and by telecommunicating, outside of work or school? (Please input a numerical number and if you don't have anyone to communicate with, please input zero) *

21. Please recall yesterday, how many hours did you spend on communicating with others? (Please input a numerical number, including zero. For example, if you spend 30 minutes input 0.5, three hours input 3) *

22. (CS) Here are several statements about your general interpersonal communication and conversion satisfaction. For each statement, please mark the option that best expresses your own feelings about your satisfaction degree (If you think it's hard for you to rate generally, you may recall your last experience of interpersonal communication). *

	strongly disagree	disagree	disagree some and agree some	agree	strongly agree
1. Other people let me know if I communicate effectively.	○	○	○	○	○
2. Other people express a lot of interest in what I have to say.	○	○	○	○	○
3. Other people genuinely want to get to know me.	○	○	○	○	○

4. My conversations flow smoothly.	○	○	○	○	○
5. Other people show me that they understand what I say.	○	○	○	○	○
6. I am very satisfied with my conversations.	○	○	○	○	○
7. In conversations, we each get to say what we want to.	○	○	○	○	○
8. In conversations, I feel that we can laugh easily together.	○	○	○	○	○
9. I feel like I can talk about anything with other people.	○	○	○	○	○
10.During conversations with others, I am able to present myself as I want others to view me.	○	○	○	○	○
11. I would like to continue having	○	○	○	○	○

conversations like the ones I have now.					
12. I have better things to do than converse with others.	○	○	○	○	○
13. I do not enjoy conversations.	○	○	○	○	○
14. Nothing is ever accomplished in conversations.	○	○	○	○	○
15. We usually talk about something I am not interested in.	○	○	○	○	○
16. I am very dissatisfied with my conversations.	○	○	○	○	○

23. (PRS) Here are several statements about how true Host Live Show is to you. For each statement, please mark the option that best expresses your own feelings. *

	strongly disagree	disagree	disagree some and agree some	agree	strongly agree
1. Host Live Show presents things as they really are in life.	○	○	○	○	○
2. If I see something on Host Live Show, I can be	○	○	○	○	○

sure it really is that way.					
3. Host Live Show lets me really see how other people live.	○	○	○	○	○
4. Host Live Show shows life as it really is.	○	○	○	○	○
5. Host Live Show lets me see what happens in other places as if I were really there.	○	○	○	○	○

24. (Dependency) Please indicate in your daily life, "how helpful is Host Live Shows to ......".

For each statement, please mark the option that best expresses your own feelings. *

	Not at all helpful	not helpful	neither	helpful	Extremely helpful
1. Stay on top of what is happening around me.	○	○	○	○	○
2. Unwind after a hard day or week.	○	○	○	○	○
3. Gain insight into why I do some of the things I do.	○	○	○	○	○
4. Discover better ways to communicate with others.	○	○	○	○	○

5. Decide where to go for services such as health, financial, or household.	○	○	○	○	○
6. Relax when I am by myself.	○	○	○	○	○
7. Find out how the country is doing.	○	○	○	○	○
8. Imagine what I'll be like as I grow older.	○	○	○	○	○
9. Give me something to do with my friends.	○	○	○	○	○
10. Figure out what to buy.	○	○	○	○	○
11. Think about how to act with friends, relatives, or people I work with.	○	○	○	○	○
12. Have fun with family and friends.	○	○	○	○	○
13. Observe how others cope with problems or situations like mine.	○	○	○	○	○
14. Keep up with world events.	○	○	○	○	○

	Never	Rarely	Sometimes	Most of the Time	Always
15. Be a part of events that I enjoy without having to be there?	○	○	○	○	○
16. Get ideas about how to approach others in important or difficult situations.	○	○	○	○	○
17. Plan where to go for evening and weekend activities.	○	○	○	○	○
18. Have something to do when nobody else is around.	○	○	○	○	○

25. Please indicate what kind of contact or connection you have with the streamer(s) you constantly watch. *

	Never	Rarely	Sometimes	Most of the Time	Always
1. Talking on the phone	○	○	○	○	○
2. Chatting via text messages or messaging APPs (e.g. WeChat)	○	○	○	○	○
3. Hanging out in person for having fun together	○	○	○	○	○

4. Watching the streamer stream	○	○	○	○	○
5. Attending an event to meet the streamer	○	○	○	○	○
6. Dating (for romance)	○	○	○	○	○
7. Other	○	○	○	○	○

26. If you chose "Other" for Q25, please specify what kind of contact or connection you have with the streamer(s) you constantly watch?

