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Game Time: “Not Too Much, Nor Too Little”

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ABSTRACT

The amount of time young adults spend on online gaming has drawn attention from governments and academics. While these concerns posit a spatial separation between the game world and reality, they fail to understand the gaming activity in relation to individuals' overall life. An alternative framing of gaming as leisure activities can yield greater insight. This research examines the temporal experience and the meaning of playing online games within a community of Chinese full-time college students. Observing their gaming routine, I try to answer: how do college students interpret the time they devote to gaming? In addition, how does the calculation of time for gaming differ from time in the game? Based on the research, I find that although the participants devote a significant amount of time on gaming, they are capable of prioritizing school obligations, making efforts to achieve a balance between work and leisure. Essentially, they regard gaming as a serious leisure and desire better performance through practicing. The findings suggest that the moral panic against online gaming, particularly in the Chinese society, is shaped by the interaction between the central regulation on internet use, the fear-delivering media representation, and the transformative work-leisure relation.

KEYWORDS

online gaming, serious leisure, time management, temporality, LOL, China

INTRODUCTION

After several months of knockout rounds, the final game of the League of Legends World Championship 2018 took place Incheon, South Korea. It was held in the 50,000 seat Munsu Stadium. At the same time, 35 online platforms across 15 countries live streamed the game (Gamepedia 2018). Aside from attracting attention as a spectator sport, League of Legends (LOL) has become a hit among online gamers. As one of the most popular multiplayer online games, League of Legends gained 67 million active players in five years since its release in 2009.

The enormous expansion of massive multiplayer online games (MMOGs) has garnered policy makers' attention. Given that players on average spend 20 to 24 hours per week on online gaming, with some spending up to 40 hours (Yee 2002), policy makers, who are usually not part of the gaming culture, believe that MMOGs would cause players to lose track of time and get lost in the world of the game. After several incidents where students played to the point of having a negative impact on their life, boot camps that aim to help the "internet addicted" teenagers abstain from MMOGs gained increasing popularity in China, responding to the concerns voiced by parents, teachers and others (Park and Ahn 2010; Sun 2010; Bax 2014; Anderson and Jiang 2018). Although not scientifically approved, these boot camps use similar clinical treatment for alcoholics and drug addicts (BBC 2017; Phillips 2017), inducing serious criticism that compares the programming to child abuse.

At the same time, many sociological scholars examined online gaming and sought to explain players' motivation. A number of early scholars claimed that a

spatial separation exists between the gaming setting and the outside world. Players are often attracted to the game world and thus detached from reality (Caillois 2001; Salen and Zimmerman 2004; Taylor 2009; Juul 2012). More recent research acknowledges the game world as a social space, where players not only experience fun from , but also have fun with their social groups (Burn and Carr 2006; Pearce et al. 2009; Szell and Thurner 2010; Crawford et al. 2011). However, these studies generally focus on the spatial feature of MMOGs, presuming that the temporal aspects follow the spatial aspects. This presumption hinders our understanding of how players incorporate gaming activity into their daily life. Even studies that obtained data on players' time spent on gaming ignore what is going on during each game session (Williams et al. 2009; Ratan et al. 2015). Therefore, scholars have underappreciated the *construction of time* in online gaming culture.

In this research, I study how players conceptualize time both in and out of gaming activity. Specifically, my research questions contain two parts. First, how do college students interpret the time they devote to gaming? Second, how does the calculation of time *for* gaming differing from time *in* the game? Based on observation of gaming activity and interviews with nine full-time college students who are active MMOG players, my findings contradict the previous belief that there are separate frameworks between the game world and reality. In contrast, players are in fact capable of interacting with other people while engaging the games. More importantly, players organize their game time as a leisure activity according to their school obligations. Although sometimes the shift of temporal experience during the game leads to

unplanned extended play, the participants still manage their time in game and do not damage other obligations. The players devote time to learn and improve gaming skills through practicing, observing and discussing. This finding is significant because it challenges the present cultural stigmatization and the state regulation, not only on online gaming, but also on the participants of such activity.

