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# Why do audiences choose to keep watching on live video streaming platforms? An explanation of dual identification framework

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A B S T R A C T

Live video streaming has been a global economic and social phenomenon in recent years. Many streaming platforms such as Twitch and YouTube Live have been founded and demonstrated unprecedented growth across the world. Yet, researchers have paid insufficient attention to understanding the massive participation behavior exhibited by live video streaming audiences. Based on social identity theory, this paper aims to explain audiences' continuous watching behavior intention via a dual identification framework including identifications with streaming broadcasters and audience groups. Analysis of data collected from two live streaming platforms in mainland China indicates that audiences' identification with broadcasters and audience groups are positively associated with their continuous watching intention. Broadcaster identification is driven by individual experience including experience of parasocial interaction, actual and ideal self-congruity, whereas group identification is enhanced by co-experience consisting of participation, cognitive communion, and resonant contagion. In addition, live streaming genres partially moderate the impact of identification on continuous watching intention. Theoretical and practical implications as well as limitations and suggestions for future research are provided.

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## 1. Introduction

In the decade, Internet users have become keen on communication through various social media services such as virtual communities, SNS websites, and blogs (Kaplan & Haenlein, 2010). Recently, the forms of computer-mediated communications have been extended beyond text and image to audio and video as results of the revolution of cutting edge internet technologies. In specific, a unique form of social media has emerged, and been recognized as live video streaming platforms. As a special combination of multiple media forms, live streaming allows individuals to publicly broadcast live video streams, accompany with a shared chat room for user communication (Hamilton, Garretson, & Kerne, 2014). Generally, a typical live video streaming activity involves a streamer/broadcaster who uploads his/her real-time video and audio content including video games, talent performance, daily life, or whatever he/she expects to share. Viewers/audiences on the streamer's channel can comment and communicate with each other via text-based chat room function. Meanwhile, the streamer also engages in dialogues and interactions with his/her audiences while broadcasting.

Live streaming activity has witnessed its prosperity since the availability of diverse platforms such as Twitch (a famous video game streaming website) and YouTube Live (live streaming service of YouTube) (Smith, Obrist, & Wright, 2013). For instance, Twitch made up 1.8% of total US Internet traffic and ranked at the fourth during peak periods in 2014 (Pires & Simon, 2015). Twitch also announced it had more than 1.5 million broadcasters and over 100 million visitors per month in 2015 (Needleman, 2015). It seems that more and more people are becoming immersed in this live video watching. Hence, we can't help wondering what the rationale is behind audiences' real-time video watching behavior on live streaming platforms.

Compared with flourishing development in practice field, academic realm has paid unequal attention to live video streaming activity. Users' continuance intention on other type of social media, such as virtual communities, social networks, has received sufficient attention in academic domain (e.g. Lin, Fan, & Chau, 2014; Zheng, Zhao, & Stylianou, 2013). However, most studies in computer science take a technological approach to optimize streaming network systems, or try to demonstrate the characteristics of

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streams on some famous platforms. (e.g. Barekatain et al., 2015; Kaytoue, Silva, Cerf, Meira, & Raïssi, 2012; Pires & Simon, 2015). Extant literature still lacks a comprehensive framework to explain audiences' continuous watching behavior. Only limited studies have shed light on this question. On one hand, the presence of co-viewers and sense of community within streaming channels have been regarded as necessary elements; on the other hand, frequent interactions between broadcasters and audiences have been emphasized in attracting and maintaining audiences as well (Hamilton et al., 2014; Lim, Cha, Park, Lee, & Kim, 2012; Smith et al., 2013). Thereby, audiences' continuous watching intention may be explained in a social-psychological approach which considers both audience-broadcaster tie and audience-other audiences tie.

In fact, the nature of live video streaming activity not only offers a real-time watching experience for audiences, but also provides opportunities to communicate and socialize among broadcasters and other co-viewers. These interactions in cyber contexts may promote the development of audiences' self-definition process and further identifications with various referents (Hall-Phillips, Park, Chung, Anaza, & Rathod, 2016). Also, the psychological bond of a social referent is an important predictor of loyalty behavior within virtual communities (Badrinarayanan, Sierra, & Martin, 2015). Thus, incorporating the identification concept in current study may be helpful to explain the study question.

