Between Engagement and Response

Influence of Viral Messages on Engaged Chinese Users in the Ice Bucket Challenge Campaign on Sina Weibo

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ABSTRACT

This case study explored the Ice Bucket Challenge campaign on a Chinese local social platform, Sina Weibo. The Ice Bucket Challenge campaign was a global buzz on social media in 2014 and was a philanthropic success. Such a viral marketing campaign with philanthropic purposes rarely occurred in terms of the outstanding use of social media. The popularity of this campaign in China attracted attention to the Chinese specific cultural and social context. Sina Weibo was the social platform where the ice bucket challenge achieved great social engagement. In terms of the Chinese cultural and social specificity, this study focused on the social engagement and response triggering of the Ice Bucket Challenge on Sina Weibo. Two research questions led this case study: One aimed at identifying the key strategies for social engagement performed by the ice bucket challenge viral messages on Sina Weibo. The other aimed at interpreting the related attitudes and behaviors of the engaged Chinese users. This study used the viral message theory and elaboration likelihood model as theoretical foundation.

The study applied a sequential mixed qualitative method, including qualitative content analysis on the top 100 engaging viral messages on Sina Weibo and in-depth interviews with 12 Chinese engaged users. A triangulation of the two research questions finally completed this case study. This study summarized the key strategies in the viral messages for social engagement and highlighted the theoretical dimensions including authority, sentiment and informational relevance. Analysis on the influence on related attitudes and behaviors overall indicated a shift from the periphery route to the central route with time going and highlighted the theoretical variables including source credibility, sentiment and information quality. Finally, this study clarified the gap between social engagement and response triggering in the Ice Bucket Challenge campaign on Sina Weibo. The campaign was concluded as a success raising public awareness of the rare disease in China, but a failure to gather proportional donations from the Chinese civil society.

KEYWORDS: Ice Bucket Challenge (IBC), Sina Weibo (SW), Social media, Philanthropic, Chinese, Viral messages, Social engagement, Elaboration likelihood model (ELM), Attitudes, Behaviors.
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1. Introduction

In the summer of 2014, a social media based viral marketing campaign – the Ice Bucket Challenge (IBC) - aiming at raising devotion for the Amyotrophic Lateral Sclerosis (ALS) Association began in the North America. In just a month, it had the whole world engaged. The IBC campaign worked like social game in which, a person poured a bucket of water with ice over his or her head and then nominated one or more people to join the challenge. The nominated person either accepted and copied the action, or refused and donated a relatively large amount of money to ALS Association. The game spread widely and participants surged in a short time, from celebrities on the global A-list such as Barack Obama to civilians. The considerable amount of donations resulting from substantial social engagement demonstrated the great success of the IBC campaign. Taking Facebook as an example, 17 million IBC-related videos were shared by September 9th, 2014 (Lafferty, 2014). From July 29th, 2014, to August 28th, 2014, donations increased by 3,500% compared to $ 2.8 million during the same period of 2012 (The ALS Association, 2014).

As a consequence of its popularity, participation on the IBC campaign in China started with Lei Jun, the CEO of Xiaomi Technology Inc. in Beijing, who was nominated by Yuri Milner1 on the most popular social platform of the country – Sina Weibo2 (SW). Subsequently, the campaign immediately became prevalent on Chinese social networking sites: by August 20th, 2014, hashtag #BingTongTiaoZhan (冰桶挑战)3 attracted 79,000 followers and was mentioned for 1.2 million times on SW. Simultaneously, more than CNY 1.4 million donation was raised through the China-Dolls Center for Rare Disorders4 (China-Dolls, Chen, 2014). So far, more than 39 million of original posts textually containing BingTongTiaoZhan can be searched on SW. According to the Weibo Data Center (Li, 2014), BingTongTiaoZhan ranked as No.17 in the hot topics on SW during the whole year in 2014. Briefly, the IBC

1 A Russian tech investor.
2 The Chinese leading microblogging platform, regarded as the Chinese equivalence of Twitter.
3 Ice Bucket Challenge in Chinese.
4 A non-profit organization that provides services to patients with ALS in Beijing.
campaign became a great success both in the real participation and the exploding of the viral messages in China, as well as in the rest of the world.

To understand the mechanism behind the success of the IBC campaign, an in-depth research on the process of the IBC viral dissemination on social media is required. Thus, this research is carried out focusing on the persuasive strategies in the viral messages and the social media users engaged in the viral dissemination. Generally, research on the IBC viral messages develops a recognition on what is exactly disseminated on social media. On the other hand, research on the engaged users explains why the users forward the viral messages or participate in the campaign. A collaboration of these two aspects in a specific regional context helps to formulate an understanding on the successful reasons of a viral marketing campaign on the social media in this context. Continuously, the reasons to study the IBC case in China is discussed in details in the next section in order to provide a precise explanation on the aim of this research.

1.1. Research Relevance and Research Aim

The IBC case in China is studied for two reasons. On the one hand, the viral way of dissemination is worth an in-depth research on the IBC campaign that raised both the donation and the public concern on the orphan disease ALS. As a representative viral marketing case, the IBC campaign was operated through words of mouth/mouse, which encouraged participants to pass on messages of sustainable developing nature in various forms (De Bruyn & Lilien, 2008; Kotler & Keller, 2011; Phelps, Lewis, Mobilio, Perry, & Raman, 2004). With the IBC viral messages disseminated on social media, social engagement was simultaneously achieved. In fact, the recent research has shown a tendency on fundraising and awareness promotion of public issues combined with social media (e.g. Miller, 2010; Waters, Burnett, Lamm, & Lucas, 2009). Several barriers existed in the application of social media for such purpose by non-profit-organizations (NPOs), including lack of constant updates of content (Waters et al., 2009), ignorance to leading interaction and social engagement (Lovejoy, Waters,
& Saxton, 2012; Waters & Jamal, 2011; Waters et al., 2009), and limitation on targets and resources (Miller, 2010), let alone the utilization of viral marketing strategy.

However, without a case similar to the IBC campaign, studies on social media use for public welfare stagnates when identifying the defects. Previous research has yet to provide further interpretation of the influence of social media use when the barriers are broken in a philanthropic case. The IBC campaign can exemplify this influence, since the aforementioned defects were revised and modified. Furthermore, in the IBC case, viral marketing strategy was approached not for a commercial brand or a business corporate. Capitalizing on multiple use of social media, especially social engagement with viral messages’ dissemination, makes the campaign a distinctive but rare example among NPOs or charities. Thus, the IBC case is worth studying in terms of improving viral marketing practice and in terms of the application of social media for public welfare. Research on the IBC case can remedy the literature gap between the defects of social media use for public welfare and the influence of social media in a non-commercial, viral marketing case.

On the other hand, by identifying the IBC diffusion and effect into a certain regional context, i.e. China, the data based on the significance of social media participants in China may benefit both academic research and application in practice. A giant Chinese social network has been established with a variety of microblogging, social networking sites (SNS), instant messaging, forums and mobile apps, etc., outside of Twitter and Facebook. Microblogging (“weibo” in Chinese) has become the most popular type of social networking sites in China in recent years. It has similar functions to Twitter with, for example, @, hashtags (#) and choices of followings and followers by users. The dominant server SW ranked at No.1 in user base among all the Chinese social platforms (Bower, 2014). It had around 600 million registered users by April, 2014, including not only domestic but also international users (Bower, 2014). As mentioned above, SW was also the first social platform engaged in the IBC case in China. According to scholars, the trend of sharing jokes, images and videos is formed almost entirely by a large percentage of retweeting on SW, significantly different from the trend of current global events and news stories on Twitter in the
western world (Yu, Asur, & Huberman, 2011). Such a retweeting trend constitutes the key element of viral dissemination.

However, so far, few studies concentrated on the use of social media for philanthropic purpose and the related public influence in China. Attention was paid to the digital media application divide in social media adoption by local philanthropic NPOs and relevant challenges of social media popularization to their civil credibility (Chen, 2012; Zhong & Li, 2011). Innovation of communication forms was highlighted for philanthropic dissemination efficiency on social media (Chu, 2014; Liu & Wu, 2012). The dynamics of philanthropic information diffusion were located in social trends in special periods of crisis (Qu, Huang, Zhang, P., & Zhang, J., 2011). These studies provide a preliminary understanding on the social media conditions of philanthropic use in China. Meanwhile, there is a gap in research regarding the angle of behavioral motivations, which leaves space to transfer academic attention to the Chinese public audience. Combined with the charitable root and the social engagement in the Chinese civil society, the study of the IBC case can fill this gap by providing a deeper elaboration of the social media influence in China.

To sum up, this research aims at three perspectives. First, providing an elaborated analysis on the effect of the IBC viral messages on SW imposed on Chinese users’ related forwarding/participating behaviors. Second, extending previous research on social media use by NPOs and give reference to social media campaigns for public welfare in the future. Third, interpreting the IBC viral dissemination among Chinese social media users and reflecting the social media practice in China. With the research questions presented in the next section, a concise description on the research structure is given. The three points of the aim of this research are reflected in a further step.

1.2. Research Questions and Research Structure

In order to understand how a marketing campaign can successfully achieve wide viral dissemination and participation, this research will investigate the viral messages based on previous research on viral marketing and viral message, and analyze the social media users with the help of the elaboration likelihood model of persuasion
(ELM) theory (Petty & Cacioppo, 1986). SW is chosen as the researched social media platform due to its strong representativeness (user base, retweeting trends) compared with other social media platforms in China and the popularity reached by the IBC campaign on it. Two conceptual components need to be clarified for the sake of research structuring.

First, viral message is the key concept in a viral marketing campaign. Success of a viral marketing campaign is decided by the engaging power of the messages, which requires the message value to be clearly perceived in the transmission and deemed to be worthy to pass on by the receivers (Dobele, Toleman, & Beverland, 2005). Basically, the essence of the IBC messages can be summarized as ‘challenge or donate’.

During the dissemination, however, the content of the messages was continuously enriched and evolved with various Chinese materials and sources. In fact, though the China-Dolls had the beneficial ownership, it was SW users that acted as the real IBC promoters who spontaneously and actively contributed to generating the IBC viral messages. It could be seen from how the IBC activity exactly entered China, and no evidence on SW shows that there was an official IBC or ALS Association account. This blurred the boundary between the so-called IBC generated messages and the user generated ones. Thus, there is a need to explain how those messages were formulated by SW users for viral dissemination and social engagement.

Previous research has provided several dimensions to identify viral messages. Three dimensions from previous studies will be invoked to analyze the IBC viral messages that users generated on SW (Kotler & Keller, 2011), including informational relevance (Dobele et al., 2005; Moore, 2003; Palka, Pousttchi, & Wiedemann, 2009), sentiment (Dobele, Lindgreen, Beverland, Vanhamme, & Van Wijk, 2007; Phelps et al., 2004) and authority (Dobele et al., 2005; Phelps et al., 2004). These three dimensions are highlighted as the crucial strategic points in viral messages. An illustration of the IBC viral messages is able to be produced to the points of wide dissemination and broad engagement of SW users.

Secondly, behavior and attitude reflect the degree of information adoption and evidence the influence of messages. In a viral marketing case, forwarding the viral
messages clearly proves the informational transmission among the engaged people. Participating in the campaign shows the positive consequence of persuasion via the viral messages. Simultaneously, the forwarding/participating behaviors reflect some characteristics of personal attitudes towards the received messages.

The ELM (Petty & Cacioppo, 1986) theory has provided an integrative framework elaborating the influence of persuasive messages on the antecedents and consequences of behavior and related attitude. The ELM theory embraces two routes of message adoption, where six factors are highlighted to be influential on the route choosing (Petty, Heesacker, & Hughes, 1997). The application of the ELM contributes to an in-depth analysis on the connection between the route of IBC-engaged people dealing with the viral messages on SW and the consequences of their forwarding/participating behaviors. The influential factors are generated as research dimensions, including three internal dimensions – personal involvement, ability and motivation, and three external dimensions – sentiment, information quality and source credibility. These dimensions are contributable to formulate an interpretation of related attitudes and behaviors of the users as a result of IBC viral dissemination on SW.

Thus, this research is structured as a case study via the angle of viral marketing and persuasion effect. Theory of viral message and the ELM is set as the basement for analysis. This research is approached by a mixed qualitative method of qualitative content analysis on the viral messages and qualitative interviews with engaged SW users to investigate two research questions:

**Research question 1:** What were the key strategies applied in the IBC viral messages that SW users generated for social engagement?

**Research question 2:** How did the IBC viral messages on SW trigger the IBC-related attitudes and behaviors of the engaged Chinese users based on the ELM theory?
Above all, an introduction of intension and structure presents a glimpse at this research. The following part is a review of relevant theories and previous research, beginning with social media and social engagement, and relevant research in the Chinese context, driven further to two sections tightly connected to the research conception and design: viral marketing and viral message, and the ELM theory.

Afterwards, the research design will present with details of methodology application with a support of rationale. A mixed sequential qualitative method containing two sections of approaches, qualitative content analysis and in-depth interview will be specifically explained. Following, the research will provide separated results of each qualitative analysis section, ending with a comprehensive discussion of result triangulation. Furthermore, the conclusion of this research will present discussion and further implications of this research.
2. Theoretical Framework

Before discussing the viral messages’ influence on public behaviors and relevant attitudes in China, this research provides a review of the literature background. The first section of this chapter points out theoretical and practical features of social media and social engagement. The next section describes the relevant knowledge of social media and philanthropy in China. In these two sections, research gaps are identified in terms of social media use for public welfare and the Chinese contextual features. Next, a literature review regarding the viral marketing practice is provided to benchmark research question 1. The introduction of the ELM theory and several appropriate dimensions for research question 2 will compose the key part of the theoretical framework. By elaborating on the corresponding theories and literature, the research questions will be clarified.

2.1. Why Social Media?

Social media was defined as “a group of Internet-based applications that builds on the ideological and technological foundations of Web 2.0, and that allows the creation and exchange of User Generated Content” (Kaplan & Haenlein, 2010, p. 61). Safko (2010) further suggests to define social media as “the media we use to be social” (p. 3), in terms of technology to effectively create online connection and relationship with other people. In other words, the mechanism of social media essentially comes down to humans’ need to be socially engaged.

Social engagement was studied from the angle of behavioral and neurophysiological mechanisms of human potential consciousness for the engagement occurrence (Porges, 2003). According to Porges (2003), without obvious dependence on awareness, the risks are directly evaluated by humans for the fear of being psychologically and physically separated inside an environment. Human behaviors are adapted to social tendency and thus match the environment for safety reasons. This helps to scientifically understand how social engagement is achieved with viral dissemination and initiative participation in the IBC case.
Scholars list many functions and characteristics of social media: varieties of information formats, the amount of audience exceeding on traditional media, interaction, engagement and free sharing, low cost with high efficiency, and relatively unlimited content generation and distribution (Kaplan & Haenlein, 2010; Mangold & Faulds, 2009; Safko, 2010). They have been used for business purposes and profit.