To address the research questions, first, I develop a theoretical framework explaining how incorporating the notion of temporality improves on existing studies by connecting gaming activity to players' larger life. Next, the methodology section discusses how my unique positionality provides an access to the field, and thus best addresses the research question. The last section pays a closer attention to the social conflict in China, where the negative image of online gaming created mainly by the Government and the media has shaped both the socially constructed moral standard and the individual-level personal relations.

LITERATURE REVIEW

The study of online gaming is still a relatively new topic in sociology. The majority of the existing research takes the premise that online gaming is an abnormal activity, thus trying to understand the meaning of online gaming through examining features that distinguish MMOGs from other activities. Scholars regard the game world as a separate space from the real world, and argue that a player must have certain motivations to be willing to enter into that space. In addition, concerned by the amount of time players spend on gaming, a few scholars have conducted ethnographic

research and documented their personal experience as MMOG players. Nevertheless, none of the existing studies has considered the possibility of temporal shifts during gaming, which might influence players' decision to enter and exit the games.

Moreover, since players have shown capability of multi-tasking while gaming, one needs to attend multiple aspects of time notions in order to fully understand the temporality of gaming. Therefore, this research bridges the theoretical gap and examines players' temporal experience both *in* and *out* of gaming activity, and aims to explain how players conceptualize, refer to, and utilize time in gaming activity.

Spatial Separation and Motivation

Early literature on online gaming share a dominant viewpoint in regarding the game world as a separate space and seeking to explain players' motivation to participate in gaming. Drawing on Huizinga's (1955) concept of the magic circle, a number of scholars believed that in creating a special time and space, online games separate players from reality and enclose them into a different dimension (Caillois 2001; Salen and Zimmerman 2004). Subsequently, other scholars take a closer look at players' gaming activities and debate that, in fact, the circle might not be quite as magical or as solid as previously theorized, as players not only utilize and redefine game rules (Taylor 2009; Juul 2012), but also invest their personal identity and social connection through playing with others (Taylor 2009), suggesting greater continuity between the online and offline world.

Although these more recent theories conclude a more fluid link between game space and offline reality (Falcao and Ribeiro 2011; Drachen 2011), scholars continue to regard the gaming experience as a distinctive space from the frame of the real world. In other words, the extensiveness of discovering the *worldness* of online games is only able to lead us to explore the activities happening *within the game space*. However, narrowing the lens to just the frame of game world hinders our understanding of how players incorporate gaming activity into their daily life and how players might experience continuity between the online game and in-person interaction.

Another group of scholars expands on studying the motivation of the gaming activity. While most of these studies employ notions of time, they fail to explain how these time notions differ or replicate the common temporal concepts. One significant study conducted by Burn and Carr (2006) helped generalized three characteristics of games that motivate players to continue playing: the ludic nature, the representation of self, and communal relations. Despite using ideas of temporal continuity and the repetitive cycle of behaviors, the studies followed Burn and Carr only looked at within-game temporal features as reasons for players to enter the MMOGs, but not how players account for the time relative to other activities or how these temporal features of games intersect with other temporal structures outside of games (Bessièrè, Seay and Kiesler 2007; Pearce 2008; Glas et al. 2011; Falcão and Ribeiro 2011). As a result, this research doesn't account for how players decide to start or stop playing.

Finally, a small number of scholars focuses their studies on individual players' game duration. They conduct surveys asking players to self-report their game time (Yee 2006; Williams et al. 2009; Ratan et al. 2015). As a result, phrased in terms of clock-time, these surveys suggest players' inclination to addictive play. In addition, Majamäki and Hellman (2016) evaluated Finnish players' temporal autonomy based on interview data. The scholars conclude that the interviewees are capable of utilizing time management skills, prioritizing social and work obligations to fit gaming activity into their schedule.

