Link the Fans: Sports Event Effect on the Design of Social Television Systems

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Abstract: The social characteristic of sports event has long been recognized. As the emerging concept of social iTV provides a great opportunity to enhance the social value of sports event, this paper explores specifically how sport might influence people's social experience of watching TV. Through conducting complementary methods of interviews and probe diaries, we investigate how peoples' social behaviors around television are influenced by sports event both during and after the game. According to the results, we found several key characters of sports event bring unique impacts to peoples' social experience of TV viewing, which differentiates it from other television genres. Physical contact and the interaction among strangers have been recognized to have positive social value to sport viewing. Cultural differences on public sport viewing were also being discussed here. Finally, we consider how the findings might impact the design and evaluation of social iTV systems.

Key words: Social TV, Television genre, Sports event, Entertainment

1. Introduction

This paper presents a study of how genre experience of sports event can influence TV viewers' social uses of television contents. Today, television has been an essential household appliance in the modern house and for many people stills the most popular entertainment resource. Though majorities of TV viewers recognize television viewing as a solitary activity, the consumption contents can actually foster multiple forms of sociability in our daily life [10, 11].

Among the miscellaneous television contents, sport is one of the most sociable television genre.[7] It is so obvious that the social activities around sports event are never scarce to see. Whenever mega sports event begin, such as Olympic Games or world cup, millions of fans gathering in front of television in their house, bars and squares, talking and cheering enthusiastically with their friends and family or even strangers. [3, 9, 11]. There are many research had been addressed on social impact and value of sports event. Sport can bring a feeling of overtly sacred in a secular context that provide a safe place and time to allow peoples' openly emotional behaviors despite social norms [3, 9]. This effect can further create a sense of community that gives people freedom to negotiate a relationship to other fans or even strangers [3]. The networks of the community could extend beyond the participants themselves, building shared identities, creating a bond between different groups of people together as supporters of a local, regional or national team. This effects can sometime even beyond gender, education, income, age and ethnicity, and further foster social capital which actually generates many social benefits to the society [5].

Recently, the emerging idea of connecting non-collocated TV viewers via telecommunication technologies has received considerable attention, mainly known as social TV [4, 7, 12]. Basically, these systems enable viewers to share information about TV contents via the television set, smartphones, tablets or the PC. Features include remote chatting while watching television, commenting and rating television content, sharing and recommending video clips, and content-aware buddy lists to show the presence of viewers [2]. With the ubiquity of mobile devices, the enhanced wireless connectivity and telecommunication capability, connecting sports fans is technically easy to accomplish. Meanwhile, participants in disparate field studies also indicate that sport as one of the program genres that are very well suited for stimulating social interactions [7, 12]. Social TV is now believed having great potential to satisfy sport fans' huge social needs.

However, many results shown in different researches also shared facts that television genres play a significant role on peoples' uses of television contents, as different genres result in a different social experience [6, 7, 8, 12]. Hawkins, Pingree [8] found that, contrary to what they expected, attention styles in the viewing experience were not a steady characteristic of an individual, but differed according to genre. Oehlberg, Ducheneaut [12] probed their participants what kinds of television programs they like to watched in group. Genres with bursty rhythms, redundant content or figure-centered were considered as the most sociable. Geerts, Cesar [6] applied an analysis of how different genres influence TV viewers' communication patterns. They had identified the effects of plot-structure on social interaction. Genres with plot-structure call for viewers' full attention, so people do not talk much while watching. Still, studies on how a particular genre impacts peoples' social behaviors of television remains scarce.

There is no denying that the social demands of sports event are huge, and how to support sport fans' social interaction, creating a better social experience of sports event seems an urgent topic to be explored. To our knowledge, there is little user studies specifically addressed on the sport genre effect on social TV system. Weldon [14] creating an audio tool designed for talking and shouting during sport match, arguing that the voice chat should be tailored to facilitate fans' communication while watching sports event. Sahami Shirazi, Rohs [13] designed a mobile application which allow user to share several nonverbal icons to other viewers in real time when sports viewing. By monitoring the channel in real-time, collected data exemplify that the aggregated sentiments correspond to some important moments. People also presented an "aha" reaction and promoted the conscious experience of connectedness between other viewers when majority of fans had pressed the same noisy button at same time.