However, a challenge is brought by social media because a single person is able to be the center of the network of hundreds of users. Companies, institutions and organizations have attached importance to constantly shaping the communication with oriented mission and performance since the control of the whole content generation is hard to be practiced (Mangold & Faulds, 2009). To this point, there is a silver lining in social media when using it for any purposeful communication campaign.

On the other hand, social media use for awareness leading and fundraising is argued to be inefficient and ineffective in previous studies. Charitable generation gap online and time and source shortage are pointed out to reduce exposure and attractiveness of public welfare issues (Miller, 2010). Ignorance to interactivity and lack of manpower frequently occur in NPOs’ Facebook use, which weakens corresponding social influence (Waters et al., 2009). One-sided information dissemination on Twitter blocks the possibility of interaction creation and regular relationship establishment (Lovejoy et al., 2012; Waters & Jamal, 2011). The failure of capitalization for Haiti earthquake via Facebook and Twitter, for example, is attributed to holding steady donor groups rather than expanding social engagement (Muralidharan, Rasmussen, Patterson & Shin, 2011).

In a comparison, however, the IBC campaign overwhelmingly benefited from the multifunction of social media, especially interaction and social engaging. Simultaneously, the IBC engaged users forwardly to keep a track of the viral core via message generation. Rather splendid, the viral maintenance is not in a sustained guidance of any IBC official organizations. Combining those conditions, the gap of social media use for public welfare and philanthropy is apparent between existing research findings and what the study of the IBC campaign is able to contribute.
Moreover, the focus on the Western social media in previous research highlights the possibility of a different research findings when changing the contextual background. Locating the IBC case in China helps fulfill the research gap regarding the regional scope. Therefore, relevant contextual significances need to be specified for such a case study in the Chinese social and cultural scope. In the next section, literature on these topics will be reviewed.

2.2. Relevant Research Background in China

In China, social media has become a major part of Internet users’ daily life. According to The Internet of China\textsuperscript{5}, by 2010 the majority of Chinese Internet users have frequently used various online services, such as bulletin board system (BBS), blogs, weibo and SNS for online communication and ideas exchange. Consequently, huge amounts of content were generated by users every day. Due to relatively more completed function and information sources, little limitation to distance between users, and technology of mobilization, SW has emerged to be the mainstream among social media services in the country (Bower, 2014). It owns relatively the highest popularity and the highest frequency of user interaction.

Some neutral characteristics of SW are shown as well. The use of SW by general users is mainly for leisure and entertainment, such as contributing, commenting on and retweeting online magazines, jokes, stories and other forms of amusement, and sending virtual gifts to people within online relationship (Yu, Asur, & Huberman, 2013). On the other hand, SW is used for interpersonal communication and long-distant interaction between who may not know each other in reality (Yu et al., 2013).

However, other significances of social media use in China cannot be ignored, besides the trend of retweeting on SW (Yu et al., 2011). First of all, the disconnection between Chinese and the foreign social networking sites. Most of the international social platforms, such as Facebook, Twitter and Youtube have been blocked by the

government in mainland China. As seen in the IBC case, the campaign was introduced to China by an international SW user, instead of information transformation from, for instance, Twitter or Facebook.

Secondly, the government’s Internet censorship on politically sensitive terms has restricted the use of text to some extent (Bamman, O’Connor, & Smith, 2012). Because of the censorship on Internet, politically sensitive terms in posted content on social media trigger high possibility of deletion of such posts (Shirky, 2011). It is related to the small percentage of, for example, posts on SW containing political organizations or relevant large groups (Barnett, 2012). Nevertheless, Chinese Internet users would instead use words or phrases with similar pronunciation or symbolized meaning to represent the sensitive terms.

Thirdly, social media in China has a stronger impact on purchasing decisions of the users than in other countries (Chiu, Lin, & Silverman, 2012). To this point, cut-throat competition in commerce is highlighted and being reassuringly familiar for commercial purpose is suggested to be the basic rule to effectively engage Chinese social media users (Chiu et al., 2012). As negative results, abundance of junk information, existence of online water army⁶ and numerous fake accounts with retweeted commercial fraudulent widely occur on especially SW (Yu et al., 2013).

Fourthly, the collectivist culture in China is shown by the dominance of interactions on social media between users who really know each other in reality (Jackson & Wang, 2013). Along with families, friends and people known in reality, Chinese users prefer interpersonal groups to be the main part of their social circle on social media.

Last but not least, research shows that in general the sentiment of posts on SW is more positive than on Twitter, and SW users discuss broader topics and concepts than Twitter users in the West (Barnett, 2012). Amusing elements are easily created by Chinese users in relation to the specific cultural phenomenon, especially on social media. These political, cultural, social, and practical knowledge of Chinese

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⁶ Water army refers to those who were hired to post online.
social media differentiate studies on social engagement and response triggering of the IBC campaign on social media in China from the case in the rest of the world.

Besides the specialty of social media use, philanthropy in China is important as well when regarding the IBC case as an event for public welfare. In history, philanthropy in China shows a shift from traditional culturalism such as fraternity in Confucian to modern nationalism (Peterson, 2005). Interestingly, a dynamic is shown by the nation taking up the dominant social service provision and the rest being shared by social organizations (Schwartz & Shieh, 2010).

In other words, the civil society is willing to put importance and donate to practical crisis on a national level which indeed gains sympathy, like the numerous donation from the civil society for Wenchuan earthquake in 2008. However, vague philanthropy mechanisms in social organizations cause distrust and suspicion among the Chinese public, making donations to issues that are perceived as weakly connected to individuals, to some extent, difficult to be raised (Schwartz & Shieh, 2010).

A few corruption scandals of internal personnel in recent years also certainly damaged the public credibility of the major commonweal NPOs in China (Chen, 2012). On the other hand, Barriers have been set by the government, what somehow prevents foreign NPOs entering the country due to political, religious and democratic-related reasons (Yin, 2009). As shown in the IBC case, the donation raised in China goes to the China-Dolls, a Chinese charity, instead of the ALS Association, the international NPO. Those conditions specify the operational challenges of a foreign philanthropic campaign in China. In comparison, the success of the IBC campaign in Chinese context shows relatively more scholarly value than in the Western society.

Moreover, previous studies of philanthropic-related use of social media in China lack an emphasis on the influence of social media on the mass users, especially the behavioral changes. The digital media application divide attracts research attention due to the uneven adoption of social media use by NPOs in China (Zhong & Li, 2011). Meanwhile, development of information forms, such as the emergence of
public-service digital advertising and micro-film, is focused on for the narrative creation and social-functional improvement (Chu, 2014; Liu & Wu, 2012).

However, the multifunction of social media puts challenges to not only charitable use but also credibility maintenance of local NPOs due to relative enhancement to negative exposure (Chen, 2012; Zhong & Li, 2011). Furthermore, philanthropic information diffusion results in situation updates, and action-, emotion-, and opinion-related expressions although limited in crisis time (Qu et al., 2011). Above all, a shortage is shown nevertheless of a combination of phenomenon and internal motions from the angle of message recipients on social media. It highlights the importance of an integrated research structure in this IBC case research.

In brief, previous literature highlights a research gap where this IBC study can be beneficial, originating in a distinctive integration of three key factors – social media, philanthropy, and the Chinese context. Based on it, scholarly perspectives from the specialties of the IBC case – viral messages’ dissemination and the ELM theory concerned with behaviors and attitudes are necessary for a thorough theoretical basis. In the following two sections, previous literature will be reviewed separately from these two aspects. Thus an analysis and evaluation framework is developed for the two research questions.

2.3. Viral Marketing and Viral Messages

The term viral marketing was introduced in 1997 and its definition was mostly argued for being regarded as word-of-mouth advertising between consumers (Phelps et al., 2004). Researchers (Krishnamurthy, 2001; De Bruyn & Lilien, 2008) argued viral marketing is used to take advantage of social relationships in order to disseminate information that can lead to effective adoption of a product by the market. Briefly, the effectiveness of social engagement – to a certain extent – is represented by the efficiency of viral messages’ dissemination. It is indicated by the numerous IBC-related messages on SW and the amount of the IBC-engaged users. However, the messages’ dissemination is not necessarily to be intentional, and promotion information can be distributed by synthetic content unconsciously (De Bruyn & Lilien, 2008). For
this reason, the consumers’ willingness to be voluntary promoters is an explicit incentive or a simple desire to share product value within interpersonal social networks (De Bruyn & Lilien, 2008). Simultaneously, this pattern of value sharing is not happening only within personal social networking but also through long-distant general relationship, for example, between celebrities and their fans. This allows measuring the additional property of IBC messages on SW as driven in different perspectives.

Relevance, sentiment and authority as three dimensions were suggested to be core terms in viral messages by Kotler and Keller (2011) without detailed explanation. However, literature has provided reliance to investigate these three concepts. First, relevance was studied as personally perceived relevance of the message content, proposed to be influential on message pass-on behaviors (Palka et al., 2009). In terms of this definition, it is difficult to measure such kind of subjective perception only by looking into the messages. However, relevance has its origin in objects contained in the messages, from which perspective relevance tends to be in the content and quality of information. For example, addressing brand name into viral messages can possibly enhance the connection between brand image and dissemination result (Dobele et al., 2005; Moore, 2003). In the IBC case, addressing name with influential image can be assembling with ALS-related information, in that the campaign’s objective was arising the public cares and gathering donation for this disease. In another case, placing commercial brand names in the IBC messages can cause charity associated with commerce. In this research, the objects in the IBC messages will be analyzed from the view of objective informational relevance.

Second, sentiment was studied as the emotional element of viral messages, which create emotional connections with recipients and further activate their related actions (Dobele et al., 2007; Phelps et al., 2004). Messages with strong emotional elements are possibly more effectively disseminated (Phelps et al., 2004). Six primary emotions have been widely applied in the design of viral messages: surprise, joy, sadness, anger, disgust and fear (Dobele et al., 2007). Surprise is dominantly identified and emphasized to be suitable to capture recipients’ imagination (Dobele et al., 2005; Dobele et al., 2007). The other five have different applicability according to several
distinct situations and could be combined with surprise (Dobele et al., 2007). Various emotions have the roots in the message content, expression, and association to a cultural context. In this research, sentiment in the IBC viral messages is analyzed according to the findings of Dobele et al. (2007).

Third, authority can be explained as the credibility of the message sources, and recipients’ trust in the incentive enhances the perception of the message value (Dobele et al., 2005). Previous studies highlight authority in viral dissemination in two different ways (Dobele et al., 2005; Phelps et al. 2004). On the one hand, the effect of source credibility has been identified from the opinion leaders in a specific segment of people at macro scale, which triggers the wide endorsement of social figures (Dobele et al., 2005). On the other hand, infrequent message senders are more influential to their network members through more targeted and interpersonal approaches in a micro scale (Phelps et al., 2004). Basically, the IBC campaign has attracted multitudinous attention, benefiting from both these two patterns of authority. Details of authority in the IBC messages will be analyzed by coding different types of authorized sources and presentation concerned with those names in the messages on SW.

To conclude, previous literature has informed several points for the analysis of the IBC viral messages on SW. It contributes to answering the research question 1:

**What were the key strategies applied in the IBC viral messages that SW users generated for social engagement?**

To specifically formulate the answer to this research question, this study combines background literature on social media and the Chinese SW context in order to further construct a research foundation for research question 2.

Simultaneously, informational relevance, sentiment and authority are highlighted to effectively influence the result of persuasion in the ELM study (e.g. Petty & Cacioppo, 1986). In terms of persuasion, three similar perspectives in the ELM theory to those three in viral messages are researched as external, relatively objective factors – sentiment, information quality and source credibility. These three factors partially play
roles in the routes people choose to deal with persuasive messages. In the next section, the ELM theory and relevant research will be discussed in details, in which the connection between the three dimensions emphasized in viral message and the ELM theory is concretely clarified.

2.4. The ELM Theory and Relevant Research

The ELM theory has been assessed in several studies about information adoption and attitude and behavioral changes (e.g. Petty & Cacioppo, 1986; Sussman & Siegal, 2003). Basically, the ELM was formulated with regard to the effect of various internal and external variables on people’s elaboration of issues and generation of attitudes and behaviors (Petty & Wegener, 1999). It has introduced two routes of how people deal with persuasive information. The central route involves considerable cognitive activity, in which people with strong motivation and ability of informative consideration carefully evaluate the merits and implications of the message arguments in the advocated position. Thus, message recipients actively generate positive and/or negative thoughts in response (Petty & Cacioppo, 1986). In contrast, the peripheral route is when simple cues in the communication context are associated with the advocated position by a mental state and/or a simple heuristic procedure when people’s motivation and ability are weak (Petty & Cacioppo, 1986). The process of these two persuasion approaches possibly depends on the involvement of individuals (personal-related perceptions): individuals with high involvement tend to adopt the central route; individuals with low involvement prefer the peripheral route (Petty & Cacioppo, 1986; Petty et al., 1997).

According to the ELM theory, adoption of the routes is influenced by three internal variables – motivation, ability and personal involvement. Among these three factors, ability to deal with information is relatively objective, while motivation and personal involvement is relatively subjective. Note that the motivation to deal with informative arguments is subjectively integrated with personal involvement, but objectively influenced by personal ability (Petty & Cacioppo, 1986).
Besides these three variables, three external variables play roles as well, including sentiment, information quality and source credibility. Sentiment refers to the emotional connection affecting both routes, when the emotions in messages are basically concerned with people’s personal-related perception and/or simple cues in communication context (Petty et al., 1997). Sentiment is highlighted in viral dissemination as well where various emotional resonances enhance the acceptance of messages by recipients (Dobele et al., 2007; Phelps et al., 2004).

Information quality is closely connected to the merits and implications of message arguments (Petty & Cacioppo, 1986; Petty et al., 1997). Information quality affects through the central route (Sussman & Siegal, 2003) with informational relevance and accuracy being highlighted to be influential (Cheung, Lee, & Rabjohn, 2008; DeLone & McLean, 2003). Other terms such as understandability, completeness, usefulness and currency are also suggested to be measuring factors of information quality (DeLone & McLean, 2003; McKinney, Yoon, & Zahedi, 2002). Moreover, source credibility as an important cue affects through the peripheral route (Sussman & Siegal, 2003) with two main influential terms – competency and trustworthiness (Cheung et al., 2008; Petty & Cacioppo, 1986).