Overall, these studies only focus on analyzing self-reported duration of playing and do not incorporate various temporal aspects, thus they fail to offer a comprehensive analysis on players' actual temporal experience in gaming activity. Nevertheless, temporal aspects such as entering, exiting and breaks during a game are crucial to examine how players understand, calculate and use time differently in gaming activity. Therefore, a theoretical gap between temporal notions and gaming activity exists and needs to be addressed.

Time and Leisure

To address this theoretical gap, I return to the existing theories on time notions and leisure activity. First, Flaherty and Fine (2001) discuss that time can be distinguished by past, future and present, where present, or *temporality*, is experienced based on interaction with the environment and individuals' thoughts and response. Thus, in the case of online gaming, the experienced time is affected by the

established expectations in the game and interaction with teammates. In other words, calculation of duration in the game, though shown in the unit of minutes and seconds, would possess different meaning to gaming than to other activities in life.

Furthermore, in regard to temporality and the means of control over time, Goodin and his colleagues proposed a concept of “temporal autonomy,” which is defined as “having control over how one chooses to use one’s own time” (2008: 30). Based on this notion of autonomy, they distinguish time into two types: “discretionary time” and “spare time” (2008: 34). Discretionary time refers to the time one decides to spend on the necessities of life, such as personal care, social obligations, and work. Spare time is defined as the amount of free time one has to conduct leisure activities. Thus, autonomy plays into the role of balancing work and leisure into everyday life.

At last, to consider what a proper leisure is, in the book *Work and Leisure*, Nels Anderson (1961) explains that the social understanding of leisure changes as society evolves, and a collective moral standard on how to spend leisure time tends to shift. Because leisure is often segmented by the participants’ identity, the judgement on which leisure is worthy to spend time is often constructed by a sole mainstream voice. As a result, how individuals utilize their leisure times becomes influenced by both the unwritten rule and the institutional constraint within the existing social construction. Anderson’s theory builds a connection between the moral standard for work-leisure balance, and the temporal autonomy on online gaming, implying that the decision one made to balance work and leisure is often shaped by the collective consciousness in a given social context. Thus, this perspective reinforces the necessity of understanding

players' temporal experience on online gaming. Examining players' autonomy in controlling game time, the research would lead to a comprehension of online gaming as an emergent subculture, and unveil the interaction between the work-leisure balance and social influence of this subculture.

METHODOLOGY

In order to answer the research questions, I conducted field observation and in-depth interviews with MMOG participants. A number of scholars have also used an ethnographic approach in studying MMOG experiences (Pearce 2009; Nardi 2010; O'Connor 2015). For instance, Celia Pearce (2009), who composed a detailed analysis based on her personal participation of playing *Uru: Ages Beyond Myst*, suggested that ethnographic evidence serves the purpose of understanding culturally shared concepts that are hard to articulate by participants. To suit my research purpose, instead of actively engaging in the games, I decided to simply observe players' game routine because: first, it would provide systematic information on players' temporal experience comparing to the self-reported methods; second, it would allow me to observe players' interaction with both the gaming activity and their surroundings.

During the recruitment process, I reached out to the potential participants individually to ask if they would like to participate. Based on a snowball strategy, I recruited nine participants of regular MMOG players, who were all currently full-time college students, except for one who graduated earlier the same year. They were also all international students who grew up in China. Given the regulations and

stigmatization on online gaming they experienced in their home country, I expected them to spend relatively longer time gaming and possess less control in their current, more permissive U.S. student environment. In other words, their unique culture background made their decisions on game time a study of interest which would address the research questions properly.

To observe their gaming experience, I went to participants' houses during their routine gaming sessions and sat to the side while writing down my observations on my computer. Occasionally, if they decided to play late at night, I would conduct a video call using a phone and ask to be placed in a position where I could see both their posture and their computer screen. Because the intention of this research is not to not ask the participants to go beyond their routine, the observation sessions mostly started and ended according to players' decision on time.