Yet, above researches were mainly done through prototype evaluating, understanding for why and how sport genres have such impact on peoples' uses of the social TV systems are need to be addressed. Therefore, the main purpose of this research is to bridge the gap by specifically investigating how sport genre might influence peoples' social experience of television viewing. Sports event in this paper were widely defined as all kinds of sport broadcasting, such as would cup, Olympics, and various professional sports which provided and produced by the television producers. Moreover, except from social behaviors during sports viewing which have studied by many researches, social activities related to sports event in daily life were also being investigated in this paper.

2. Method

Participants in this research were targeted on avid sport fans that have rich viewing experience of sports event.

As these people immerse in sports event to certain level, they might provide ample and variety information for us to draw out comprehensively of the sport fans' life. Due to privacy difficulties, interview and probe diaries were used as the alternative method to probe sport fans' behaviors, opinions and expectations around sports event.

Participants

In order to find out avid fans, a screener was designed as a filter which contains several questions to evaluate the person's sport viewing state and social tendency. Through the screening process, we try to find out participants who have rich sport viewing experience, high sport viewing frequencies, high acceptance of new technology, strong social attitude and abundant social activities related to sports event. The screener was broadly sent out via our social network and all the participants were recruited from the screening list. In this paper, 15 sport fans were selected from total 51 persons on the screening list, including 14 male and one female, ageing 20 to 30 (median 26), all Taiwanese. Occupations ranged from students and soldier to public engineer and designer. All of the participants have at least interested in two kinds of sports event and have averaging 10 years of sports viewing experience. Most of the participants have high viewing frequency during sport season, averaging 2hrs a day. They also shown high degree of social tendencies and acceptance of technology, which regularly use variety devices such as smartphone, tablet or PC to login their social network or sport forums to share their viewing experience with others, like Facebook or BBS boards that related to sports.

Data collection

Interview

The objective of the interview is to widely explore sport fans' current viewing and social behaviors around sports event. Six participants who have the highest sport viewing frequency were recruited in the interview, including two male and one female. The interview protocol was semi-structured. As we observe in pilot study, participants were much passionate to sharing their opinion when talks about their favorite sports event, especially their favorite players or teams. Therefore, in order to facilitate their interests of expression, the design of the interview script would first start from questioning their favorite sports event and players, and gradually shift to how they follows and watch these favorite events and how they share their viewing experience with others during or after the sport viewing. Additionally, we also invite participant to talk about some of their unforgettable watching experience of sports event, since the memory might be easier to retrieve and recalled complete. Each interview was taken averaging 1.5 hours. Facts about sport fans' viewing pattern and social activities during and after sports event are expect to be found in this stage. Besides, participants' media usage pattern, social needs and expectation of sports event are also expect to be revealed.

Probe diaries

After the interview, probe diaries were applied to address some interesting issues that have been found in previous stage, especially the interaction and relationship between sport peers. Meanwhile, the self-document diaries were tried to solve the recall bias problem in order to raise the reliability of the data we found in the interview. Since the curiosity about the interaction and relationship between peer-group had risen, it had been decided to recruit participants in the same sport peer-group as a set to join the probe diaries session. In the end, five groups and total 11 probe diaries were sent out via post, one of the groups contains 3 participants, rests of the four groups have 2 participants in each, and all participants were male. There are two kinds of tasks in the probe

diaries: the informative and innovative task. *Firstly*, the informative tasks, participants were asked to record their daily media usage behaviors relate to sports event and their viewing and social behaviors during sports viewing. *Secondly*, the innovative tasks, we invited participant to design a sport club for their peer-group and to sketch out both their current and ideal viewing environment. All above tasks were designed and divided into five different daily themes, guiding participants to write the diary thoughtfully. The probe diaries were asked to finish in a week, and end back to the researcher for further analysis. By comparing and analyzing of these self-document records, deeper information about the relationship, interaction and expectation between peer-groups around sports event were revealed. More reliable facts such as sport fans' media usage pattern, viewing and social activities during sports event were also collected and reached.