To these three external variables, literature review in the previous section has suggested the common grounds, shown by the three dimensions for analyzing viral messages – informational relevance, sentiment and authority. It is obvious that characteristics of viral messages have internal connections with the ELM theory. Thus, the terms highlighted in each dimension among sentiment, information quality and source credibility in the ELM theory are combined with the theories on informational relevance, sentiment and authority in viral messages. The combination achieves a framework assisting analysis of SW posts and relevant content in interviews.

The capability of applying the ELM theory in the study of the IBC case is located in the concluded approaches dealing with messages that have the capacity of calling actions. According to the definition of a viral message, the message itself has persuasive property (De Bruyn & Lilien, 2008; Phelps et al., 2004). The basic reaction intended in a viral marketing campaign is that targets pass forward the messages with
the motion facilitated by both the message and the targets (De Bruyn & Lilien, 2008; Kotler & Keller, 2011; Phelps, Lewis, Mobilio, Perry, & Raman, 2004). The participation as another consequence is in a direct relation to the involvement in a viral marketing campaign. Lacking an observation on message recipients, it is ineffective to conclude how the message content contributes to the success of a viral marketing campaign. Previous research discussed in chapter 2.3 directly addresses the angle of viral dissemination and social engagement. On the contrary, the ELM theory, in a reverse direction, contributes to analyzing the case from the view of the engaged people, deep in their identity as message receivers and message senders. As already stated in this research, SW users were the ones that acted as the real IBC promoters. In this case, a collaboration of theories on both aspects, viral messages and processing messages by humans, helps the understanding of the IBC case in a more comprehensive way than if only relying on theories from either aspect.

After all, these six factors in the ELM theory - motivation, ability, personal involvement, sentiment, information quality, and source credibility – constitute a complex network of multi-roles in the process of elaboration, in terms of amount, direction and extent (Petty & Wegener, 1999). They contribute as six dimensions for interviewing the engaged SW users and further qualitative analysis to answer research question 2:

**How did the IBC viral messages on SW trigger the IBC-related attitudes and behaviors of the engaged Chinese users based on the ELM theory?**

Simultaneously, arguments about the mechanism of the ELM theory will be assessed to see if the research results of the IBC case match the proposal of previous research. By integrating the answers to the two research questions with further application of the ELM theory and various dimensions, a conclusion will be drawn for the sake of a completed interpretation of the IBC case on SW.
3. Method

This chapter presents a detailed description of how this research was carried out and the reasons of the choice of method. Based on a case study via a mixed sequential qualitative approach, three sections are elaborated upon a comprehensive research design. Two following sections separately cover elaborations on the qualitative content analysis of the IBC viral messages on SW and qualitative in-depth interviews of the IBC-engaged users. A detailed design of each approach is presented in each corresponding section. The last section provides a triangulation of the two qualitative methods for the sake of a sequential approach through an integrated case study of the IBC campaign on SW.

The case study method is highlighted as an empirical inquiry (Yin, 2014). As a research method, it helps to investigate a contemporary phenomenon with an interpretive bias in the context of reality (Yin, 2014). This method contributes to studying the IBC campaign, because the contextual conditions are highly involved in this contemporary case. To deeply investigate the IBC case, theoretical propositions were already settled in the previous chapter. In terms of sufficiency of sources in a case study, multiplicity of analytical evidences is emphasized simultaneously in a triangulation orientation (Yin, 2014). Following this principle, the IBC research design follows the methodological path of a case study.

In this research, two notions lead to the choice of a mixed qualitative approach. The first one is situated in opposition to quantitative research, which isolates specific variables and illustrates only numerical correlations (Brennen, 2012). Qualitative research approaches offer an insight into the research objects’ behavior, motivation and potential impact to interpret the meaningful relations with the consideration of alternative notions (Brennen, 2012). The other is that a study on the ELM theory with multimode models requires multiple qualitative processes, instead of limiting the samples in independent quantitative variations (Petty & Wegener, 1999). Due to the independence of variables and the numerical results rather than qualified descriptions,
quantitative methods cannot lead to detailed interpretive answers to the research questions. Thus, qualitative methods match this research better than quantitative ones.

In regard to a mixed qualitative approach, it is decided by the differentiation between types of data, levels of analysis or matters of participation (Morse, 2010). To study the IBC case, dividing the research with two methods contemplates the theoretical basement as discussed in chapter 2. Moreover, what requires further emphasis is the design of a sequential approach in this study (Creswell & Plano Clark, 2011). Corresponding to the process of viral dissemination, people receiving and evaluating viral messages is objectively posterior to related behaviors of engagement. As a result, research on the influence of viral messages has to be first launched out into the messages themselves. In this case, the analysis of IBC posts is designed prior to conducting interviews with engaged SW users. The findings of content analysis of the viral messages are used to construct the content of the interviews in order to enhance the connection of these two research sections for further research triangulation.

This research is mainly divided into two sections, respectively corresponding to the two research questions in the light of rationale (e.g. Marshall, 1996). Briefly, as to research question 1 (What were the key strategies applied in the IBC viral messages that SW users generated for social engagement?), the research is carried out by content analysis via inductive coding schemes informed by the three theoretical dimensions – informational relevance, sentiment and authority.

A criterion sampling strategy (Patton, 1990) is applied, consisting of an engagement standard and a time frame. The engagement standard requires a sample of 100 posts that literally contain BingTongTiaoZhan (冰桶挑战) with relatively the highest engaging power evidenced by the totality of likes, comments, and shares on SW. The time frame is two months following the IBC entrance to China, which according to statistics by Weibo Data Center is the most popular period of the campaign in the country. Inductive content analysis method is invoked to analyze the data by a concrete process of open coding, grouping, categorization and abstraction (Elo & Kyngäs, 2008).
For research question 2 (**How did the IBC viral messages on SW trigger the IBC-related attitudes and behaviors of the engaged Chinese users based on the ELM theory?**), the data collection is approached via qualitatively interviewing 12 people with a selective sampling strategy (Coyne, 1997; Patton, 1990). This selection meets a minimum criteria of an IBC-forwarding behavior at least and obeys demographic principles for a balance of genders and representative age groups (Sandelowski, 1995).

The six dimensions of the ELM theory – motivation, ability, personal involvement, sentiment, information quality, and source credibility – structure the interviewing framework. The result of the previous content analysis builds the basement for the interviewing questions. In the guide of concepts driven from the ELM theory and viral marketing theory, thematic analysis (Burnard, 1991; Boeije, 2010) is approached with coding themes generated during the analysis.

Each of the analysis sections is informed by a mutual-connected theoretical framework, while the results link back to the theories. After these two sections of analysis, a methodological triangulation of the results of the two parts is carried out to coincide the two qualitative methods and interweave the analysis results. These methodological designs are specifically explained in the following paragraphs.

**3.1. Content Analysis of the IBC Viral Messages on SW**

As already mentioned, this section of the qualitative analysis aims at answering research question 1: **What were the key strategies applied in the IBC viral messages that SW users generated for social engagement?** This research question is answered with the help of qualitative content analysis of the viral messages that SW users generated. Qualitative content analysis is “a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns” (Hsieh & Shannon, 2005, p.1278). It allows researchers to identify the themes and patterns of data in the context of communication while understanding the social reality in a systematic and scientific manner (Zhang & Wildemuth, 2005).
Qualitative content analysis for this research not only identifies and examines the themes of the IBC posts, but also places the whole case in the Chinese context while taking into consideration of both the social media culture and the philanthropic perspective of the campaign. It specifically frames emergence and interpretation of findings that are informed by the theoretical dimensions with empirical ingredients (Zhang & Wildemuth, 2005).

3.1.1. Sampling Strategy

The sampling strategy applied for data collection consists of a criterion sampling approach (Patton, 1990). Criterion sampling is a purposive sampling technique where quality assurance is commonly the criterion of importance (Patton, 1990). The criteria for sample generate qualitative components that surround the key analytical concept.

In this case, previous literature provides an elaboration on the positive relationship between social engagement and viral dissemination. Thus, by highlighting viral dissemination, the engaging power of the sampled IBC messages shall be guaranteed to a certain extent. However, the huge amount of IBC-related posts (i.e. more than 39 million of original posts literally containing BingTongTiaoZhan can be searched) on SW puts a challenge to data collection. Thus, the criterion sampling approach is applied to ensure that the data for this content analysis is representative among all the IBC posts on SW in respect to social engagement (Teddlie & Yu, 2007).

Making use of the keyword and selective searching functions of SW, the collected units of data are settled. These samples contain the Chinese characters BingTongTiaoZhan (冰桶挑战) and meet the criteria of the totality of sharing, comments, and likes ranking as the top 100 among all the posts. Setting a criteria of top 100 posts ensures the engaging power of the sample to the maximum on SW. Simultaneously, these 100 posts carry the possibility of targeting the largest amount of audience. Thus, these units of data can be considered generalizable enough to answer research question 1.

On the other hand, the time period is embraced in the criterion sampling. The units of analysis from all the searched IBC posts on SW are chosen during the two months
after the IBC campaign entered China (August 18, 2014). This time frame is set due to
the statistic result from the Weibo Data Center: Since the IBC campaign entered China
on August 18, 2014 (152,531 posts), the daily amount of original posts containing
BingTongTiaoZhan on SW zoomed up during three days and reached the peak on
August 21, 2014 (1,145,524 posts). Subsequently, the daily amount went in a decline
overall, and with slight fluctuations during the time it fell to a valley at the second
month by October 14, 2014 (2,016 posts). This evidences that the most intensive time
of the IBC viral dissemination on SW is within the two-month-period after August 18,
2014. Thus, it is reliable to choose such a time window for data collection. Additionally,
the representativeness of the sample is further enhanced by setting this time window.

With a criteria of engaging power and time period, the data with relatively the
highest engaging power is collected. Unexpectedly, there was a sample originally
posted in Korean that was later translated by a volunteer helper who is a native
Korean speaker. Finally, these 100 IBC viral message are put into an Excel file for
inductive content analysis.

3.1.2. Qualitative Inductive Content Analysis

The IBC viral messages were analyzed using an inductive content analysis
method. Inductive content analysis is applied in research where previous literature does
not provide comprehensive knowledge included in a case (Elo & Kyngäs, 2008). The
theory of viral messages that was previously reviewed, indeed highlights three
conceptual dimensions including informational relevance, sentiment, and authority.
However, no coding schemes are provided that are accurately applicable to this study.
Though literature of sentiment and authority suggests some categories in the
dimensions (e.g., Dobele et al., 2007), it cannot be ensured those categories match the
IBC case study. Also, originally informational relevance amplifies the range of any
categories or themes since only the specific information in the data is valid for analysis.
Inductive content analysis contributes to an empirical and contextual interpretation on
the case, which roots in the definition of a qualitative case study method – elaborating
the phenomenon in the context (Yin, 2014). Besides, inductive content analysis moves
from the phenomenal to the general (Elo & Kyngäs, 2008). Under these circumstances, it is possible to improve the generalization of a case study (Yin, 2014). Therefore, inductive content analysis suits to the analytical approach of the IBC viral messages.

During this inductive content analysis, four steps of analysis were conducted, including open coding, grouping, categorization, and abstraction (Elo & Kyngäs, 2008). The theoretical framework of viral messages serves as the informational basis referenced in the analysis process. The three external dimensions of the ELM theory (informational quality, sentiment, and source credibility) are theoretically connected to embed the analysis result into the interview structure. The coding frame is structured in such way that it keeps track of social media research in order to accomplish an interpretation on the IBC case on SW. An interpretive bias may exist while a coding consistency needs to be kept in such a case study (Flick, 2012). However, this bias cannot be avoided in such a case study which lacks an existent accurate theoretical coding scheme but also highlights the case context. Besides, all the posts were analyzed in the original language to ensure the contextual features during the analysis, with exception of the Korean post.

After completing the inductive content analysis, another theoretical research was conducted which highlights the connection between theory and findings. General descriptions are formulated in regard to research question 1. The themes occurring frequently are assembled to conduct in-depth interviews. Results of analyzing popular subcategories and dimensions are transformed into interview questions and findings beyond expectation are included as well. By these means, applying the sequential research approach and triangulation of the two analysis sections is substantially achieved. The transformation of content analysis to interview design is covered in the next section that interprets the details of qualitative in-depth interview.

3.2 In-depth Interview

This part of the study aims at answering the research question 2: How did the IBC viral messages on SW trigger the IBC-related attitudes and behaviors of the engaged Chinese users based on the ELM theory? Qualitative in-depth interview
was chosen to approach this research question, because it can provide detailed information about interviewees’ personal experience such as perception, feeling, attitude, and behavior that may not be covered by a quantitative approach (Weiss, 1995). As opposed to a survey, qualitative in-depth interview contributes to a further understanding on a situation especially when it results from an internal state of an interviewee (Weiss, 1995). The study on the ELM theory can definitely benefit from in-depth interviews by gaining an interpreted and integrated explanation of the situation with multimode models. In total 12 IBC-engaged SW users were interviewed to provide an in-depth answer to research question 2.

3.2.1. Sampling Strategy

The difficulty to design the sampling strategy for data collection is no evidence that the IBC campaign in China has specifically targeted a demographic group of SW users. In the premise of not knowing about the attitudes of the engaged SW users, their reactions can only be judged by the analysis of their real behaviors. In terms of a viral marketing campaign, passing on viral messages is obviously the valid and credible proof of engagement. In this situation, a selective sampling strategy is adopted. Selective sampling is argued to be similar to purposeful sampling (Coyne, 1997), for which Patton (1990) shows the evidence by claiming “the logic and power of purposeful sampling lies in selecting information-rich cases for study in depth” (p. 169). This claim may narrow down the concept of ‘cases’ with restraint rather than the general data in just one case. However, it provides the capability to conduct the selective sampling method to achieve a qualitative core in a case study.

Thus, the sample for the interviews are selected based on the following criteria: being active on SW and being engaged with the IBC viral messages with at least a forwarding behavior (i.e. persons actively posting posts containing content of the IBC or sharing the IBC posts from other users). Definitely, the interviewees who meet these criteria possess the possibility to be further engaged – for example, participating in the IBC campaign. However, these criteria are set for the sake of social engagement and viral dissemination to be practically evidenced. To achieve the selective sampling, 12
interviewees are recruited with at least some available sources of their forwarding behaviors on SW (the IBC post links on SW work as evidences).

Besides, influence of demographic variation was taken into consideration for the reason that the IBC-engaged users on SW did not show any specific demographic characteristics related to a gender or an age group (Sandelowski, 1995). These variables may cause bias in the interviewing data and the result of analysis because they are possibly concerned in the IBC case. To reduce this bias, the interviewees are selected as follows.