_____

27. What is your gender? *

○ Male

○ Female

28. What is your age? (Fill in the blank, please) *

_____

29. What is the highest degree obtained or level of school you have completed? *

○ Less than high school

○ High school graduation (includes equivalency)

○ Bachelor's degree

○ Master's degree

○ doctoral degree

○ Other (please specify) _____

30. Do you have a job, currently? *

○ Yes

○ No

31. What is your personal income per month? *

○ 0-1999

○ 2000-3999

○ 4000-5999

○ 6000-7999

○ 8000-9999

○ over 9999

32. What is your current romantic relationship status? *

○ Single

○ In a relationship

○ Married

○ Separated

○ Divorced

○ Widowed

○ Other (please specify) _____

33. How satisfied are you concerning your romantic life? *

   ○ not at all satisfied   ○ unsatisfied   ○ neither   ○ satisfied   ○ very satisfied

34. To what extent do you want to have another different romantic partner? (Seeing this question means you chose "in a relationship" or "married" for Q31) *

  ○ not at all eager ○ not eager ○ neither ○ eager ○ very eager

35. To what extent do you want to have a romantic partner? (Seeing this question means you chose "single", "separated", "divorced" or "widowed" for Q31) *

  ○ not at all eager ○ not eager ○ neither ○ eager ○ very eager

Appendix C - Survey (Chinese)

真人秀直播问卷

1. 你看网络互动直播吗？（比如斗鱼，YY 直播等）[单选题] *

　○是

　○否

2. 你看真人秀直播吗？（即以主播个人和观众的互动为主，不是关于游戏直播或教育，音乐会，体育赛事等其他类型的直播）[单选题] *

　○是

　○否

3. 平均一周里，有几天你看了真人秀直播？[单选题] *

　○1 天　　　○2 天　　　○3 天　　　○4 天　　　○5 天　　　○6 天　　　○7 天

4. 回忆上周，有几天你看了真人秀直播？[单选题] *

　○1 天　　　○2 天　　　○3 天　　　○4 天　　　○5 天　　　○6 天　　　○7 天

5. 你平均每次看真人秀直播多少个小时？（请填入一个数字，包括零。例如，若你看 30 分钟填 0.5，若看了 3 个小时填 3）[填空题] *

　—————————————————

6. 回忆上周，你平均每次看真人秀直播多少个小时？（请填入一个数字，包括零。例如，若你看 30 分钟填 0.5，若看了 3 个小时填 3）[填空题] *

　—————————————————

7. 通过赠送虚拟礼物，你每个月大概奖励真人秀主播（们）多少人民币？（请输入数字，如果你从没奖励过主播请输入零） [填空题] *

_____

8. 当你看真人秀直播时，你做以下的活动有多频繁？（可多选）[矩阵量表题] *

	从不	很少	有时	大多数时间	一直
1.只是观看	○	○	○	○	○
2.观看的时候和主播聊天	○	○	○	○	○
3.观看的时候输入评论	○	○	○	○	○
4.在平台上关注主播	○	○	○	○	○
5.分享我正在看的直播链接	○	○	○	○	○
6.问主播的个人联系信息	○	○	○	○	○
7.通过送虚拟礼物奖励主播	○	○	○	○	○
8.在平台上给主播私信	○	○	○	○	○
9.其他	○	○	○	○	○

9. 如果 8 题你选了"其他"，请说明你的其他活动内容（例如边看秀场直播边看电视等）。[填空题]