3. Results

After conducting interviews and probe diaries, all data collected from total 15 participants have been categorized and analyzed into affinity diagram. As great deals of finding have been revealed through different approach, the outlines of sport fans' life around sports event had been clearly draw out.

Viewing pattern

In this section, our objective was to discover peoples' viewing pattern, including the motivation to watch sports event, the things they concerned most about sport viewing and the behaviors they perform during the game.

Importance of particular sport contents

For sports fans, not all contents in sports event were equally important, there are some contents are much significant than other. All six participants in our interview claim that there are some games are much important than other that they will pay more attention and deliberate to watch. Games that are associated with their favorite players or teams, decisive that the outcomes of the game are important, such as playoffs or rare happened that have monumental meaning, i.e. Olympic Games were regarded most important contents by our participants. As there are too many sports event for our participants to follow, only these important games would be arranged into their viewing schedule.

Similarly, there are some contents are more significant than other in a game. 3 out of 4 participants think watching the whole game are quite time consuming, and all the participants only want to focus on the moments they care. Periods that are related with their favorite players and teams, decisive that every plays might critical to the final outcome of the game, or abrupt that usually rare and unexpected by our informants, such as astonishing or foolish play. On the contrary, rest periods of the game were consider too stable or predictable that regard as non-utilitarian plays to our participants, such as official game breaks.

"Watching the whole game are just too time consuming! I only want to focus on the player I love." - P1

During those periods, they will temporarily leave for various activities, such as interact with other viewers, update game related information or even engage in routine works which were unrelated to the game. Interesting, all of the participants reported they would not turn off the broadcasting channel while they leave. Two participants say the loudly sound from the game were like a voice cue to inform them the situation on the court, and by doing so they can always grab the context and go back to the game in a very short time.

"Always listening to the sound of the game, nobody wants to miss an exciting play"-P3

General requirements for sport viewing

In the interview, all six participants stated that watching sports event require certain knowledge of the game, as they called it *"common sense of sport"*. More interesting, all participants in the interview have watch more than one kind of sport games, and many of these games are match to the sport they participated in their daily life. They claim this could help them to be much familiar with the games, such as the rules. Simultaneously, they could also learn from the sports event to enhance the performance of the sport they play.

'I think watching and playing sport can benefit each other, which helps me to understand the game better ''- P3 Another robust finding shown in both interview and probe diaries, live broadcasting seem have vital meaning to our participants. All six participants in the interview said they only watch sport game in live. Similarly, 9 out of 11 participants in probe diaries recorded their sport viewing in live. They think the live broadcasting of sport brings an unpredictable character to the game, which makes it more exciting since no one could possibly know what might happened next, and they also agreed they would not watch rebroadcast if unnecessary.

"Watching live sport is like I am witness the history making" - P4

Social interaction during sport viewing

In this section, we reveal fans' social context and behaviors during sport viewing. The interaction among collocate and remote viewers, the expectation, requirements and some unforgettable group viewing experience would be line up here.

Collocate viewing prerequisite

Although most of the participants in our study preferred to watch the sport games with others, they usually watch alone, and would only watch together when the game are important to them and their peers. These games are similar to the significant games we mentioned above, which usually huge and important, such as playoffs, or have the player and team they both support. All six participants in the interview said only if they assume their friends might have interest about the game, they will actively invite them to watch together.

"I only invite others to watch significant sport games together, since these games are something worth to see and everyone would pay more attention to them."- P4

All participants in the interview tend to invite people who are familiar with the game to watch together, usually their sport peers. If not, they rather watch alone. Participant 4 explain that watching with people who are familiar with the rules and process of the game are quite enjoyable, as they could communicate freely based on shared knowledge of the game. Otherwise they might feel frustrating by keep explaining the rules and situations to the newcomers who will always talking an unrelated topic in a weird timing which could interrupt and bothering the watching experience.

"It just how tired to watch a game with the newcomers, you never really focus on the game!" -P4

Preference about collocate viewer

All six participants in the interview tend to invite viewers who shared similar idea about the game, usually support the same player or team to watch sports event together. As they said watching with supporters can brings a feeling of accompany, and they might have a deeper discussion, since they all know the players and team well.