First, a balance in gender is created to avoid the bias of gender, in which way the 12 interviewees include six males and six females. Second, according to the WDC (Bai, 2015), users from 13 to 35 years old sum up 88% of the total active SW users - the post-1980 and post-1990 generations form the majority of SW users. Based on this, the 12 interviewees include six members who were born in the 1980s and six born in the 1990s. By a systematic demographic selection (Figure 1) with detective resources of forwarding behaviors, the units of analysis are settled.

<table>
<thead>
<tr>
<th>Demographic Bias</th>
<th>Ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>16-25</td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
</tr>
<tr>
<td>Female</td>
<td>3</td>
</tr>
</tbody>
</table>

Moreover, the interviewees are recruited via direct requests on SW and through the interpersonal network by sharing recruitment information. The recruitment was completed with a volunteering consent to avoid ethical issues. In the consent, the academic objective of the interviews is clearly explained. Interviewees sign for volunteering in the interviews and providing necessary personal information including
name, gender, and age, place of residence, occupation, and education. Prohibition is highlighted in the consent for any further purposeful use of the personal information and the interviewing data, especially for commercial ones.

3.2.2. Interviewing Structure

The general interview guide approach (Turner III, 2010) is applied on the interviews, because of its flexibility as in a semi-structured, open-worded format with relatively structured interview questions in the same areas of information. The six dimensions of the ELM studies (personal involvement, ability, motivation, sentiment, information quality, and source credibility) function as an outline for the interview questions. The result of the content analysis of the IBC viral messages serves as a guide for the construction of the interviews’ questionnaire. The approaching process for the interviews adopts the qualitative interview design model suggested by Turner III (2010).

The interviewees are expected to describe and explain their IBC-related behaviors when being engaged on SW. This highlights three perspectives, in terms of being engaged, attitude and behavioral response, and reasoning. It requires an open space to reduce opinion intervention from the interviewer. Therefore, the first section containing leading questions provides freedom for the interviewees to answer from their own perspective. The perception on the IBC case on SW is asked in a general way to the interviewees at the start of the interview:

- *Could you please describe what you have seen on SW about the IBC?*

This is an example of the leading question to start the interview. The interviewees have choices to recall their memories in a flexible way and pick up what they think is important to the IBC case. Such leading questions draw focus on the engagement conditions. Probing questions are used to gather IBC perceptions from different perspectives generated from analysis of the IBC viral messages. Especially the key strategies in the IBC viral messages are highlighted linking each research section.

Taking an example of the probing questions:
- Did you ever notice the practical arguments against the IBC campaign because of wasting water?

With a few leading questions and related probing questions, the interview is led to highlight personal purport. The following questions focus on the related attitudes and behaviors of the interviewees. The freedom for interpretation by the interviewees is maintained by the open leading questions. For example:

- Could you please describe how did you react to the IBC engagement on SW?

Following this leading question, attitudes and behaviors are clarified in the interviews with questions differentiating these two aspects. Discussion on reasoning different attitudes and behaviors is led afterwards. Probing questions emerge again to clarify the specific influence of different strategies found in the previous analysis. With the answer to those questions, the interview probes into the motives of related attitudes and behaviors. After completing the reasoning process, a back-up section of questions clarifies the influence of personal variables in case the interviewing content is not comprehensive enough.

Though an open space is provided during the interviews, a control of the interviewer is introduced for research objectivity via theoretical framework and integration with the content analysis result. The logic in the sequential qualitative design is highlighted by establishing the association between the ELM theory and the viral messages. Besides, information obtained from the previous open questions directly contributes to choose the further interviewing content. Thus, highlighting backing questions and supplementary questions helps to produce triangulation of the result of the two parts of the analysis.

Repeating, the design of this interviewing structure is in the light of the research achievements of the ELM theory and the application of the general interview guide approach. The result of viral message analysis specifies the details in the interview guide. This interviewing structure is first designed in Chinese for its localization and understandability towards the Chinese interviewees. The full interview guide is translated to English and can be found in Appendix A. A pilot test has been conducted with an interviewee who has participated in real interviews. The operability of this
structure is proved by providing interesting research data. The specific questions are chosen and asked in a flexible way in the real interviews in order to fit in the situation. Any valuable informational point given by the interviewees might be followed by a related question. Each interview is controlled for approximately 30 minutes.

Because these interviews are conducted by a Chinese researcher and Western theories are applied in a cross-cultural case study, this can be perceived as a combined emic-etic approach. The combined emic-etic approach is to avoid either single etic or emic approach leading to a potential ignorance of contextual concepts or a trap of local specificity (Ho & Cheung, 2007). Thus, in the interview structure, the etic constructs benefit from the Western instruments, for example, the ELM theory. On the other hand, the emic constructs emerge in the practice by, for example, applying the Chinese unique narration and communication approaches. The emic instruments originate from understanding on the Chinese context and local knowledge of the researcher. For example, the content analysis result is cited in the interview question by localization, or to be exact, origination. In this condition, the theoretical framework in an etic structure is the design basement and the implementation involves the emic instruments. Thus, this combined approach gains an etic intention as a stance bias from the start.

Furthermore, the interviews are implemented via a long-distance access by using Chinese instant messenger and online chatting software. Interviewing data is recorded by digital recorders and is transcribed immediately after the interviews. This interviewing method is similar to a telephone interview. It is argued for a possible deprivation of observation on informal, nonverbal communication if not being in person (Creswell, 1998). However, a long-distance access overcomes the unavailability of a direct face-to-face interview and the reluctance of interviewees to face-to-face participation (Creswell, 1998; Sturges & Hanrahan, 2004). Simultaneously, when research direction is narrowly focused, face-to-face interaction or environment immersion is neither highlighted (Sturges & Hanrahan, 2004). Thus, this data collection by conducting the interviews via digital solutions gains a bias to verbal communication with a narrowed objectivity, which follows the research intention nevertheless.
3.2.3. Thematic Content Analysis

The analysis of the data from the transcripts of the interviews is conducted with a thematic analysis approach. This method choice follows the design of semi-structured, open-ended interviews and the integration that all the interview transcripts are completed (Burnard, 1991). Research subjects as interview transcripts require both theoretical descriptions and empirical explanations (Boeije, 2010). A thematic analysis approach creates empirical interpretations of the data with any possible themes or categories. On the other hand, using a theory-based interview design, the thematic approach contributes to the emergence of themes related to the theoretical conception. In this research, the theoretical framework of the ELM theory combined with the result of viral message content analysis produces the components of the interview.

During the analysis process, open coding, axial coding, and selective coding are completed in respect to the thematic method (Boeije, 2010). Similar to content analysis of the IBC viral messages, the themes are generated during the coding process. The transcripts are kept in Chinese in case the analysis loses the Chinese contextual features. Relatively, the ELM theory is further invoked to formulate an understanding on the research result. A theoretical return, however, is conducted to highlight the analytical relationship and the gap between the data and the theory. A concrete answer to research question 2 presents an integration of the ELM theory and the practical findings.

Above all, detailed descriptions present the research design in two sections, while explanations are embodied in the methodological sequence and research undertaking. Both data sets are provided in a separate file in Chinese. In the final results section, specific content is quoted and translated to English to exemplify the findings. When quoting, content that is not influential to the presenting analysis results are omitted in the form of […] Since it is surplus, quoted content will not be in the original Chinese version. But explanations on specific contextual meanings will be provided in emphasis, in order to avoid the incomprehensible issues of Chinese-English translation. The next section gives an elaboration on the interlaced connection
between content analysis and in-depth interview. The methodological triangulation further contributes to a comprehensive interpretation of the whole IBC case on SW.

3.3 Triangulation

The aim of this research is to illuminate the IBC viral dissemination on SW. Simultaneously, the necessity of attention to the viral messages and the engaging human is clarified. Revealing the theoretical essential connection between viral messages and the ELM theory gives a motion to the design of a sequential mixed research method. A methodological triangulation is reflected by the combination of theories informed in each analysis section and the assembling of content analysis resulted into in-depth interviews (Yin, 2014). This triangulation of the theoretical framework, the viral message content analysis, and the in-depth interviews avoids defects caused by a single method. It enhances the validity and credibility of the mixed-approached research (Yin, 2014).

To be specific, the three dimensions (informational relevance, sentiment, authority) emphasized in previous research on viral messages are in a tight relationship with the three external dimensions (information quality, sentiment, source credibility) of the ELM theory. The viral message dimensions inform the research process in the content analysis. The content analysis examines what components are embodied in the IBC viral messages that are related to the social engagement and viral dissemination. On the other hand, the findings of content analysis are embedded into the interview questions. In other words, two sections of analysis share two closely connected theoretical foundations. The result of the content analysis directly influences the data collected by in-depth interviews and further indirectly impact the result of the interview analysis. Moreover, findings of the in-depth interviews elaborate the influence of the IBC viral messages on the engaging behaviors of SW users. The causes of the IBC viral dissemination are theoretically described and empirically interpreted, in which way the interview analysis gives feedback to the content analysis. Finally, the two research sections return to the theoretical framework. An integrated result by the two methods of analysis elaborates the IBC campaign on SW as a case
study, and further enriches the theoretical framework with analytical modification and expansion.

In the next chapter, specific research results are provided by sections in a sequential order of the viral message content analysis, the in-depth interview analysis, and the result triangulation.
4. Results

4.1. Content Analysis of the IBC Viral Messages on SW

This section presents the research results of the qualitative content analysis of the 100 selected IBC viral messages on SW. In general, three themes emerged during the inductive content analysis: IBC-promotion, IBC-criticism, and IBC-unconcern. IBC-promotion refers to the theme of promoting and popularizing the IBC campaign in a positive intention. IBC-criticism, on the contrary, demonstrates a critical concern or rejection to the IBC campaign. IBC-unconcern means the theme of divergent topics that are not certainly concerned with the IBC campaign. These themes summarize the topics of the sample, presenting an informed connection to the theoretical dimensions (informational relevance, sentiment, and authority) of viral messages and further the ELM theory. These three themes compose the conceptual outline to present the results.

4.1.1. IBC-promotion

IBC-promotion emerged as the dominant theme of the sample (84 posts) of messages containing BingTongTiaoZhan (冰桶挑战) selected for this study. Specification of the narratives necessarily occurred to a contextual investigation. As to IBC-promotion theme, a promoting orientation was highlighted in the context of the viral messages, which basically reflected positive attitudes towards the IBC campaign. The dominant emergence of IBC-promotion somehow indicates the traditional cultural conception of philanthropic acceptance in the Chinese civil society (Peterson, 2005).

Key Strategies

The IBC-promotion posts presented a prominent strategy highlighting the credibility of the message sources – celebrity endorsement. As to this strategy, celebrities endorsed the IBC-promotion with a significant connection to the message context. Self-presentation of celebrities concerned with IBC content and forwardly
promoting phrases. For example, “challenge” and “nominate” were preliminarily phrased in “accept the challenge” and “I […] nominate […] (someone)”. Nominations by inserting (@) celebrities’ names target the promoting subjects. A philanthropic concern to the ALS was generally highlighted via self-claim and further call-on. Those are summarized as a general strategic route focusing on celebrity endorsement in engagement self-presentation, interpersonal transmission, and philanthropic appeal. For example:

Check out this video I’ve just created: #BingTongTiaoZhan# #Shila’s charity on the way# I accept the challenge from @GEM! Finish the BingTongTiaoZhan, pay much attention to the ALS, and care about the ‘gradual-frozen’. I want to challenge haha, are you ready? @EXO-M @Eric Moo haha… […] Pay attention to rare disease ALS: http://weibo.com/p/100127r215182. (Amzah, No.38)

In such a strategic route, first of all, the influential power of celebrities is highlighted by a targeted and interpersonal approach on IBC-promotion leading to social engagement (Phelps et al., 2004). It was evidenced by a transmission between celebrities from being nominated to self-participation and further nomination of new participants. This certainly refers to the basic operational mechanism of the IBC campaign. Second, faced with the general public audience, self-presentation of celebrities highlights the subject of IBC participation with extra credibility (Dobele et al., 2005). The celebrities unconsciously volunteered in advertising the IBC campaign with a passive incentive of being personally engaged (De Bruyn & Lilien, 2008). As a result, public recipients perceived the message with emphasis on the leading figures in the promotional orientation. Third, addressing philanthropic concern to the ALS creates a connection between the IBC engagement and the philanthropic intention (Dobele et al., 2005; Moore, 2003). Perceptions on the IBC charitable meaning consequently emerged in the viral dissemination (Palka et al., 2009). To conclude, this basic IBC-promotion route centers on celebrity identity in micro interpersonal and macro mass communication with a hint of the IBC philanthropic and social value.