_____

10. 如果让你回答"我看真人秀直播是因为……"这个问题，对于以下各项陈述，你有多认同？[矩阵量表题] *

	非常反对	反对	不认同不反对	认同	非常认同
这就像面对面和人交流	○	○	○	○	○
这种体验很像真实的生活	○	○	○	○	○
这个科技很新颖	○	○	○	○	○
这种体验很不平常	○	○	○	○	○

	非常反对	反对	不认同不反对	认同	非常认同
直播和其他媒体相比（如电视，网络视频等）满足了不同的需求	○	○	○	○	○
直播和其他媒体相比（如电视，网络视频等）可以被视作不同的媒体	○	○	○	○	○

11.（同上）如果让你回答"我看真人秀直播是因为……"这个问题，对于以下各项陈述，你有多认同？[矩阵量表题] *

	非常反对	反对	不认同不反对	认同	非常认同
它让我可以扩大我的社交网	○	○	○	○	○
它让我意识到我属于一个群体	○	○	○	○	○
知道他人的想法和主张让我觉得舒服	○	○	○	○	○
通过它我可以对比自己和他人的意见	○	○	○	○	○
我期待与其他观众互动	○	○	○	○	○
我期待与主播和其他观众互动	○	○	○	○	○

12.（同上）如果让你回答"我看真人秀直播是因为……"这个问题，对于以下各项陈述，你有多认同？[矩阵量表题] *

	非常反对	反对	不认同不反对	认同	非常认同
使用它时我觉得我的互动不是消极的	○	○	○	○	○
主播对我的要求具有较好的响应	○	○	○	○	○
主播可以预料到我的需求	○	○	○	○	○

它让我做主	○	○	○	○	○
我可以影响主播的表现	○	○	○	○	○
直播使用起来很便宜	○	○	○	○	○

13.（同上）如果让你回答"我看真人秀直播是因为……"这个问题，对于以下各项陈述，你有多认同？[矩阵量表题] *

	非常反对	反对	不认同不反对	认同	非常认同
我没其他事可做	○	○	○	○	○
这是个习惯	○	○	○	○	○
我可以用它	○	○	○	○	○
我对正在直播的内容很感兴趣	○	○	○	○	○
它拓宽了我的思维	○	○	○	○	○
它让我可以探索新事物	○	○	○	○	○
我对它的信息交流同步性很感兴趣	○	○	○	○	○
这样我就可以逃避家人或他人	○	○	○	○	○
这样我就可以逃离我正在做的事	○	○	○	○	○

14.（同上）如果让你回答"我看真人秀直播是因为……"这个问题，对于以下各项陈述，你有多认同？[矩阵量表题] *

	非常反对	反对	不认同不反对	认同	非常认同
它是一个惬意的休息	○	○	○	○	○
我没有其他人可以说话或者呆在一起	○	○	○	○	○
它让我觉得没有那么孤独	○	○	○	○	○
它让我愉快	○	○	○	○	○

它给我提供消遣	○	○	○	○	○

15.（同上）如果让你回答"我看真人秀直播是因为……"这个问题，对于以下各项陈述，你有多认同？[矩阵量表题] *

	非常反对	反对	不认同也不反对	认同	非常认同
我想从他人处获得自我认可	○	○	○	○	○
我想让他人称赞我	○	○	○	○	○
我想让他人关注我	○	○	○	○	○
我想和主播建立情感上的联系	○	○	○	○	○
我想获得更多的自信	○	○	○	○	○
我想和主播成为朋友	○	○	○	○	○

16. 以下是一些关于真人秀直播的陈述。对于每一个陈述，请选择最能体现你对你最喜欢的主播（们）的感觉的选项。[矩阵量表题] *

	非常反对	反对	不认同不反对	认同	非常认同
1. 当我最喜欢的主播犯错的时候，我为他/她感到遗憾。	○	○	○	○	○
2. 我喜欢的主播让我感觉舒服，就像我和朋友在一起。	○	○	○	○	○
3. 我觉得我最喜欢的主播是一个自然，真实实际的人。	○	○	○	○	○
4. 我期待着今天晚些时候看我最喜欢的主播直播。	○	○	○	○	○