For each observation, I consistently documented the following data: first, players' perceptions and understandings of time, and second, the actual time notions. These variables include duration (the start and the end time of each game session), frequency of breaks (including behaviors that suggest entering or exiting the game), and frequency of checking a clock. At the same time, because it seems acceptable to chat with players while they are playing, I also asked and documented their expectation on the length of gaming in the beginning of each play session. In addition, interviews also have led to information regarding their usual gaming schedule and reasoning to these decisions. Overall, I gathered information both from what I *observed* - their actual practices of gaming activity, and what the participants *said* - their beliefs and

understanding on gaming activity. Therefore, the data incorporates a holistic view on players' gaming experience both within and outside of the process of the activity.

It is crucial to understand that this research method was only plausible because of my personal standpoint and sociocultural identity. First, given the established connections I had with my participants, they would feel comfortable during their routine gaming activity. Thus, I reduced the influence from the participants' self-consciousness of being watched, and kept the setting closest to their gaming routine. Second, as a Chinese international student, I was able to understand not only the language the participants used when communicating during gaming, but also the cultural context they came from. The ability to conduct interviews in Chinese helped me to locate their vocabulary when talking about online gaming, which shed light on the social meaning of this activity. In other words, my identity allowed me to be both physically and culturally closer to the participants, creating sufficient rapport as an important precondition. Last, as an outsider of the gaming culture, I gained the advantage of observing and hearing what might be taken granted for experienced gamers. Given that temporal notions are intricately embedded in the gaming activity, through this method I am able to give full attention to players' interaction both within the game setting and with the surrounding environment. In short, my unique positionality was a critical factor that contributed to supporting the research purpose with this suitable method.

FINDINGS

In order to engage in any of the MMOGs, a player must have an access to some type of gaming devices. All of the participants in my study own a personal computer which they used to engage in MMOGs. Specifically, seven out of nine of them have procured desktops or specialty laptops for higher speed and thus better gaming experience. Furthermore, given the weight and the necessary cable connection for fast speed, the participants usually set up these game devices - including a screen, a keyboard and a mouse - in their room and rarely moved them around.

Admittedly, although sharing an apartment with three other students, Henry did not place his game computer in his own room but in the shared space, the dining table in the living room. When I asked whether the computer interferes with his and his housemates' daily lives, Henry responded that, "[placing it] here makes it *easier to play*, plus there's plenty of space on the other side of the table. And it's also close to the outlets." In the case, Henry's computer setting not only showed his frequency of engaging in gaming but also implied the extent of gaming as a crucial part of his life. By owning game-oriented devices and placing them as a stable furniture at home, many of the participants have demonstrated their devotion in gaming activity. Moreover, because many of the participants do not power off their computers or log off from the games they play, they have easier access every time when they begin to play. Thus, I wondered how players account for the time they spend on gaming and how their notions of time *for* gaming different from time *in* the game?

To address these questions in this section, I will break down the question into two main parts: experiences of time notions *within* and *outside* of the gaming activity. Specifically, the second part discusses players' time management based on their decisions to start and to stop a play session, and as well as instances when they decided not to play.

Temporal Rhythm and Clock Time in Game

Based on my observations, I discovered that MMOGs operate on a different temporal structure than the common clock-time system. Not consciously aware of the difference, the players showed incompatible time notions between their experience and expression of game time. At the beginning of each session, I asked the participants to indicate their anticipated duration of play. In the end, multiple participants experienced instances where they spent half an hour to an hour more than they expected, and occasionally even longer.

At 4:20 pm, I asked to Henry "How long do you think you are going to play?" "Uhm good question. Ugg I died. I think maybe one more hour?" Henry answered with rising tone... At 5:55 pm, Henry was still engaging in the game. At this point, he had played for almost two hours in total, and showed no response toward the time.