7 Malaysian well-known singer.
Except highlighting influence of social figures, two other strategies occurred in rather a few posts of IBC-promotion, referring to emotional emphasis and interactive dialogue. Emotional emphasis helps generate emotional connections with recipients relating to the IBC engagement (Dobele et al., 2007; Phelps et al., 2004). Strong emotional elements were involved in the communication context assisting IBC-promotion. Specifically, joy embodied in the acceptance and transmission of the challenge, while sincerity and sadness related to the ALS and philanthropic appeal. For example:

[Most touching BingTongTiaoZhan: I am the ‘gradual-frozen’ [Tears (emoticon)]]
A US 26-year-old photographer, Kabbah Jarl himself is a ‘gradual-frozen’, and his family is shrouded in the shadow of ‘gradual-frozen’ disease. KabbahJarre pours out of fear of ‘gradual-frozen’, even bursts into tears. Each BingTongTiaoZhan video has brought him great encouragement. From funny beginning to sad ending, 7 minutes, try to watch till the end. (Sina Video, No.55)

Interactive dialogue, on the other hand, put personal-related perception into spotlight. This strategy created a dialogic form of the IBC messages reminding recipients of self-identification as communicates via personal subject “you”. Simultaneously, an interactive request completes motivating attention and participation. This strategy takes advantages of behavioral and neurophysiological mechanisms of human potential consciousness to match the social environment (Porges, 2003). Possibility is highlighted that recipients produce self-related perception and are persuaded as a result of being personal-involved (Petty & Cacioppo, 1986; Petty et al., 1997). For example:

#Necessity of BingTongTiaoZhan# How hot is "BingTongTiaoZhan"?
[BingTongTiaoZhan] And no matter how hot, it is not you can join because you want to! See what necessity you lack! [On-looking (emoticon)] (Haier Shuizhidao, No.70)
Interestingly, the IBC-promotion posts completed a strategic combination of celebrity endorsement, emotional emphasis, and interactive dialogue. This strategic combination contained a prerequisite of source credibility for primary social engagement. Thus, using celebrities as ambassadors was an underlying highlight. However, emotional emphasis and interactive dialogue were included in the IBC-promotion content. These three strategies exert intangible effects on recipients’ elaboration of the IBC positivity according to the ELM theory (Petty & Wegener, 1999). This strategic combination is exemplified by a message that were repeated in the data:

I have just successfully donated in the event ‘Freeze for the rare disease’ of Micro Public Welfare! Nominate three of your friends to join the #BingTongTiaoZhan# and kindly donate to the Care Center for Rare Disorders @China-Dolls caring about rare diseases including ALS (Amyotrophic lateral sclerosis, commonly known as ‘gradual-frozen’). Help for rare diseases and do charity by ‘frozen’! Do you dare to challenge? @Micro Public Welfare […] (Lu, No.2; Wang, J., No.3; Wang, Y., No.6; Yu, No.86)

**Dimensions**

Among the three theoretical dimensions of viral messages (informational relevance, sentiment, and authority), authority dominates the IBC-promotion. This results from the wide application of celebrity endorsement strategy. When the celebrities were message senders, the IBC messages directly met the corresponding followers. As being involved in the message content, celebrities concerned with the context in a further step. In either endorsement approach, authority improves IBC-promotion via amplifying the influential scope and enhancing the persuasive effect (Dobele et al., 2005). At macro scale, social engagement of the mass recipients benefits from the authorized public opinion leading ability in public segments in a promoting orientation (Dobele et al., 2005). This was evidenced by generally the positive connection between celebrities’ popularity on SW and the corresponding
engaging power of their messages. At micro scale, interpersonal transmission highlights authority of network members via direct promotional targets (Phelps et al., 2004). This was proved by the interpersonal dissemination. For example:

Zheng Xu accepted the ALS BingTongTiaoZhan, and invited Jet Li, Han Han, and Vicki Zhao to relay. […] (Xu, No. 95)

Thank @Zheng Xu for nominating me at #BingTongTiaoZhan#. […] (Zhao, No. 36)

On the other hand, repetition raises a question regarding the relatively more influential authority of infrequent message senders. To date, previous research highlighted that frequent message push of the same topic by the same sender can damage the source credibility (Phelps et al., 2004). However, the collected data showed a few message senders were repeating and still possessing relatively high engaging power. For example, two messages in the data were sent by Mi Zhou⁸ in approximately ten minutes with exactly the same message content. Taking another example, three messages were from Guangbiao Chen⁹, all presenting his personal IBC participation. These repeating conditions propose that frequency may not concern with authority in the IBC mass dissemination.

Sentiment is another dimension highlighted in the IBC-promotion posts when emotional emphasis emerged to be an important strategy. Some clear emotional elements were assembled, considering to be beneficial for related social engagement (Dobele et al., 2007; Phelps et al., 2004). Joy, sincerity, and sadness were found in a positive connection with IBC-promotion. Nevertheless, proposed key emotion in viral messages, surprise, barely embodief, let alone an emotional combination with surprise and another sentiment (Dobele et al., 2005; Dobele et al., 2007). This condition questions the theoretical emphasis of capturing recipients’ imagination with surprise sentiment in the IBC case (Dobele et al., 2007).

⁸ Chinese singer, member of the male singing group Super Junior-M in South Korea.
⁹ Chinese well-known entrepreneur and philanthropist, Jiangsu Huangpu Recycling Resource CEO.
The last dimension of viral messages, informational relevance, is not prominent in a comparison with authority and sentiment. IBC-promotion theme did not highlight a specific strategy in informational relevance. Varying relevance could be generated by different message recipients based on the information. However, the informational core clearly constituted of a promotional orientation in communication context, with the IBC or the ALS assembled for a positive imaginary association in its dissemination (Dobele et al., 2005; Moore, 2003). It is related to the ELM theory that the message recipients are IBC-engaged in a positive intention of informative consideration via the central route (Petty & Cacioppo, 1986).

Moreover, a further theoretical insight completes an unexpected association with a dimension in the ELM theory – personal involvement. This results from applications of interactive dialogue in IBC-promotion. Personal involvement was suggested to gain a decisive effect in information dealing by message recipients (Petty & Cacioppo, 1986; Petty et al., 1997). It occurred in recipients’ self-perception when interactive dialogue acquired every message recipient with an identification of interactive subject. Thus, personal involvement of recipients gained a possible enhancement intending to IBC-promotion. It is related to the corresponding information dealing process and the persuasion consequence (Petty & Cacioppo, 1986).

Generally speaking, the IBC-promotion posts include three key strategies – celebrity endorsement, emotional emphasis, and interactive dialogue. These three key strategies correspond with dimensions summarized from viral message studies – authority and sentiment, and the ELM theory – personal involvement. As an important dimension of viral messages, informational relevance is replaced by IBC-promotion theme in itself, while strategically standing as a secondary position.

4.1.2. IBC-criticism

IBC-criticism emerged when negation, resistance, or critical thinking to the IBC campaign became the topic of the viral messages. IBC-criticism was beyond the stream of IBC-promotion, specially occurring in a few posts of the sample (i.e. there were only 9 posts). A promotional objectivity for the IBC campaign was not denied in
the IBC-criticism posts. The communication context, however, captured message recipients with negativity to the IBC campaign. Negotiation between water conservation and the ALS charity could lead to a further critical thinking. This theme reflects a tendency that the Chinese civil society prefers philanthropic importance to practical crisis (Schwartz & Shieh, 2010).

**Key Strategies**

IBC-criticism used a significant strategy relating to message information structure and perception – practical argument. This strategy included fact display and logical reasoning criticizing the IBC campaign. Water shortage was always emphasized as the core of argument, resulting in rejection to the water-pouring activity. Philanthropic attention to the ALS was somehow highlighted via appeal for banning the campaign form and taking practical charitable action. A negative image of the IBC campaign was structured and could possibly influence recipients’ perception of the IBC campaign (Dobele et al., 2005). To sum up, this strategy focused on a direct transmission of IBC-criticism with arguments supported by practical common sense. Examples follow in an order of fact display and logical reasoning:

[…]. @Henan Daily reported that people in Lushan County raised empty bucket in front of Spring Temple Buddha to protest the popular BingTongTiaoZhan in China on 22th August. It is reported that people in Pingdingshan area even have trouble to drinking water because of drought these days. […] (People's Daily, No.91)

[…]. But, one person named 3 more, and the 3 named 9 name again. What a math concept it is! I am strongly agree with the viewpoint of Zhiwen Wang, which is why are we wasting the water when we are short of water? Let’s save it first. In addition, there are so many ice that must cost electricity! We must do something practical to care about these rare diseases! (Zuo, No.75)

Except straightforward informational argument, emotional emphasis was used to strengthen the expression of IBC-criticism. This strategy functioned similarly as in
IBC-promotion. Nevertheless, emotion emphasis was closely contextualized with the IBC-criticism argument. In this case, a relatively stronger expressive tone deflects recipients to emotional perception of the message information (Dobele et al., 2007; Petty et al., 1997; Phelps et al., 2004). For example:

[…] Remember why we did a charity buzz? Certainty most of the people here didn't get involved. The fake and the useless are two the most expensive things in the world. The reason I refused to accept BingTongTiaoZhan is that people who suffers from drought are much more that the ALS patients! […] (Ng, No.15)

In addition, celebrity endorsement emerged in IBC-criticism. Generally, celebrity endorsement in IBC-criticism affected via the same approach of social opinion leaders in the IBC-promotion posts. Thus, similar discussion does not repeat here. On the other hand, it was noticed that IBC-criticism only engaged common civilians in very few posts, which somehow made celebrity endorsement less prominent in those posts. Besides, interpersonal transmission via celebrity nomination was non-existent in IBC-criticism. To this condition, IBC-criticism limits the effect of celebrity endorsement on a macro level (Dobele et al., 2005).

**Dimensions**

IBC-criticism highlights informational relevance dimension by the prominent application of practical argument. It generated a relatively negative image relying on the fact of water waste in the campaign (Dobele et al., 2005). In respect to persuasion, argument with truth acquired the IBC-criticism posts a superiority in information quality (Petty & Cacioppo, 1986; Petty et al., 1997). The IBC messages correspondingly possessed informational characteristics of accuracy and understandability. These characteristics highlight the persuasive result of IBC-criticism closely related to an evaluation on the merits and implications of the argument by the message recipients (Petty & Cacioppo, 1986). However, a common feature with IBC-promotion is that IBC-criticism theme was generated from the
contextual informational relevance. This is emphasized for a theoretical and analytical integration of the whole data.

Sentiment is another dimension highlighted due to the emotional emphasis strategy. Sentiment of IBC-criticism, different from IBC-promotion, presented various complicated emotional elements in a combination of seriousness. However, a similarity with IBC-promotion is that surprise still barely occurred. This emphasizes the doubt of the importance of surprise in viral messages (Dobele et al., 2007). On the other hand, a finding of the primary and secondary relationship highlights that sentiment in IBC-criticism posts related to the contextual informational relevance. This is because sentiment in IBC-criticism mainly just strengthened the tone of the message argument. Corresponding social engagement is involved with such an emotional emphasis that possibly influenced perception on the criticism and further behavioral resistance to IBC participation (Petty et al., 1997).

The last dimension of viral messages, authority, stands at a special position. To this dimension, relevant discussion of celebrity endorsement does not repeat. One significance, however, highlights the definition of authority regarding to source credibility and recipients’ corresponding trust (Dobele et al., 2005). A transform of this concept occurs from the visible authority to the general knowledge. This general knowledge of drought and water shortage was sourced for IBC-criticism with absolute public credibility. This condition indicates a special emergence of authority via related argument in the IBC messages. Meanwhile, authority integrates with informational relevance in IBC-criticism meeting the recipients’ evaluation (Petty & Cacioppo, 1986).

To conclude, three key strategies affect in the IBC-criticism posts: practical argument, emotional emphasis, and celebrity endorsement. These strategies are sorted from the most important to the least, corresponding with the theoretical dimensions – informational relevance, sentiment, and authority. Other interesting findings beyond the strategies illustrate an integration of the theoretical dimensions in the communication context.
4.1.3. IBC-unconcern

IBC-unconcern emerged when the topic was not concerned with the IBC campaign. IBC-unconcern was beyond the main stream of the IBC concern, emerging in the least amount of posts from the sample (i.e. only 7 posts). Two main topics achieved IBC-unconcern, referring to commercial advertising and entertaining diversion. Emphasis on the sources unconcerned with the IBC campaign in the context was the significance of this theme. In a full view of the IBC case, IBC-unconcern was the additive theme in the viral dissemination, less important than IBC-promotion and IBC-criticism. However, IBC-unconcern highlighted the Chinese specificity of social media use, such as the entertainment trend on SW reflected by the entertaining diversion, and the intangible commercial flood on social media reflected by the commercial advertising (Chiu et al., 2012; Yu et al., 2013).

Key Strategy

The key strategy in the IBC-unconcern posts regarded to the IBC social influence on SW, summarized as IBC-concept bundling. It referred to taking advantage of the IBC popularity on SW via assembling BingTongTiaoZhan (冰桶挑战) for publishing irrelevant messages. This strategy is highlighted due to particularity rather than importance. Previously, IBC-promotion and IBC-criticism revolved around the campaign, making occurrence of the IBC concept in the messages necessary and logical. However, conditions in IBC-unconcern was on the contrary that the IBC was just a booster for social engagement. Thus, IBC-concept bundling emphasized the relationship with the IBC concept in recipients’ perception. IBC-concept bundling was applicable to both commercial advertising and entertaining diversion. For example:

Relaying #BingTongTiaoZhan#, #Items explosion challenge# Wait for you to play! Join the PK of the online game FengTian to share your prized items during the PK, and @3 friends to take the challenge! Forward the message to win the prize, iPad Mini is waiting for you! (Sina Gaming Activity, No.30)
BingTongTiaoZhan bursts to weakness. After watching "Shit Bucket Challenge" initiated by a Thai man, I feel I'm not myself anymore! We should pay more attention to patients with constipation, and let's do Shit Bucket Challenge! [Bye (emoticon)] (Weibo Funny Chart, No.88)

**Dimensions**

The IBC-unconcern messages highlights informational relevance and authority via IBC-concept bundling. Specifically, informational relevance in IBC-unconcern owns an association with the perception of the IBC image in the message context (Petty & Cacioppo, 1986; Petty et al., 1997). However, diverse informational relevance could distract the message recipients, leaving a doubt on perception of any IBC concern. On the other hand, authority in IBC-unconcern shows a vague characteristic. The IBC campaign accorded with authority as an incentive of perception enhancement with social influence, but complicated arguments on source credibility and authority functioning (Dobele et al., 2005; Phelps et al. 2004). It raises a consideration of if authority dimension embraces the social influence of a popular tendency or phenomenon in a viral marketing case.

Sentiment in IBC-unconcern originated from the corresponding informational relevance that associates with the Chinese local cultural specificity. However, the narration and expression of those messages did not highlights any emotional element.

Above all, IBC-unconcern embraces a key strategy: IBC-concept bundling. This theme differentiates the dimensions from IBC-promotion and IBC-criticism. It highlights informational relevance and authority fastening on source involvement. This somehow blurs the dimensions’ boundary and narrows sentiment down into the contextual association.

**4.1.4. Result Summary**

Previously, a few subsections have highlighted the three themes emerging in the IBC viral messages – IBC-promotion, IBC-criticism, and IBC-unconcern. These
themes reflected different attitudes towards the IBC campaign in social engagement. They were concerned with several points in literature, especially arguments of philanthropy and commercial and entertaining features of social media in China.

Several key strategies for social engagement in each theme were interpreted in the discussion. Those strategies comprise an integrated research result of this content analysis. Via the theoretical return in each subsection, a phenomenal investigation completes a combination of theoretical and practical propositions in a case study (Yin, 2014).

To conclude, a concise strategic interpretation of the IBC viral messages for social engagement is illustrated by Figure 2. Five key strategies were found in the IBC viral messages. First, celebrity endorsement was the most prominent strategy in all, related to authority in viral messages and source credibility in the ELM theory. As an important cue, it could impact via the peripheral route in recipients’ message dealing process (Cheung et al., 2008; Petty & Cacioppo, 1986; Sussman & Siegal, 2003). Second, emotional emphasis was another prominent strategy according with sentiment in both viral messages and the ELM theory. It could impact via both the central/peripheral routes, depending on the specificity of personal-related perception by the recipients (Petty et al., 1997). Third, practical argument was theoretically connected to informational relevance in viral messages and information quality in the ELM. The related message arguments could affect via the central route (Petty & Cacioppo, 1986; Petty et al., 1997; Sussman & Siegal, 2003). Fourth, interactive dialogue was directly related to personal involvement in the ELM theory. It was proposed to strengthen personal-related perception leading to the central route (Petty & Cacioppo, 1986; Petty et al., 1997). At last, IBC-concept bundling had a theoretical concern with informational relevance and authority in viral messages. However, it was not theoretically extended to the ELM theory, because it cannot contribute to any IBC-related attitude and behavioral changes. Highlighting IBC-concept bundling was in respect to specificity of social engagement in research question 1.
Above all, a summary of research findings was provided to answer research question 1: **What were the key strategies applied in the IBC viral messages that SW users generated for social engagement?** Simultaneously, it highlighted an integration of the theory and practice by showing the connections between key strategies and theoretical dimensions. The following section will present a switch to the study on the behavioral and attitude changes due to the IBC engagement on SW via the application of the ELM theory. The findings in this content analysis will inform the next section via a research integration in the interview structure. Again, this integration will benefit the result triangulation, informed by the next section as well.