5. 如果我最喜欢的主播出现在其他主播的频道，我也会看那个频道。	○	○	○	○	○
6. 当我最喜欢的主播说话时，他/她好像明白我想知道什么。	○	○	○	○	○
7. 如果有一篇报纸或杂志报道是关于我最喜欢的主播的，我会读它。	○	○	○	○	○
8. 当我最喜欢的主播因为度假不直播时，我会想念他/她。	○	○	○	○	○
9. 我想要当面见见我最喜欢的主播。	○	○	○	○	○
10. 我觉得我最喜欢的主播很有魅力。	○	○	○	○	○

17. 如果让你回答"我觉得我一直看的真人秀主播（们）是我的……"这个问题，对于以下各项陈述，你有多认同？ [矩阵量表题] *

	非常反对	反对	不认同不反对	认同	非常认同
同龄人，社会地位相同的人	○	○	○	○	○
就是一个主播	○	○	○	○	○
朋友	○	○	○	○	○
家人	○	○	○	○	○
陌生人	○	○	○	○	○
男/女朋友	○	○	○	○	○
偶像	○	○	○	○	○

	○	○	○	○	○
老公/老婆	○	○	○	○	○
名星	○	○	○	○	○
顾问，指导者	○	○	○	○	○
其他	○	○	○	○	○

18. 如果 17 题你选了"其他"，请你说明你觉得主播你的谁？[填空题]

———————————————

19. 当你在工作或上学时，你和多少人有聊流 （面对面或使用通讯技术都算）？（请输入一个数字，如果你没有和任何人交流请输入零）[填空题] *

———————————————

20. 当你没有在工作或上学时，你和多少人有交流（面对面或使用通讯技术都算）？（请输入一个数字，如果你没有和任何人交流请输入零）[填空题] *

———————————————

21. 回忆昨天，你花在和人交流的时间有多少小时？（请输入一个数字，包括零。例如，如果你花了 30 分钟，请输入 0.5；3 个小时请输入 3）[填空题] *

———————————————

22. 以下是一些关于你平时和他人交流对话满意度的陈述。对于每一个陈述，请选择最能体现你的满意度的选项（如果你觉得很难做概括，可以参考最近一次的交流交谈经历）。[矩阵量表题] *

	非常反对	反对	不认同不反对	认同	非常认同
1. 别人让我觉得我的交流很有效	○	○	○	○	○
2. 别人对我所说的表现了很大的兴趣	○	○	○	○	○

3. 别人很真诚地想要了解我	○	○	○	○	○
4. 我的谈话都发展的很流畅	○	○	○	○	○
5. 别人表现出他们明白我说的意思	○	○	○	○	○
6. 我对我的谈话都很满意	○	○	○	○	○
7. 在谈话时，我和对方都需要说出我们彼此想表达的意思	○	○	○	○	○
8. 在我和别人谈话时，我们能轻易地一块儿笑	○	○	○	○	○
9. 我觉得我可以和别人说任何事	○	○	○	○	○
10. 在谈话时，我能够表现成我想让别人看到的那个自己	○	○	○	○	○
11. 我想继续拥有我最近有过的（那些）谈话	○	○	○	○	○
12. 我有比聊天更好的事做	○	○	○	○	○
13. 我并不享受与别人谈话	○	○	○	○	○
14. 交谈解决不了任何问题	○	○	○	○	○
15. 别人通常和我说的都是我不感兴趣的东西	○	○	○	○	○
16. 我对我的谈话都很失望	○	○	○	○	○

23. 以下是一些关于真人秀直播对于你有多真实的陈述。对于每一个陈述，请选择最能体现你感受的选项。[矩阵量表题] *

	非常反对	反对	不认同不反对	认同	非常认同
1. 真人秀直播呈现的就是事物在真实生活中的样子	○	○	○	○	○

2.如果我在真人秀直播里看见了什么，我可以肯定这就是这个东西真实的样子	○	○	○	○	○
3. 真人秀直播真实地让我看到他人是怎样生活的	○	○	○	○	○
4. 真人秀直播呈现了真实的生活	○	○	○	○	○
5. 真人秀直播让我身临其境地看到了发生在其他地方的事情	○	○	○	○	○