"It feels good when you can share the emotion and being supported by others."-P6

However, when talking about collocate viewers who hold opposite notion about the game, there were different

voices from our participants. Four participants like to watch the game with the opponents, as they consider the aggression comments and tense atmosphere could actually facilitate the discussion, brings fresh viewpoints to the conversation while watching. Another two participants hold hesitate attitude, refer that the opponents they invite might only limit to acquaintance, since the hostility might offend people who are not intimate with them.

"We love to joke around others' favorite player, since we all acquaint to each other, no one would care about the offending words" -P5,P6

Interesting, three participants in the interview even considered that having both supporter and opponent to watch sport game together would be the most entertaining situation. The mix group can actually raise intense atmosphere between two parties, stimulus emotion and variety topics to chat and debate which lead to an ultimate viewing experience.

Interaction with collocate viewer

In the interview, all participants recalled most of the times when they watch the game with collocate viewers, the conversation will stay around the game itself, such as commenting each play or even talk about other related games. Especially when abrupt events happened, they will put all their attention to it, talking, shouting and sharing the exciting emotion about the events. Conversely, during the unimportant periods, they will shift the talking to other topics which might nothing to do with the game itself, such as the gossip about their peers or life anecdotes.

"When we watch the game together, we only talk other things during game breaks"-P4

Interesting, four participants in the interview also claim that they will occasionally prepare some sport equipment related to the game when watch sport together with collocate viewers. For example, if they watch NBA game, they might prepare basketball ball and wear team jersey during sport viewing. The equipment can not only add more physical feel to the sport they watch, but enrich the modality of social interaction, such as passing the ball between viewers or imitate a foolish play to make fun of the player.

"Sometime it's good to have a ball when you watch the game there're a lots of things you can play with it"-P3

In the interview, all the participants prefer to watch sport games with collocate viewers. And they are not intending to interact with other remote peers or use other devices if they are watching the game with the others. As they claim physical contact could replace the virtual interaction and entertainment, bring more real feeling to the social interaction and create greater pleasure of the game.

"There's no way you can high-five with a remote friend"-P1

Both in the interview and probe diaries, there are only 5 out of 15 participants who had ever watch sports game in bars, stadium and open squares. Moreover, even though most of our participants have live game experience in the stadium, the frequency is very low that each of them might only under three times of their entire sport viewing experience. Although the games they watch in public are heterogeneous, the motivations are incredibly similar: games that are monumental and having significant meaning to them, especially when the games are about national team or oversea players. As we look to the evidences, 5 out of 6 participants in the interview and 8 out of 11 participants in the probe diaries had ever watch live games of Chinese Taipei, Jeremy Lin or Wang Chien-Ming in sport bar or stadium. Most of these games were also referred as most unforgettable viewing experience.

"If we go to the sport bar, it would always be Wang Chien-Ming's game." - P5

Interaction with remote viewers

There are no much evidences that people would frequently interact with remote peers while they watching alone

and quite often they only interact with unknown viewers on social platforms related to sport. Most of our participants reported that they would habitually stay on social platforms which they familiar with when they watch alone. In our study, BBS (Bulletin Board System) was the most mentioned. They claim that watching the discussion which generate by other unknown fans can brings a feeling of accompany, especially when important moments that they cannot share their emotion with their sports peers.

"When there is no one can watch the game with you, BBS are your best friends" - P2

Two participants said the discussion and popularity shown on the BBS boards could also help them to choose what to watch, since the comment might bring useful information to evaluate the game. They also referred that live conversation about the game on the boards provides quick review for the current situation to help to decide whether to watch the game or not or to inform the context when they just cut in in the middle of the game.

"Sometime I was attracted by the sensational discussion on the BBS, and then go back to see what's going on". - P4

Interesting, our participants show different social attitude toward these unknown viewers. In the interview, all participants claim that most of the time they only browse information which provided by the strangers on the BBS or other sites. And they do not actively interact or generate any info, unless they are very familiar with the sport, or the info on the boards brings a strong feeling to them, such as an insult to the player they supported. Three participants even concern their opinions might not persuasive enough to convince others.

"On BBS, I only share things I know well" – P2

However, they display a rather open attitude when facing strangers who supported the same teams or players. They perform much actively on the social platforms that related to the players or teams they loved, such as fans' online club or team's Facebook pages. They stay longer on these platforms during the game, celebrating and even join the conversation about the player or team they loved with others, and they were more likely to share information on these platforms, such as their comments about the game or a players' highlight.