### 4.2. Analysis of the IBC-related Attitudes and Behaviors

This section presents the result of the analysis of the transcripts of the in-depth interviews of 12 users of SW that were engaged in the IBC campaign. The result consists of IBC-perception on SW, influence on the IBC-related attitudes and influence on the IBC-related behaviors. IBC-perception on SW provides a corroboration but also differences between the key findings of the IBC viral messages on SW and the real perception and impression of the engaged SW users. Specific influence on attitudes and behaviors is separately discussed taking into account
message processing routes and dimensions of the ELM theory. These three perspectives compose the conceptual outline to present the following results.

4.2.1. IBC-perception on SW

The findings of IBC-perception of the engaged SW users revealed four dominant themes: celebrity engagement, philanthropic specificity, emotional experience, and opposite argument. Among these themes, celebrity engagement, emotional experience, and opposite argument connected with the key strategies highlighted in the previous result section (chapter 4.1) – celebrity endorsement, emotional emphasis, and practical argument. Philanthropic specificity was not regarded as a strategy in viral messages, but it was confirmed as an important point of perception by most of the interviewees. These themes constituted of the key aspects of IBC-perception on SW.

First of all, celebrity engagement was again the most common and significant theme. It already emerged in nine interviewees’ answers to the first question of a general description of IBC-perception on SW. This proves celebrity endorsement as a key tag on the IBC campaign in general, and it seems to deeply impress the engaged SW users. As perceived by the interviewees, not only numerous celebrities were very IBC-engaged, but also their interpersonal transmission clearly triggered dissemination of the campaign:

I saw a lot of celebrities mutually @, and let each other accept the challenge. […] (Zhang, J.)

[…] I saw a lot of social figures, including celebrities, some influential entrepreneurs. They were doing this activity, and then it spread from mouth to mouth. […] (Wang, Q.)

[…] Some people including Jun Lei were inexplicably nominated by some foreigners, and then they started forwarding and inviting other people to participate. […] (Li, X.)
Besides being perceived, celebrity engagement was confirmed as the reason why at first most of the interviewees received IBC messages. In this condition, celebrities emerged not only as message senders but also as sources of message content, which is a consistent finding with the results of the analysis on the IBC viral messages. Foreign celebrities were also perceived as source of content for the campaign. By this approach, celebrity engagement successfully helped to deliver the IBC concept to the public audience and raised attention to the campaign on SW. For example:

I saw so many celebrities tweeting (the IBC), and everybody was discussing it. At first I saw the Beckham family whose face score was so high, and later found that so many celebrities participated in the activity. That was how I noticed (the IBC). (Zhang, X.)

Celebrity engagement accords with the source credibility dimension in the ELM theory (Cheung et al., 2008; Petty & Cacioppo, 1986). Emphasis of celebrity engagement in the IBC-perception generates the high possibility of the peripheral route being adopted by the interviewees (Sussman & Siegal, 2003).

Second, philanthropic specificity was another important theme. This theme referred to the messages possess specific and clear philanthropic properties. It not only emerged in the general description, but further was confirmed by the answers to specific questions about the reception of specific philanthropic information on SW. Some interviews clearly addressed both the philanthropic connection of the IBC campaign with the ALS patients and the donation objective. For example:

The information was certainly first you got to know this special disease, and second you could realize we could motivate the public to know about this disease and donate in this way [...]. (Wang, Y.)

However, philanthropic specificity somehow was perceived as a weak factor of engagement because of insufficient philanthropic information made available. For example:

10 Former global famous football player.
I did not feel I received the philanthropic information, because it only said the intention of this activity was like this. But nobody really published the donation account, or it was only done by a very few. […] So I feel philanthropy is relatively less. At least this is what I noticed. (Su, X.)

In another condition, philanthropic specificity was perceived weaker with the engagement expansion in the later stage than in the beginning. This change was emphasized as a turning point. For example:

In the beginning this IBC event seemed to focus more on the donation, but later it turned to much more on entertainment, like what kind of funny IBC, or the IBC happened again. (Yu, H.)

Related to the ELM theory, the weakening perception of philanthropic specificity reflects the drop of information quality in terms of informational relevance, accuracy, and completeness (Cheung et al., 2008; DeLone & McLean, 2003; McKinney et al., 2002). It influences the persuasion result via the central route (Sussman & Siegal, 2003).

Third, emotional experience emerged in the perception of the message content and the communication process. As to this theme, it was interesting to be indicated the importance of surprise as a key IBC emotional perception by the interviewees. An extension of the analysis results in sentiment dimension was generated beyond just looking into the viral messages (chapter 4.1). For example:

[…] Then the third was it could be in such a filming pattern. It was a quite interesting thing. Who could have thought making a bucket of iced water and pouring it into one’s own head? (Wang, Y.)

Besides surprise, joy and sincerity were separately related to the game of challenge and the philanthropic involvement. These two emotions were mostly experienced combined with surprise by the same interviewees. This corroborates the literature highlighting this combination in viral message study (Dobele et al., 2007). Taking the same interviewee as an example:
[...] Then when I saw everyone was willing to do this thing (the IBC), I felt a sincere positive energy in the beginning. [...] (Wang, Y.)

Beyond expectation, disgust was also perceived by some interviews in the later stage of the campaign. This emotional experience emerged with the change of philanthropic intention:

[...] But later, the celebrities who always did publicity stunts also joined this activity, and everyone started playing it (the IBC) as a joke. I felt this was already away from the original intention, and felt a little bored. Everything could be entertained by them. Enough is enough! [...] (Zhang, R.)

Emotional experience is related to sentiment dimension in the ELM theory (Petty et al., 1997). In regard to message dealing, it exerts an effect on both routes while the option of routes is decided by personal-related perception in message processing (Petty et al., 1997). Thus the influence of it needs to be identified in specific situations.

The last theme, opposite argument, had a specificity: even though a mention to it was found, it did not exist in most of the interviewees’ perception. In previous analysis section, practical argument was the key strategy applied in the IBC-criticism messages but inferior in numbers (chapter 4.1). Relevantly, here only one interviewee mentioned this aspect in the general description without probing questions. It reflects the related impression that it was not as strong as the other themes:

[...] Another voice is about saving water. (Wang, Q.)

In another situation, nevertheless, relevant memory of opposite argument was recalled by some interviewees when they were reminded by the probing questions. Thus, to the IBC-perception, opposite argument was still found as a crucial theme. It is related to information quality in respect to informational relevance (Cheung et al., 2008; DeLone & McLean, 2003). Influence of this theme occurs in the central routes, so any related attitude or behavior certainly results from a careful evaluation of the arguments (Petty & Cacioppo, 1986).
Above all, four themes of IBC-perception on SW (celebrity engagement, philanthropic specificity, emotional experience, and opposite argument) have provided the breakthrough points to illustrate the influence of the IBC viral messages on the engaged SW users. In the light of a theoretical connection to the ELM theory, these four themes will embody in the following discussion.

4.2.2. Influence on the IBC-related Attitudes

The findings of the influence of the IBC viral messages on attitudes revealed message processing connected with the four themes in IBC-perception. This condition led to an integration of the central route and the peripheral route when SW users constantly receive the messages. Sentiment, information quality, and source credibility emerged to be effective when related attitudes were generated. However, these three dimensions showed specific characteristics in different stages.

When the users initially received the IBC messages on SW, the message influence showed a bias to the peripheral route. After the engaged users received the conceptual point of philanthropy, sentiment and source credibility dominantly influenced the IBC-related attitudes. Separately, celebrity engagement provided opportunities of greater message reception due to celebrities’ relatively broader social networks (Dobele et al., 2005). And it was the participation of social figures that firstly put the water-pouring game into the spotlight. Personal characteristics of social figures including their social influence and message property triggered relevant concerns by the engaged users:

The main (who I cared) was the celebrities on SW. Their messages had more possibility of philanthropic feature, and they were my first concern. […] (Yu, H.)

Thus, source credibility provided a prerequisite for attitude generation. After the social figures highlighted the challenge, emotional experience of the engaged users directed the intuitive feelings. In the situation of unknowing such an activity form, the water-pouring game easily captured the message recipients’ imagination (Dobele et al., 2005; Dobele et al., 2007). Along with surprise, excitement dominated the sentiment
of message perception. This process helped to lead the IBC-related attitudes in a positive orientation:

In the beginning I thought this activity had quite positive energy. I felt celebrities were quite enthusiastic for this disease, even though the ALS was distant from them. Much less the coldness of being poured with the iced water. And also I felt their reactions after the challenge were very funny. (Zhang, J.)

In the beginning I thought this activity was very interesting and novel, because there was never such a way to do philanthropy. It was indeed a creative philanthropic activity. […] (Tong, J.)

In this condition, the general attitude towards the IBC campaign tended to be favorable acceptance in the beginning. This favorable attitude resulted from the peripheral variables like the participation of social figures and the attractiveness of activity form. The message adoption just stayed at a primary informative connection between the IBC activity and its philanthropic property. The engaged users rarely evaluated the message arguments at this step, which made information quality a relatively ineffective variable (Petty & Cacioppo, 1986; Petty et al., 1997). Thus, the influence of the messages on the IBC-related attitudes was initially exerted in a bias to the peripheral route.

Regarding to this condition, personal involvement played a decisive role (Petty & Cacioppo, 1986). Before being primarily engaged by the IBC messages on SW, most of the interviewees had no clue about the campaign, the activity form, or the ALS disease. The weakness of personal involvement did not trigger conduction of informative consideration (Petty & Cacioppo, 1986). The temporary involvement could not instantly improve the personal-related perception as shown in the excerpt below:

In the beginning, I felt it had no matter with me. […] (Su, X.)

Actually if I was not curious about this activity, it was just parallel with our life. […] (Tong, J.)
This low self-perceived involvement led some engaged users to perceive themselves as spectators all along. And the bias to the peripheral route remained until the final stage. As a result, the primary favorable attitude remained:

Because no friends around me participated in this event, so I did not have a high involvement. […] I did not seem to have any clear attitude. Just a SW message, if I saw it, so be it. I felt this was a good philanthropic activity. But I did not care that much, because I could not feel it (the IBC or the ALS). I just felt the challenge was interesting. […] The other people, I believe, were the same as me, watching it with an entertainment spirit. […] (Wang, Q.)

This case reflects, to a certain extent, the IBC messages failed to lead clear attitudes towards philanthropic concern in some segments of SW users.

In another situation, however, the bias shifted from the peripheral route to the central route in the later stage. This situation emerged when the engaged users received relatively sufficient messages. At this stage, careful considerations were conducted to evaluate the informational content of the messages especially concerned with the IBC campaign and the philanthropic content.

On the other hand, sentiment and source credibility were evaluated in the light information quality (Petty & Cacioppo, 1986; Petty et al., 1997). Specifically, sentiment was not limited to the surprise to the water-pouring form, while source credibility broke through into various sources. In this situation, the final positive IBC attitudes were generated by an integrated approval from these three perspectives:

It was an impressive philanthropic activity to me. I think it was a great success. It not only engaged many social figures and celebrities, but also made more than 90% of the people around me clear about it. But from the perspective of operation and implementation, I think it still had some flaws. Especially lacking control made a lot of people easily ignore the philanthropic aspect in the end. […] Philanthropic communication becomes more and more joyful. Such an influence is relatively
constant. *BingTongTiaoZhan* helped me improve my consciousness of the rare disease, and I did not know about the ALS patients before. (Li, X.)

However, according to some interviewees, the fading of philanthropic specificity triggered some critical attitudes. This, as previously discussed, referred to the drop of information quality (chapter 4.2.1). Meanwhile, celebrity engagement occasioned a credibility fall and emotional experience led to a deviation of disgust and boredom. This highlights the mutual influence between different variables. When the information is not perceived as qualified, message recipients can generate negative attitudes towards the perceived sentiment and source credibility. This point is demonstrated by the following excerpt:

[…] But philanthropic information only appeared in some messages that specifically publish the ALS or from some figures who really donated. Those celebrities who joyfully took the challenge did not donate, but still self-presented so-called love just made people feel they were doing stunts. (Zhang, R.)

In respect to the shift to the central route, personal ability and motivation of message dealing emerged to be in leading (Petty & Cacioppo, 1986). The engaged users with relatively low ability and motivation generated attitudes in a rather simple way, because a personal-related bias pre-limited the range of informative focus. Shallow considerations were conducted without careful analysis of the specific arguments. Influence of the messages on attitudes approached through the mixed route, but the condition was less complicated. For example:

[…] I only paid attention to the funny activity form, the philanthropic intention, and the ALS disease. Except these, I did not consider other points. […] I think whatever the form of philanthropic activities, being so well known like *BingTongTiaoZhan* is already unprecedented. Besides, who knows *BingTongTiaoZhan* basically knows the ALS. Such an effect of knowledge popularization and the related attention to this disease from the society are worth approving. (Yu, H.)
In a comparison, the engaged users with high ability and motivation chose a specific opening to the IBC phenomenon. Elaborative considerations were based on the relatively more extensive knowledge background. This further reduced the influence of the peripheral variables of the IBC messages. Meanwhile, a personal-related bias occurred, triggering specific judgments on the communication background. For example:

SW as a platform needs topics to attract users to post online. It originally needs such topics and public welfare sounds good. So it did that (the IBC). But it is influenced by SW users’ favors. And SW has almost become a composition of celebrities as the lead and their fans as the rest. So doing such a thing (the IBC) on SW looks entertaining but not serious. […] Another motive is my bachelor study was advertising. So I would forwardly collect, search, and evaluate the information. I would pay attention to if anyone did advertising in it (the IBC). […] (Zhang, R.)

In short words, relatively high personal ability and motivation contribute to a rather comprehensive evaluation of all the external variables.