As an observer, I was often surprised at how quickly time passed during each observation. At first I internalized this impression for the fact that I was taking notes and observing at the same time, thus becoming too immersed and less aware of time. Nevertheless, even as I started documenting clock-time in detail and thus being fully

aware of the time, I still experienced a shorter span of time passing than the actual duration. As a result, I found that this altered experience of temporality was closely related to the embedded features of the MMOGs, which are not only resulted from the intrinsic ludic features created by the game design, but also due to the limitation of exits that transforms players' experience with temporality.

Take LOL for instance, which most of my participants actively engage and are also prone to extended play. The gist of each round of game in LOL is to fight on the battlefield using a selected champion, collaborating with teammates to sabotage enemy's base (Riot Game 2016). Overall, LOL contains three different game modes - *Summoner's Rift*, *Twisted Treeline*, and *Howling Abyss* (the last one is also known as All Random All Mid, ARAM) Altogether, these three game modes provide a fit for individuals with different gaming purposes and different levels.

Essentially, methods of controlling the game are the same in these three modes: a player needs to control a champion to attack the enemies while avoiding being attacked. When using a computer as the gaming device, one controls the champion's movement and attack using a mouse and keyboard. For instance, if the player wants their champion to go left, they would click on the left side of the champion on the map, and then it follows. During my observation, the participants who were engaging in LOL always had one hand clicking on the mouse at a high frequency, and another hand continuously pressing "Q" and "W" to perform attacks. The frequency of clicking depends on the fight situation. Peaks in the conflict usually spurs more instant-actions. Based on my rough calculation during observation, several

participants would often reach the speed of eight clicks per second during an intense moment of a game.

Because of these game settings, players tend to experience a different temporal rhythm from clock-time, despite the game using minutes as a counting unit. In fact, the process of each game is not designed to be experienced as a linear, progressive timeline, in which players would clearly sense a progression of time. Instead, it is broken into periods of attacking and waiting.

First of all, the embedded gist of the game has indirectly influenced on players' experience of temporality. In order to destroy an enemy's base, the team must first kill the enemies to clear a route to that base. All champions have limited life value and are designed to resurge after complete attack; however, killing one still requires several consecutive attacks. Thus, from a player's perspective, it usually takes multiple tries to accomplish a kill, considering the enemy's ability to dodge the attacks. A route will finally appear based on teamwork and lead to a temporary opportunity to carry out damage on the others' base. Nevertheless, even during that opportunity, a player also has to be aware of the enemy's resurgence time and retrieve to secured land to avoid being attacked. In other words, there is a *repetitive cycle* of attacking, being attacked, time out, resurging, and attacking again. Within the cycle, windows of opportunity also emerge repeatedly. As a result, this process experienced by players serves as a measurement of time in the game which is independent from clock time system.

During my observation, the time frame for destroying the base lasts from three minutes to ten minutes, subject to game modes, team collaboration, and personal

skills. For instance, in the ARAM game I observed from Henry, closer combats begin to take place right from the start of a game due to its compact setting, and it tends to take longer time to create a opportunity to fight through. On the contrary, since the classic maps require distribution of teammates into three routes in distant spaces, a kill becomes easier as it is done through a one-on-one combat, with fewer teammates supporting and fewer enemies attacking. Laura, a senior who engages in multiple MMOGs and almost plays every night with her housemate, once explained to me that, on the other hand, the result of killing the enemy or being killed in the classic mode highly reflects champion's level and individual skills, which both positively correlate with overall time spent on gaming activity.

At 11:26 pm Laura and Tom started a new round of normal LOL game... At 11:48 pm I heard some intense background noise from the game which lasted for two minutes... About five minutes later, the noise got high again and I could see more than four champions combating each other on her screen.

Breaking final victory into smaller goals at each moment, the game requires players to consistently carry out instant actions. Because the map creates an enclosed and constant condition, players' actions during the battle do not feel like separate events, so they appear as a single present moment (Goodin et al. 2016). Moreover, since there is no limit or competitive pressure on the overall duration of one game, players become motivated to carrying out the final target – conquering the enemy's nexus. In other words, because of the intensity of reaction demanded, players are

distracted from the overall time span due to their focuses of winning. They thus experience less of time spent on each game than the actual clock-time.