Drawing on previous research, this study aims to develop and empirically test an audiences' social identification framework based on social identity theory. Firstly, a dual identification model, which depicts identifications with broadcasters and audience groups, is proposed to explain users' continuous watching intention. Secondly, unlike most prior studies which take identification for granted without considering its formation in computer-mediated communications (Shen & Khalifa, 2015, pp. 87–101; Tuškej, Golob, & Podnar, 2013), we expect to carefully examine the antecedents of identification process. Identification can be either deduced from collective identity or inter-member interaction (Postmes, Spears, Lee, & Novak, 2005). Previous studies mainly take the former perspective to explore the antecedents of identity attractiveness that leads to identification (e.g. Bhattacharya & Sen, 2003). However, in consideration of the interactive nature on live streaming platforms, perceived identity information is mainly rooted in interaction process among broadcasters and audiences. Audiences' identifications with various referents may result from interactive experience between members. Hence, we intend to inspect the formation of audiences' identifications from the perspective of user experiences that generate from interactions within audience-broadcaster tie and audience-other audiences tie. Current study constructs two categories of experiences to describe audiences' sensations and feelings regarding to live video consumption. Specifically, parasocial interaction experience and self-congruity have been conceptualized as the individual experience resulting from interaction with broadcasters. Participation, cognitive communion, and resonant contagion constitute the co-experience which is introduced to measure experiences emerging during interaction with other audiences. Finally, to further understand the potential influence of streaming content genres in proposed dual identification framework, a sub-group comparison involving two popular stream categories (video games & talent shows) is conducted.

## 2. Literature review and hypothesis development

### 2.1. Theoretical background: social identity theory

Proposed by Tajfel and Turner (1979), social identity theory posits that people hold various social identities along with their individual identities. It is assumed that our self-concepts are partially defined by certain social groups where we obtain the sense of oneness or belongingness, as well as involving values (Ashforth & Mael, 1989). Hence, people tend to classify themselves into various social categories that they identify with, and develop social identifications which depict the oneness or belongingness to certain social categories (Ashforth & Mael, 1989). This social identification process is mainly served as a self-defining way to achieve self-consistency, self-esteem, and self-enhancement (Bhattacharya & Sen, 2003). In consequence, to maintain their favored social identities, people's deep identifications with groups, organizations or other human aggregates lead to in-group favoritism and corresponding results such as enhanced commitment, intragroup cohesion, product and service preference, and group support behaviors (Ashforth & Mael, 1989; Bhattacharya & Sen, 2003; Trepte, 2006).

Based on social identity theory, social identification concept has been widely applied in social media research, and conceptualized into specific forms such as organizational identification, community identification, etc. (e.g. Helm, Renk, & Mishra, 2016; Luo, Zhang, Hu, & Wang, 2016). Recently, studies on virtual communities and social networks have verified the crucial role of community identification of members in showing positive outcomes such as consumption behaviors, generating positive word-of-mouth, and continuous usage intention (Algesheimer, Dholakia, & Herrmann, 2005; Badrinarayanan et al., 2015; Helm et al., 2016; Hsu, Chih, & Liou, 2015; Yoshida, Gordon, Heere, & James, 2015). In fact, live video streaming service can be regarded as a special type of video-based social media, indicating that social identity theory and social identification concept may be effective to explain members' continuous participation intention.

### 2.2. Social identification on live video streaming platforms

People often remain multiple identities in varying salience (Kleine, Kleine, & Kernan, 1993). Belén del Río, Vazquez, and Iglesias (2001) further argue that identification can be distinguished into group-based identification and individual-based identification. In current study, two relevant social referents, i.e. audiences and broadcasters, coexist within live streaming platforms. Consequently, members' social categorization process may results in their identifications with audience groups and broadcasters respectively.

Drawing on related works, we construct the audience group identification as psychological attachment, emotional and social bonds a member shares within an audience group (Algesheimer et al., 2005; Füller, Matzler, & Hoppe, 2008; Hall-Phillips et al., 2016). Users from the same audience group interact with each other mainly via text-based dialogues (Hamilton et al., 2014). During their communication, audiences can exchange their ideas and thoughts about streams, broadcasters, and even issues unrelated to stream contents. Meanwhile, audiences will subtly deliver their identity-related information and perceive others' identities in a form of collective group identity. In consequence, a member may identify with other audiences if he/she perceives the fit of values and beliefs between the group and him/herself. According to Keh and Xie (2009), identification is effective in promoting commitment to long-term relationship maintenances. Badrinarayanan et al. (2015) also indicate that identification with other members will lead to sustained participation and interaction on virtual communities. Therefore, we infer that, with the increased identification of audience group, a member will feel stronger attachment to the group and choose to maintain their intragroup connections by continuous watching.

**H1.** Identification with an audience group is positively related to continuous watching intention.