Additionally, an interesting case indicated the IBC critical attitudes were related to the practical argument of water shortage. This emerged on only one interviewee via the mixed route. Following the primary influence of the peripheral variables, the message was carefully treated by an elaborative consideration of the argument. Simultaneously, personal ability and motivation turned to be effective. Such a case was not representative in quantity. However, it demonstrated the opposite voice on SW gained possibility of triggering negative opinions on the IBC campaign:

My attitude changed because of a message on SW. A NBA player of Dallas Mavericks, who comes from Africa, put two pictures together. One was an African child taking a cup of water to drink. The other showed some NBA players doing a collective challenge. […] He seemed to say a word […] I suddenly felt indeed (sad). […] This activity from there is somehow moral kidnapping. If you are nominated but do not participate, then you do not have refinement, emotion
quotient, or kindness. The funny point is this activity may fit in the U. S. thanks to sufficient water resources there, but it does not mean it fits all around the world. […] This should not be like the American hegemony in the past when all the world needs to imitate the U. S. […] (Tong, J.)

To conclude, the integration of the central route and the peripheral route showed a specific tendency in the IBC message processing. Such a tendency demonstrated the influence of external variables including sentiment, information quality, and source credibility in different stages. In the early stage, a bias emerged to the peripheral route overall. The low personal involvement meant that sentiment and source credibility dominantly triggered the primary favorable attitude towards the IBC. Partially engaged users kept this attitude, what finally led to a failure of the IBC philanthropic appeal. In another situation, a bias shifted to the central route to some engaged users at the later stage. Information quality emerged to be the key influential variable, affecting attitudes towards perceived sentiment and source credibility. As a result, the IBC-related attitudes finally kept in a positive orientation, or merged to a critical direction from diverse perspectives. Personal ability and motivation influenced the specific evaluations on the IBC campaign.

Above all, these research results confirm the ELM theory in terms of attitude generation (Petty & Cacioppo, 1986). Meanwhile, it broadens the discussion from the perspective of time change and highlights the mutual influence between the external variables. It offers implications for the following discussion of the influence on the IBC-related behaviors.

4.2.3. Influence on the IBC-related Behaviors

The findings of the influence of the IBC viral messages on behaviors revealed internal connections with IBC-related attitudes and personal significance of the interviewees. Based on the selective sampling strategy (chapter 3.2.1), 12 interviewees all had behaviors of forwarding the IBC messages on SW. Moreover, five of the interviewees had behaviors of searching the IBC or the ALS. Three of the interviewees
had behaviors of the challenge-taking. None of the interviewees indeed donated to the campaign. These conditions have clarifies behavioral consequences for the following discussion. Under these circumstances, the peripheral route dominantly emerged, with sentiment and source credibility being the effective external variables to the online behaviors. The central route occurred in only a few cases. However, to the challenge-taking behavior, the messages’ influence displayed an integration of both the route.

Regarding to the IBC-related online behaviors, the bias to the peripheral route was decided by the general low personal involvement in the early stage of message reception (Petty & Cacioppo, 1986). This was confirmed by the finding that only two interviewees knew the IBC and the ALS before receiving the IBC messages on SW. Thus, the message sources and the activity form first attracted the recipients’ attention. This resulted in celebrity engagement and surprised emotional connection and triggered the primary searching behaviors:

[…] But this form (the IBC) was quite novel. So I was curious about what the creative point was and what the disease was. I wanted to know why to disseminate it in this way. […] So by that time I went to searching what the ALS is, and then got to know about the thing (the IBC). […] (Wang, Y.)

In the beginning I saw it (the IBC) in hot topics but I did not have any special feeling the first time. But then when I saw celebrities were doing it, I became curious about it and searched it. (Zhang, H.)

The behavioral influence of celebrity engagement and emotional experience remained for a period of time, after the engaged users completed a basic perception on the campaign content and its philanthropic specificity. At this point, message recipients stepped out of the surprise sentiment and had it merged to joy and entertainment. In substance, however, the peripheral route did not change. Some interviewees confirmed the persistence of their searching behaviors at this stage, which was continuously influenced by variables of sentiment and source credibility:
After I got to know about this activity and I felt it playful, some well-known celebrities participated in it. When some of them posted on SW saying they took the challenge but did not attach the video, I would search it by myself. (Wang, Y.)

There were celebrities nominated the next. I would care if the celebrities I liked were nominated or participated the challenge. So I also tried to search it. (Tong, J.)

Simultaneously, most of the IBC-related forwarding behaviors were triggered via the same periphery approach:

[…] I have shared the video of the Beckham family. […] I watched it and found it quite fun. […] (Zhang, J.)

[…] When I saw Weiting Chen\textsuperscript{11} was poured by water with real ice dregs and he was frozen without any celebrity dignity, I felt he was quite cute. And it was entertainment, thus I shared it. (Zhang, R.)

However, the influence through the peripheral route was temporary. The high frequency of IBC emergence damaged the source credibility of celebrities (Phelps et al., 2004). Simultaneously, the drop of information quality was perceived, recalling attention to the philanthropic concern. Influence on attitudes indicated a shift to the central route and the consequent critical attitudes gradually triggered antipathy and boredom to the IBC messages (chapter 4.2.2). Thus, the IBC-related online behaviors that included searching the IBC and forwarding the related messages dribbled away.

Besides celebrity engagement in general, source credibility could extend into interpersonal relationship in the peripheral route. The interpersonal IBC dissemination between celebrities was discussed (chapter 4.1.1). Moreover, the interviewees confirmed the emergence of interpersonal relationship among the civilians and its influence on the related behaviors. This finding reminds of the importance of authority through micro interpersonal approaches (Phelps, et al., 2004). As the excerpt shows:

\textsuperscript{11} Chinese singer, actor.
I saw so many things (the IBC) and I thought all of them were just stunts. So I never forwarded those post. The reason why I forwarded that one was because that was my friend’s challenge. I knew about him and his personal behaviors, thus I felt forwarding it was relatively meaningful. (Wang, Z.)

Moreover, it is notable that in a few specific cases the influence of the IBC messages on the online behaviors was approached by the central route. Information quality played an important role in the perception on the message value. The related behavior finally completed after the information was qualified. For example:

The most impressive to me was the one I really forwarded in the end. It was made with quite educational significance. It was not simply pouring water or a celebrity’s water-pouring. It told you what the ALS is indeed, and what final result it can trigger. […] (Wang, Y.)

In such cases, high personal involvement contributed to behavioral decision making, when perception of the message value tallied with personal-related attitudes and opinions (Petty & Cacioppo, 1986). Attention thus moved to that message pass-on, which included the intentional besides the explicit incentive of disseminating actions (De Bruyn & Lilien, 2008). And these intentional behaviors emerged when the merits and implications of the message could benefit personal value expression. Taking the same interviewee as an example:

If I forward a message, this proves that it is what I want to show my audience and the message value represents my personal values. (Wang, Y.)

Regarding to the IBC challenging behaviors, the IBC messages influenced three interviewees via approaches that theoretically constituted of an integration of the central route and the peripheral route. However, the integrating extent changed in the specific situations. In fact, two of the participants were directly nominated on SW. Participations after being nominated highlighted, firstly, the influence of source credibility by the peripheral route. The corresponding influence separately benefited from the social power of celebrities and interpersonal relationship in these two cases.
However, the common feature is that related behaviors were adapted to social engagement from personal-perceived authority (Porges, 2003). Evaluations were instantly conducted on the possible social risks of ignoring the influence of message sources (Porges, 2003). These conditions were confirmed:

Right at being nominated by a friend in an IT company in Shanghai […] He is a quite close friend, and he also did the challenge. I would feel sorry if I refused him (Chen, C.).

I was one in the Jay Zhou\textsuperscript{12}’s fan group organization. When the activity engaged us, we were @ by him. So I joined it. […] If I had not been one of the fans in the group, I might not have done it (the IBC). […] Because I had that identity, I represented our organization […] (Zhang, H.).

Secondly, sentiment exerted its influence step by step. Before the specific nominations were received, the excitement and entertainment concerned with the activity form had set a positive emotional premise. Subsequently, the temporary emotional responses rapidly emerged after nominations. These emotional responses were oriented by the favorable attitudes, while the positive emotional establishment was further enhanced. Under these circumstances, the influence by the peripheral route gained further strength (Petty et al., 1997). For example:

At first, the BingTongTiaoZhan of Jay Zhou was filmed in a very funny way. […] It made me want to have a try. […] (Were you excited when you received the nomination?) Yes, I was so excited at the moment, because I never thought I would be nominated. (Zhang, H.)

Thirdly, elaborative considerations were conducted by the nominated participants after they gradually departed from the influence of the peripheral variables. However, this was not related to information quality of the nomination messages. It benefited from the enhancement of personal involvement as a result of being objectively involved. Such an objective personal involvement guided the nominees to consider

\textsuperscript{12} Famous Chinese singer and film director.
the merits if taking the challenge in their flesh (Petty & Cacioppo, 1986; Petty et al., 1997). Thus, the influence showed a shift to the central route that triggered the personal evaluation on the behavioral value. This is another interesting finding highlighting the influence of the internal variable, personal involvement, on the IBC-related behaviors (Petty & Cacioppo, 1986; Petty et al., 1997). For example:

[…] Without being nominated, perhaps I would not have done the challenge. […] You cannot feel the other diseases in your flesh. You cannot experience the life of children with autism or forgetting the way home like patients of the Alzheimer’s disease. The merit of this form (the IBC) is that you can have a temporary experience of being an ALS patient. (Chen, C.)

Integrating these findings, a common approach where the nominating messages triggered the IBC participation indicated the key influence of two external variables (source credibility and sentiment) and an internal variable (personal involvement). Besides, an interesting case was noted: An interviewee took the challenge without being nominated. In this case, curiosity as the only variable triggered the challenge-taking behavior. It just highlighted the influence of sentiment via the peripheral route. The other theoretical variables were ineffective because the behavior was not specifically connected to any of IBC messages. This might be special, but it corroborated the mind state of some spectators in social phenomenon:

Because I had no chance to be poured with a bucket of iced water, such a rare experience should be cool and novel. That was my attitude. […] Nobody nominated me, and I did not nominate anyone. I just wanted to feel it when the iced water was poured on me. […] (So it was not related to your philanthropic concern or support?) No. […] (Tong, J.)

To conclude, the influence of the IBC messages on the related behaviors indicated differences related to the specific conditions. Similar to the IBC-related attitudes, the influence of source credibility and sentiment was regarded as the dominant triggers of IBC online behaviors by the peripheral route. In very few online-behavioral cases,
the central route was identified with a combined influence of information quality and personal involvement. On the other hand, the influence on the challenge-taking behaviors approached by an integration of the peripheral route and the central route when clear nominations are received. Interesting findings highlighted the order from the peripheral route to the central route due to the enhancement of personal involvement. Simultaneously, a special case put an emphasis on the emotional influence on the spontaneous participation by the peripheral route when no nomination emerged.

4.2.4. Result Summary

To sum up, previously a few paragraphs highlighted the IBC case from the perspective of the engaged users by focusing on the messages’ influence on the IBC-related attitudes and behaviors. The basic principles of the ELM theory were confirmed. By the integration of the findings, the influence of the IBC viral messages commonly showed a bias to the peripheral route because of low personal involvement in the early stage (Petty & Cacioppo, 1986). Source credibility and sentiment emerged as the leading variables (Cheung et al., 2008; Petty & Cacioppo, 1986). However, the influence by peripheral route showed a fading inclination mainly because the trustworthiness of sources fell (Cheung et al., 2008). A bias gradually shifted to the central route with several factors because of sufficient message receptions. These factors included the deviation of informational tendency, the awakening of personal message dealing ability and motivation, and the enhancement of personal involvement.

At this point, a sequence between attitudes and behaviors emerged – the IBC-related behaviors were influenced by personal attitudes (Petty & Cacioppo, 1986). Simultaneously, information quality became influential. It especially triggered the IBC critical attitudes and ended the related behaviors. Further, the influence on the IBC participation via nomination highlighted the specificity of personal involvement, while the spontaneous challenging behavior was only related to sentiment. These
conditions raised further attention to the ELM theory in a case of continuous message dissemination and interpersonal activity invitations.

Above all, a summary of research findings was provided to answer research question 2: **How did the IBC viral messages on SW trigger the IBC-related attitudes and behaviors of the engaged Chinese users based on the ELM theory?**

After giving concise answers to two research questions, the next section connects the two answers and completes the triangulation of the research result.

### 4.3. Social Engagement vs. Response Triggering in the IBC Case

Via two methodically studies, a triangulation is conducted in this section. This triangulation is based on a gap between the social engagement and the responses of the engaged users in the IBC case on SW.

First, the key strategies of the IBC viral messages on SW included celebrity endorsement, emotional emphasis, practical argument, interactive dialogue, and IBC-concept bundling. These five strategies contributed to the wild social engagement in the case. However, according to the engaged users, the interactive dialogue and the IBC-concept bundling had little relationship with the specific attitudes and behaviors. These two strategies always emerged with intangible effect. The other three key strategies, celebrity endorsement, emotional emphasis, and practical argument, link up the theory of viral messages to the ELM theory.

Unexpectedly, one of the findings showed that the practical argument of water conservation was weakly influential. Although it was concerned by part of the interviewees, in this case, only one changed his attitude towards the campaign about critically evaluating the situation. Though it did not prevent the spontaneous IBC attempt of this interviewee. In terms of response triggering, the importance of practical argument was thus reduced.

Moreover, emotional emphasis was an important strategy for the IBC viral messages, of which the core was emotional expression. In essence, the emotional emphasis was embraced as a part of the emotional experience by the interviewees. However, the features of emotions perceived by the interviewees were somehow
different from what were detected in the message content. The majority of the emotional experience preferentially located at the water-pouring challenge, rather than the specific message content.

Thus, it is notable that the engaged users’ emotions were dominantly influenced, to a large extent, by the activity form. Surprise has been proven to be the key sentiment to the viral dissemination (Dobele et al., 2005; Dobele et al., 2007). As an emotional cue, it triggered the favorable attitudes and the searching and forwarding behaviors in the IBC case (Petty et al., 1997). Nevertheless, surprise gradually turned to excessive entertainment, causing disgust and boredom to partially engaged users who were supposed to regard such a philanthropic event seriously. Under this circumstance, the consequent attitude and behavioral changes, to some extent, weakened the practical philanthropic effect in the final stage.

The last key strategy, celebrity endorsement, was highlighted to be the most important factor of the IBC social engagement. According to the interviewees, it clearly influenced the IBC-related attitudes and behavior. Authorized by the online segments, source credibility of the celebrities freely impacted in the early stage. During this period, the public still had little knowledge and insights of the IBC. The trustworthiness of the celebrities were therefore strong (Petty & Cacioppo, 1986). Meanwhile, the number of engaged people was slowly increasing. The celebrities also owned high competency of discourse power thanks to their credibility (Cheung et al., 2008). At this moment, positive social effect of the celebrities kept catching the public attention and further triggered corresponding positive attitudes and behaviors towards the IBC.