"I'll stay on my favorite players' boards and expecting to chat with someone who respects my idea." -P1

Comparing to the strangers, our participants have less interaction with their remote sport peers while watching sport. All participants said they would actively chat or share information with their remote peers only if they assume they would feel interesting about the things they share. In probe diaries, most of the timing they share was around important moments and the materials were always about important contents, especially burst events. Besides, they would more actively to share when they were watching the important game.

"When there is a big play, I'll immediately call my friend to watch" -P4

Social activities in daily life related to sport

In this section, we present findings of sport fans' social activities in daily life related to sport. The interaction context and materials, the way they interact with their sport peers and other unknown viewers were be uncovered here.

Interaction with sport peers

In the interview, we found that the conversations about sport are quite often appearing in sport fans' life. Most of our participants mentioned that once they meet their sport peers in the daily life, they would immediately start talking over about the sports event they both loved, such as a players' breaking record, the teams' standing or some funny things happened in the game. Two participants even reflect that sports event seem took a great portion of the interaction between them and their sport peers. They claim sport topics can constantly prompted out when they hanging out with their peers. These topics can pop out in anytime and anywhere, no matter under what circumstance or activities they are involving, such as shopping, dining or even watching movies. However, the conversation would usually quick shift away from the sports event to others unrelated topics such as gossip about other peers or life anecdotes.

"No matter what we do together, we would always unintentionally talked about the sport event we both loved, it just natural to us"- P5, P6

Moreover, people were more actively to share when the topics are about an important game or important moments, especially when these contents were also related to the player or team they support, since they know both of them would pay highly attention to this kind of game.

"I'll share things that are important and my peers might feel interesting about it." -P4

Interaction with strangers

We found that the peoples' interactions with strangers in the daily life are very similar to the interaction during the game. As our participants reported, they would frequently visit BBS boards when they have free time, but they will widely browsing every board that related to all the sports they loved, instead of just focusing on a particular board which they do during the game time. Many of them also say it has been a habit since they start watching the sports. Through browsing these boards, our participants can update news about every sports event they loved. More importantly, these news would usually follow with some interesting comments by other strangers. Watching these comments, as our participants' report, are one of their favorite recreations, since these comments are usually hilarious or sometime even informative, poring great pleasure into their daily life. Many of our participants even said these comments on the board might affect their future viewing chose of the sport games.

"Some of the comments on the BBS will make you laugh to the ground"-P3

4. Discussion

According to previous research, television genres play a significant role on peoples' uses of television contents. So the question if how such sport genre might influence people's social experience around television contents. Based on our findings, we have identified some unique characters of sport which might have directly impacts on peoples' social experience both during and afterward the game.

Social characters of sport

Important contents

As the results shown, not all contents in sports event were equally important, there are some contents are much important than other. In our findings, we have identified several criteria of the important contents which not only occupied peoples' most attention during sport viewing, but have the capability to stimulate and aggregate individuals' emotional behaviors. In facts, this robust phenomenon of aggregating sentiments has been found in many studies of sport which might rarely happen in most of other television genre. [3, 9, 11] The important contents of sport can not only influence peoples' viewing pattern, but also their social behaviors both during and after the game. According to results, most of the shared materials are highly related to the important contents. Since people pay more attention to it, these contents naturally have higher chance to be perceived and used.

Additionally, people might also assume the important contents were more interesting and appropriate to be shared by projecting themselves to others.

As we take a deeper look, most of the important contents are very figure-centered which are highly associated with the player or team that supported by our participants. This character of sport further affects their social tendencies, people tend to invite viewers who support the same players and teams to watch together, since they can feel being accompanied by celebrating together and their similar common ground might also facilitate a deeper discussion. Interesting, anecdote evidences shown sport fans also love to have opponents when sports viewing. They feel having both supporters and opponents to watch together can be most entertaining. We can infer that the opposition between supporters and opponents bring a vivid atmosphere to the game which stimulates the conversation by showing their competence to each other [11].