24. 如果让你回答"真人秀直播帮助我……"这个问题， 对于以下各方面，你觉得真人秀直播对你的帮助大吗？ [矩阵量表题] *

	完全没帮助	没帮助	没太大帮助	有帮助	非常有帮助
1. 掌握我身边发生的事	○	○	○	○	○
2. 在困难的一天或一周后可以放松	○	○	○	○	○
3. 让我对于我所做过的事有更深的理解	○	○	○	○	○
4. 发现更好的与人沟通的方法	○	○	○	○	○
5. 决定去哪里得到关于健康，财务，和家政的服务	○	○	○	○	○
6. 当我一个人的时候得到放松	○	○	○	○	○
7. 了解国家的情况	○	○	○	○	○
8. 想象当我更老时的样子	○	○	○	○	○
9. 和朋友在一起时有事可做	○	○	○	○	○

	○	○	○	○	○
10. 了解该买什么东西	○	○	○	○	○
11. 思考以什么方式和朋友，亲人，或同事相处	○	○	○	○	○
12. 与家人朋友在一起时度过愉快的时光	○	○	○	○	○
13. 观察他人是怎么处理我的类似问题或情况的	○	○	○	○	○
14. 不落后于世界大事件	○	○	○	○	○
15. 不用去特定地方也能参加一些我喜爱的活动	○	○	○	○	○
16. 得到关于如何在重要或困难的情况下接近他人的点子	○	○	○	○	○
17. 安排晚上或周末活动去哪	○	○	○	○	○
18. 当没人在我周围的时候有事可做	○	○	○	○	○

25. 请选择你和你经常观看的真人秀直播主播之间存在哪种联系或关系。[矩阵量表题] *

	从不	很少	有时	大多数时间	一直
1. 打电话	○	○	○	○	○
2. 通过短信或者聊天软件聊天（比如微信）	○	○	○	○	○
3. 一块出去玩	○	○	○	○	○
4. 单方面看主播直播	○	○	○	○	○
5. 参加一个活动去和主播见面	○	○	○	○	○
6. 约会（为了恋爱或浪漫的感觉）	○	○	○	○	○
7. 其他	○	○	○	○	○

26. 如果你 25 题选择了"其他"，请说明你和你经常观看的真人秀直播主播之间有什么联系或关系。 [填空题]

_____

27. 你的性别是？ [单选题] *

　○男性

　○女性

28. 你多少岁了？（请填写） [填空题] *

_____

29. 你完成了的最高学历是？ [单选题] *

　○低于高中

　○高中毕业（包括同等的学历）

　○学士学位

　○硕士学位

　○博士学位

　○其他（请说明） _____

30. 你现在有工作吗？ [单选题] *

　○有

　○没有

31. 你每月的个人收入是多少？ [单选题] *

○0-1999 元

○2000-3999 元

○4000-5999 元

○6000-7999 元

○8000-9999 元

○高于 9999 元

32. 你当前的婚恋关系是？ [单选题] *

○单身

○恋爱中

○已婚

○分居

○离婚

○丧偶

○其他（请说明） _____

33. 对于你的感情生活你有多满意？ [单选题] *

○非常不满意　　　○不满意　　　　　○都不　　　　　　○满意　　　　　　○非常满意

34. 你对换一个恋人有多渴望？（看到此题说明你 31 题选择了"恋爱中"和"已婚"） [单选题] *

○完全不渴望　　　○不渴望　　　　　○都不　　　　　　○渴望　　　　　　○非常渴望

35. 你有多渴望有一个恋人？（看到此题说明你 31 题选择了"单身"，"分居"，"离婚"或者"丧偶"）[单选题] *

○完全不渴望　　　○不渴望　　　　○都不　　　　　○渴望　　　　　○非常渴望