However, such credibility gradually decreased in the later stage. At this point, the civil world was more informed about the IBC content and the attention shifted to the philanthropic effect. Simultaneously, the amount of participants passed the period of a rapid expansion. In this situation, the celebrities’ credibility was challenged because of the falling competency and the trustworthiness was doubted (Cheung et al., 2008; Petty & Cacioppo, 1986). As a result, negative influence of the celebrity endorsement was gradually manifested into a vicious circle.
Based on the discussion, emotional experience and celebrity engagement certainly contributed to the IBC social engagement over the viral dissemination, but the extent to which they influenced the IBC-related attitudes and behaviors should be regarded distinctively. This condition highlighted the importance of philanthropic specificity in the later communication period. However, actually the philanthropic specificity became increasingly difficult to be caught in the last IBC messages on SW. In this situation, the engaged users gradually lost the attention to the philanthropic intention and donative objective. Over time, the IBC campaign evolved into an entertainment stunt on SW. Thus, a theoretical emphasis is placed on improving the influence of information quality by the central route to constantly stimulate attitudes and behaviors. However, the challenge of continuous content generation and noise reducing on social media should be taken into careful consideration (Mangold & Faulds, 2009).

Furthermore, some interesting findings of the Chinese specificity are beyond analytical framework of the viral marketing theory and the ELM theory. Somehow, these findings were related to the differentiation between social engagement and attitude and behavioral responses. First, an intention of using SW remained clearly as a leisure and entertaining tool (Yu et al., 2013). This was generated from not only the attitudes and behaviors of the interviewees, but also their perception on the IBC case on SW. It may explain the deviation at the later stage of the IBC dissemination.

Secondly, the trend of forwarding images and videos by SW users benefited the reception of the IBC value (Yu et al., 2011). This was shown by the rising awareness of the rare disease among those who had no prior knowledge of the ALS. Thirdly, the traditional culturalism in philanthropy emerged when philanthropic messages were received (Peterson, 2005). This was reflected by the general positive attitudes towards the philanthropic intention of the IBC campaign.

Lastly, the stereotype of the Chinese public regarding philanthropic events or charitable organizations generated distrusts and suspicions (Schwartz & Shieh, 2010). More than half of the interviewees expressed suspicious attitudes towards the beneficiary of donations or the credibility and transparency of the Chinese local charities such as the China-Dolls. Some of the interviewees expressed the wish to
know the breakdown of the sum of donation and the amount individually donated by celebrities in the IBC campaign in China. Three interviewees considered actively donating but gave up concerning credibility of the local charities. In this context, the IBC campaign failed to collect extensive donations from the Chinese civil society.

To conclude, social engagement of the IBC campaign on SW can be considered a great success due to the acquired high celebrity engagement and the emotional connections of surprise and entertainment. However, taken various elements into consideration, it is not sufficient to conclude that equal success of the philanthropic responses of attitudes and behaviors among the civil SW users has been reached. For example, the communication process on SW and the Chinese local significance imposed an influence. These findings are finally concluded in the next chapter.
5. Conclusion and Discussion

This research explored the IBC case on SW in the light of the general success of the IBC campaign in both China and the global scope. This research was separated into two strands. The first part aimed to identify the social strategies behind the IBC case on SW by the analysis campaign’s viral messages. The second was intended to clarify the influential approaches of the IBC on SW through the related attitudes and behaviors of the engaged SW users. In this chapter, I will conclude the both parts before presenting the debate on the use of social media in the IBC campaign in China. Moreover, I will move on to evaluate the academic relevance concerning the research. Eventually, I will conclude the limitations on the research and suggest on further studies.

Conclusion

The first research section provided a content analysis on the top 100 engaging IBC posts on SW in order to approach research question 1: **What were the key strategies applied in the IBC viral messages that SW users generated for social engagement?** Findings in this section generated five key strategies in three topics of the posts, including the IBC-promotion, the IBC-criticism, and the IBC-unconcern. Celebrity endorsement, emotional emphasis, and practical argument were the three key strategies theoretically corresponding to the three dimensions of viral messages – authority, sentiment, and informational relevance.

Drawing to a further theoretical step, these three strategies were considered of persuasive influence by the three external dimensions of the ELM theory – source credibility, sentiment, and information quality. The dominant IBC-promotion strategies constituted of celebrity endorsement and emotional emphasis. Thus, the messages triggered positive IBC-related attitudes and behaviors mainly by the peripheral route. On the other hand, IBC-criticism embraced an extra strategy practical argument. When mixed together to celebrity endorsement and emotional emphasis, it enlarged the possibility of a mixed route to critical IBC-related attitudes and behaviors. Moreover,
the two other strategies, interactive dialogue and IBC-concept bundling were relatively of less importance. The interactive dialogue theoretically connected to personal involvement based on the ELM theory, though it was just a narrative method. On the other hand, no further theoretical extension to the IBC-concept bundling was found, but this strategy summarized the approaches of social engagement by the IBC-unconcern posts.

The second research part referred to in-depth interviews with 12 IBC-engaged users and was developed to address research question 2: **How did the IBC viral messages on SW trigger the IBC-related attitudes and behaviors of the engaged Chinese users based on the ELM theory?** Findings of this section first highlighted the IBC-perception on SW with celebrity engagement, emotional experience, philanthropic specificity, and practical argument. Based on these four elements, the IBC messages influenced the related attitudes and behaviors via a combined effect of the peripheral and the central routes.

In the early stage, source credibility and sentiment triggered the primary favorable attitude, indicating an inclination to the peripheral route. With the growing amount of the IBC messages, partially SW users gradually perceived more personal involvement. With regard to these users, an influential bias gradually transferred from the peripheral route to the central one. This finding differentiated the effectiveness of the external variables – source credibility, sentiment, and information quality in different stages of message perception. Meanwhile, it strengthened the influence of information quality that dominated the personal reaction to source credibility and sentiment in the later stage. Besides, a special finding denied the influence of practical argument on the IBC-related behaviors. The other findings highlighted the significance of personal involvement in the nominated IBC participation, and the dominance of sentiment in the spontaneous challenge taking.

Drawing a conclusion, a practical gap existed between the IBC engaging strategies and the variables influencing the attitude and behavioral responses on SW. Nevertheless, the similarity called attention to the influential power of celebrities and the emotional connection. This similarity highlighted a common social media approach.
by social engagement creation and influence release on attitudes and behaviors in a philanthropic campaign. This common approach showed a deviation to the peripheral route and was limited in the early stage of message reception. As time went by, however, the transfer of response triggering from the peripheral route to the central route distinguished the influence by the social engagement. Simultaneously, the information quality of philanthropic specificity tended to drop, negatively influencing the message perception and triggering negative attitudes and behaviors.

When the IBC social engagement reached a peak online, the influence on the related philanthropic responses showed a decrease. Furthermore, the philanthropic responses were negatively impacted by other Chinese local factors such as the entertainment use of SW and the distrust and suspicion to philanthropy. These overall perspectives enabled the IBC campaign to successfully raise public awareness to the ALS in China, but collaborated to a failure in gathering a proportional amount of donations from the Chinese civil society.

**Evaluation**

This research contributes to the academic study of viral campaigns on social media in two perspectives. On the one hand, it utilizes an integrated theoretical framework benefiting from the viral marketing theory and the ELM theory. The theoretical framework highlights the theoretical commonality of the viral marketing theory and the ELM theory on an academic level. Simultaneously, the sequential qualitative mixed method in this study highlights the applicability of approaching two separated research sections based on two distinct theoretical tracks via a case study. The findings put forward an argument about the changing effect of theoretical variables based on the ELM studies on message recipients in the complete communication period.

On the other hand, the contextual feature contributes to an understanding of a popular social phenomena in a specific cultural background. The research findings indicate the merits and demerits of a well-known philanthropic campaign on a
representative social media platform. Those findings are applicable in a similar case study under different cultural and social backgrounds.

**Limitations and Suggestions**

This research has two considerable limitations. First, the interviews had to be conducted by electronica means due to the long distance between the researcher and the chosen social reality chosen. This somehow weakened the control on some specific details of the interviews. Some of the interviewees could not further fulfill the answers specifically to a further step. Sometimes the interviewees chose to answer the questions in a very flexible and indigenous way. I could not keep on interrupting or asking them to choose another narrative because that could have interrupted the continuation of the interview. This situation also obstructed in the coding phase of the analysis because there were difficulties in translating some Chinese expressions into English. As a result, the research process was delayed. Face to face interviews can be more effective and save efforts in transcription.

Another limitation is that there was not any real donator to the campaign among all 12 interviewees. To my surprise, although I dedicated a hard efforts in searching, IBC participants were not as many as expected. If any donator could be involved, the research results may vary and demonstrate diversification.

The further research of the same theoretical framework and design may conduct a comparison between the same amounts of the IBC challenge takers and the real donators, for example. With a different objective, on the other hand, it would also be interesting to set the research scope in another specific regional cultural context. Some specific cultural significance could show a distinctive situation from the IBC case in China. Moreover, any future successful philanthropic campaign involving social media can be compared with the IBC campaign. Related arguments can be generated on the philanthropic industry and the use of social media in a further step.
References


Appendix A. Interview Guide and Translation

对冰桶挑战微博的认知
Perception of the IBC Campaign on SW

Could you please describe what you have seen on SW about the IBC?

- Probing questions

(Informational relevance dimension)

Did you get clear philanthropic information in the IBC messages on SW?

Did you ever notice the practical arguments against the IBC campaign because of wasting water?

(Sentiment dimension)

Did you ever feel any emotion was extremely strong or clear?

大约什么时候你开始在新浪微博上注意到冰桶挑战？
Since when (approximately) did you start noticing the IBC on SW?

- 你是怎么注意到的？
How did you notice the IBC on SW?

- Probing questions

(Authority dimension)

Was that because of messages sent by celebrities?

如果有的话，你在新浪微博上对冰桶挑战的关注持续了多久？
If you do, how long have you been paying attention to the IBC on SW?

- 冰桶挑战在新浪微博上在这一时期是否有内容和形式的变化？
Was there any content and form change of the IBC on SW within your attention?

- Probing questions

(Informational relevance dimension)

Did any change happen to the philanthropic perspective?

Did any change happen to the arguments supporting or against the IBC?
campaign?

(Sentiment dimension)
Did any change happen to the emotional perspective?

(Authority dimension)
Did any change happen to the message senders or communicators?

关于冰桶挑战在新浪微博上，最让你印象深刻的是什么？
What was the most impressive thing you remember about the IBC case on SW?

- Probing questions

(Informational relevance dimension)
Was that philanthropic information?
Was that practical arguments against the IBC campaign?

(Sentiment dimension)
Was that emotional emphasis?

(Authority dimension)
Was that the participation of numerous celebrities?

冰桶挑战相关行为的基本描述与解释
General Description and Explanation of the IBC-related Attitudes and Behaviors

请你描述一下接触冰桶挑战微博时，你的反应。
Could you please describe how did you react to the IBC engagement on SW?

- 你最初的态度是怎样的？
  What was your original attitude towards the IBC?

- 你最初有什么相关行为，比如转发或者参与挑战？
  What was your original related behavior, for instance, forwarding the messages or participating the challenge?

- 你会有这样态度和行为的原因分别是什么？
  What were the reasons for your original attitude and behavior?

- Probing questions

(Informational relevance dimension)
是因为慈善信息吗？
Was that because of the philanthropic information?

是因为支持或反对冰桶挑战的声音吗？
Was that because of the arguments supporting or against the IBC campaign?

(Sentiment dimension)
是因为情感的共鸣吗？
Was that because of the emotional connection?

(Authority dimension)
是因为其他信息发布者和活动参与者吗？
Was that because of other message senders or IBC participators?

- 你的态度和行为后来有变化吗？为什么？
Did any change happen to your attitude and behavior later? Why?

- Probing questions

(Informational relevance dimension)
是因为慈善信息吗？
Was that because of the philanthropic information?

是因为支持或反对冰桶挑战的声音吗？
Was that because of the arguments supporting or against the IBC campaign?

(Sentiment dimension)
是因为情感的共鸣吗？
Was that because of the emotional connection?

(Authority dimension)
是因为其他信息发布者和活动参与者吗？
Was that because of other message senders or IBC participators?

个人因素对处理冰桶挑战信息的影响
Influence of Personal Variables on the IBC Message Dealing

(Individual ability dimension)
你觉得你考虑消息的能力如何影响你处理冰桶挑战微博？
How did your message-dealing ability exert influence when you deal with the IBC messages?

- Probing questions

关于冰桶挑战微博你有没有理解困难或者困惑？为什么？
Did you have any difficulty or confusion when facing the IBC messages? Why?

(Individual motivation dimension)
你觉得你考虑消息的动机如何影响你处理冰桶挑战微博？
How did your message-dealing motivation exert influence when you deal with the IBC messages?

- **Probing questions**

  你有没有动力仔细考虑冰桶挑战微博的内容？为什么？
  Did you have motivation to carefully consider the IBC messages? Why?

(Proprietary involvement dimension)
你觉得你与冰桶挑战或者渐冻症的关联如何影响你处理冰桶挑战微博？
How did your personal involvement with the IBC or the ALS exert influence when you deal with the IBC messages?

- **Probing questions**

  你觉得那种对话互动性的微博比起别人的自我表现会让你觉得与冰桶挑战的关联更强吗？为什么？
  Do you think the direct interactive dialogue in some messages involved you with the IBC more than the pure self-presentation of some people did? Why?

附加问题
**Additional Question**

还有没有关于冰桶挑战微博以及你个人有关冰桶挑战行为的补充？
Is there anything you think valuable to talk about the IBC on SW or your behavior that you did not mention before? If so, could you please share it with me?
### Appendix B. Interview Participators Overview

<table>
<thead>
<tr>
<th>Name</th>
<th>Gender</th>
<th>Age</th>
<th>Place of Residence</th>
<th>Occupation</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zhang, Jiaxin</td>
<td>Female</td>
<td>22</td>
<td>Lanzhou</td>
<td>Student, Graduate</td>
<td>BA - Arts</td>
</tr>
<tr>
<td>Yu, Huaxiang</td>
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<td>30</td>
<td>Bengbu</td>
<td>Bank Clerk</td>
<td>BA - Accounting</td>
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<td>Wang, Qing</td>
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<td>24</td>
<td>Hefei</td>
<td>Financial Administrator</td>
<td>BA - Finance</td>
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