Loosely structure

The mixture of important and unimportant contents which we found in our findings makes sports event a loosely structured genre that drive people constantly leave the screen. The smaller plots of loosely structure enable people can effortlessly switching between different tasks during sport viewing while still stay in the context of the game. Meanwhile, the loosely structure of sport can also effect many aspects of sport fans' social behaviors. According to our findings, communication pattern during sports event seems highly related to the game flow. As the chatting topics usually focus on the game itself, and only shift to unrelated topics during unimportant moments. We might argue that loosely structure forms communication patterns by directing peoples' attention. As communication cost lots of peoples' attention, talking related topics on the screen can reduce cognitive load. While when unimportant moments appear, people no longer need to devote their attention but can easily shift to other unrelated topics.

Moreover, the loosely structure of sport can also add benefits to daily interaction among sport fans. In the interview, our participants said sports topics can pop out from nowhere, no matter under what circumstance. Hence, we might argue that the loosely structure actually make the sports event a communication facilitator in daily interaction. Unlike movies, small plot of sport can benefit both sharers and receivers, since they all handling a smaller context of the games. That is, the sharers could easily pick up any slices of important moments which have a clear beginning and an end, and the receiver do not even need to watch the whole game, only highlights is enough for talk.

Domain knowledge

Distinct from news, soap or movies, watching sport require some domain knowledge which can hardly learn in daily life context. As the robust findings revealed, almost all the participants claimed that watching sports event require certain knowledge of the game, as they called it "common sense". This common sense of sport seems not only help people to understand the game better, but play an important role on their social interaction with others. As we know the communication pattern during sports event are very dependent on the flow of the game, which governor by the shifting attention. The social timing would be much easier to be synchronized if the viewers have similar understanding of the game since they both know when to focus and discard the content, it providing match timing to interact. Besides, the possession of domain knowledge could also guarantee the mutual understanding of the conversation between peers by setting a common ground of sports event which can facilitate for a deeper discussion either during or afterward. It is believed that the requirement of domain knowledge can guarantee a smooth interaction experience by synchronize the attention and understanding of the sports viewers.

Live broadcasting

The value of live sports event broadcasting has robustly admitted by all of our participants. The real-time firsthand information makes our participants feel they were standing in front of the world, as the unexpected results make them feel fresh and excitement. Thus, this live character of sport can pours many benefits for social interaction. It encouraged synchronize viewing that once people assume their peers might have interest about the game, they might actively invite them to watch together, since everybody want to watch the game in live. Moreover, the live requirement of sport also ensures peoples' status update which facilitates the communication both during and after the game. That is, whenever people watching a sport game, they assume their peers might also watch the game at same time, which motivated them to interact actively with their peers. Therefore, although current on-demand televisions are now widely spread, the regulative functions of TV will still remain in sports event [11], guarantee peoples' viewing status update which facilitates the social interaction of sports event.

Collocate versus remote

In our study, people talk more and having more positive feeling about collocate group viewing rather than remote group viewing experience. Most of the remote interactions during the game were limited to unknown viewers on the social platform when our participants watch alone. In fact, collocate viewers in sport might have many social advantages than remote viewer. Sport is a television genre with celebrate nature, when there are moments that worth to rejoice, the stimulated emotion can be enlarge to huge excitement through physical contact, such as high-five, embracing or even dancing. This is one of the greatest pleasures of viewing sport which can rare happen in the secular context [3, 9], especially in conservative culture like Asia. Similarly, people will occasionally preparing equipment related to sport when watching sport with collocate viewers, such as basketball. The equipment can not only add more actual feel to the viewing experience, but used as social tools to facilitate social interaction. On the other hand, people in collocate viewing situation might be easier to evaluate their social etiquette through observing others' reaction in variety ways, such as eye contact or body movement. Though these social cues are sometime subtle and unconscious, it adds great value to smooth the social interaction which current remote viewing can hardly provide.