It seems that due to the difference in temporal experience, players are inherently inclined to play excessively. Nevertheless, *this is not quite the whole picture.*

Although players showed little awareness of time during each game, they seemed to know the average time cost of each round. Participants have shown awareness of time by either checking the clock or talking about it. During my first observation, Henry explained that he usually plays the ARAM mode because it only “takes 15-20 minutes,” while, the normal mode “takes longer time, about 40 minutes.” During another observation, Laura also demonstrated her acknowledge of game duration:

At 11:56 pm, they were defeated in the last round of the game... Laura turned her chair around and asked: “how long have you been observing?” I looked at the time, and said about 30 minutes. Then she responded: “That’s about right.” Soon after, they were in the process of pairing up for another game.

In other words, players have an approximate understanding of time based on the duration of a single round in a normal mode, which varies each time but within an acceptable range. As a result, they tend to pay limited attention to clock time when engaging in a round. Because quitting the game in the middle would cause punitive consequences on players’ record and future participation of the game, participants always finish a round of a game once started. In conclusion, the overall duration of gaming activity in one session is segmented by the rounds of game, and thus the overall time spent is highly subject to players’ decision on “do I have time for one

more round?” From another perspective, we can also say that their prediction was not accurate because the calculation based on hours mismatches the time segmentation embedded in gaming; nevertheless, they have knowledge about the time that they can use, and use this knowledge to make entry and exit decisions.

Continuity of Gaming and Interaction with Surrounding

As discussed above, players appear to be extremely preoccupied during a game as they continuously react toward the instant changes happening on screen. However, albeit their body posture of concentration, the participants are in fact not completely cut off from the surrounding. They appear to be extremely responsive to stimulation in their surroundings and capable of interacting with other people in or out of the games: not only engaged in conversation with teammates in the game, but also conducted interaction with other people present in the physical space throughout the gaming process.

On one hand, linking with other friends and teaming up to play is very common among my participants. During the game process, communication usually involves giving strategic commands to each other and commenting on the game situation, which lasts throughout the game process but tends to concentrate when a fight gets more intense. For example, Kevin tends to get very emotional during a fight and would shout out phrases such as “go, go, move forward! Hit that guy, quickly!” It seems communication with teammates is an inherent part of gaming as players respond to the situation of the game.

On the other hand, when other people are present in the same room, the players will still respond to the interaction: more passive responding instead of initiating interactions during the games, but more actively during breaks. While they were playing I was able to ask my participants questions including inquiries about game rules, school work and what they did the day before - basically normal conversation one would have with another person in any situation. Nevertheless, solo players were quicker at responding and seemed to be less bothered by the conversation.

Beyond conversations with me during observation, players also interact with other people who are present in the space, which involves more intense communication.

Soon after Henry started the second game, Peter, William and Neal came over. All of them often play LOL, and one of them, Neal, was Henry's usual LOL teammate and mentor. Henry turned to see them and asked loudly if they would want to come watch him playing. They all walked to Henry and stood behind him and watched. They exchanged a few words about the situation of the game and gave judgement on his champion, but soon Peter and William walked toward others in the room. Henry and Neal kept their conversation, and occasionally Peter or William would swing by and engage in the activity.

On another day, Henry again showed a continued interaction with other people while playing:

During one observation with Henry, Sherry (Henry's girlfriend) has not been feeling well that day. While Henry was playing, she came out of her room and asked Henry to make noodles for her, and offered to play in replace of Henry. Henry said he was playing a specific character, and Sherry responded that she

knew how to use it. So now she sat down and started playing. Henry stood up and rushed to kitchen, within one minute he had start boiling a pot of water, and he came back standing behind her to watch, with one hand on her chair.

Based on this observation, we can see that although players seem to devote extensive attention on games while playing, they are not cut off from the real world; rather, they are able to participate in social interaction in the room as they are physically present.