Strangers' role in sports viewing

In our study, although people claim many benefits that online strangers can bring, the way they interact with these strangers are quite conservative. Moreover, the social attitude became relatively open when people meet strangers who supported the same figure. People perform much actively on the social platforms which related to the players or teams they loved, such as a team's Facebook pages. As we look to the conflict evidences, the reason might lies in the presence of others' viewing preference. Since our participants did not know these strangers from Adam, the preference states of others are unknown, it is hard to evaluate if their behaviors would be appreciated or not. Conversely, when people meet these strangers in particular space, such as the fans' online club, it provides a clear clue for people to assume the strangers' viewpoint and therefore erase the concern of ambiguity.

Therefore, we might say strangers actually play a special role in sport viewing. They do generate many benefits for fans by sharing and aggregating large amount of emotion to amplify the excitement of the game, providing useful social info for people to select meaningful contents form ample, fragile and miscellaneous sports contents, as well as bringing pleasure and feeling of accompany to either the watching periods or daily life when there is hard to reach their peers. But people will still hold defensive attitude toward online strangers if they remain unpredictable. In the best, proper interaction can facilitate emotional connections and membership through mutually support, building a "sense of community" or even foster social capital [5]. In the worst, trigger negative emotion due to inappropriate social behaviors, such as frustrating, anxiety and even angry, and finally leads to a terrible social experience.

Cultural differences on public viewing

While many researches of sports event discussing a lot about peoples' behaviors in public space, participants in our study have fewer public sport viewing experience. As we tried to explain, though income might be one of the reasons, since most of our participants were students or just graduate in a few years, we argue that cultural differences might be the major rooted cause. Our participants are all Taiwanese, to them, watching sport in public, especially in clubs or bars are not a conventional habit, but rather an import culture from western countries. Many sports fans in Taiwan who actively and love to watch sport game in clubs or bars were more or less love western cultural or have ever live overseas. However, this is not to say that people in Taiwan or other region in eastern cultural dislike to watch sport in public. In fact, this foreign culture might transform to a more hallowed ceremony and have more significant meaning. As the findings revealed, many of the reasons that our participants watch sport in public were because they wants to support their national team or overseas players with as many fans as possible, e.g. Jeremy Lin in NBA or Chien-Ming Wang in MLB. Besides, the memory of the experience would last longer and stronger than other games, as many of the participants regard these games as their most unforgettable viewing experience. Here, the motivation to watch sport in public might not only about recreation, but more about sharing the national pride with more people who hold the same faith and trust. These fans beyond themselves to become an entity, to witness the rise and fall of the team or player, to feel the happiness and sadness together, and to create the 'Liminality' effect which can rarely happen in the daily context [3].

5. Conclusion

Sports is not only a sociable television genre, but also very emotional and sensational. How to design the social television system properly that fit into sport genre is our prime concern. In this paper, we have identified several key characters of sports event and devote findings which might differentiate it from other television genres that bring unique impacts to people's' social experience around television viewing, both during and afterward. Social interaction in sport viewing is very dependent on some important contents, thus television system should support viewers to recognize, capture, store, edit and share these contents. Focusing attention on the important contents further make sport forms a loosely structure genre, which the small plot provide many pause for social interaction and also lower the burden of sharing activities, plus the live character of sport, it is very suitable to encourage synchronize interaction when sport viewing. Good social interaction in sport also requires some domain knowledge. Therefore, a buddy list of knowledgeable sport peers might be a favorable feature for future social iTV. Moreover, we found physical contact can enrich social experience while sport viewing. Hence, it is good to have different modality of remote communication to support peoples' emotional behaviors. Interaction with strangers can be entertaining and informative in sport, but always make sure to keep their viewing presence and preference transparent, otherwise people might stay conservative. To conclude, although watching sport in public is not a conventional habit for Asian, there are still huge social needs in sport viewing. Thus, an online sports club might be an alternative way for public sport viewing in conservative region.

For future research, we believed several issues are worth to be explored. *First*, different sports might have more subtle effect on peoples' social experience, future studies can focus deeper on specific sports event. *Second*, since people switch a lot in sport viewing, it is worth to understand how secondary screen could play a role to support their behaviors and promote a seamless viewing experience around sports event. *Third*, cultural differences were always interesting to explore, as we discover a few difference on public viewing, more light should shed on related issues. *Lastly*, although our study are mainly based on sport broadcasting by mass media, it is worth to explore when the broadcasting become more democratize, how people can generate their own sports contents to influence and interact with others.

6. Citations

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