This finding contradicts with the previous belief on the separation between gaming framework and the outside world, and suggest a new understanding of online gaming.

Another important temporal notion during gaming session is the short period after each round of a game, a break. During these four to five minute breaks, players would mostly remain in the spot, except for times when they stand up to fulfill some physical need. For instance, with a habit of smoking, Kevin would run upstairs from his room in the basement and stand in front of the house to quickly smoke a cigarette, at least once per hour of gaming (since his housemates do not allow smoking inside of the house). Shortly, he would dash down stairs again and acknowledge his teammates that he is back so that they can resume and start a new game. As for Laura, she tends to get up from her seat and go bring drinks and snacks to her table during the breaks.

When other non-gamer friends are also present in the same setting, players tend to use these breaks to engage in interaction with these people. For instance, Henry would always initiate conversation with me while waiting for a new round. During one of the earlier observations, he started introducing the different types of champions that exist in LOL to me. As for Laura, she would always check in with me after a round was finished, asking whether I could see her clearly and inquiring about my

school life. Particularly, on the day when Sherry, Henry and I went to visit William and Peter's apartment, the interaction between gamers (Peter and Henry) and non-gamers (Sherry, I and the other housemate of Peter and William) became very prominent.

Henry was using William's computer to play in William's room, which is separated from the living room. Peter was sitting at his game spot which is next to the dinner table in the living room. Every time when they finished a round, Henry would step out of the room to check out what we (non-gamers) were doing and engage in the conversation that we were having. He asked about what was happening in the TV drama that we were watching. Peter also stood up and came over to observe us doing manicures, and said that he would want to borrow the nail clippers.

Sometimes, Peter and Henry would return to their seats and started playing again without notice. Overall, although they were playing the entire time at the apartment, I accounted for their presence during the night and did not feel excluded.

To sum up, based on players' utilization of breaks during gaming, we can draw a few implications on the continuity of playing MMOGs. First, players are inclined to maintain the same status - both physical and spiritual - throughout a game session; however, breaks serve as chances for them to be more involved with the surrounding outside of the game. Second, despite the intrinsic demand for players' preoccupation, the continuity of gaming is in fact not solidly defined, as that it allows other interactions to take place at the same time. Hence, engaging in both the games and outside responses, the players receives temporal influence from both dimensions,

which as a result is distinct from but not completely separated from the common understanding of time notions.

Time Slots and Overall management

The second part of the findings is related to players' overall control of game time. Overall, each participant demonstrated strategies to find available time for gaming that would fit into their school schedule. By deciding when to start and when to stop, the players generally prioritized their obligations as full-time students and thus prevented gaming activity from interfering their performance at school.

In terms of when to play, almost all of the participants expressed that they usually start playing after "everything else is done for the day." Although each participant would employ different evaluations about what should be done, they all found time to play after accomplishing school obligations, social relations, and personal care. As a result, there were three popular windows of time to play based on participants' report and my observation: weekday nights, weekday afternoon, and weekends.

One of the most common time for participants to play appears to be weekday nights. Players tend to initiate a game at around nine or ten o'clock at night. Although the ending time for each individual is different, the majority of them finish gaming before 2:00 am. During these observations in weekday nights, most of the participants are in a position where they would not head out of their house again. As Laura described, gaming is "the last thing before going to bed." Particularly, Laura would always remove her makeup and change into pajamas before gaming. As for deciding

to exit gaming, participants usually have justified reasons. During one of the observations, Henry stopped playing LOL with another friend at that person's house and returned home earlier than he planned, because his girlfriend was about to sleep. In another instance, on a weekday night, Laura decided to stop playing, given that she had class 9:00 am on the next day. In both situations, the participants demonstrated their willingness to prioritize either social responsibility or the physical need to prepare for school and thus the ability to terminate the gaming activity.

Moreover, some of the participants also reported their gaming activity during the day, commonly when they returned home from classes in the afternoon. Nevertheless, these game sessions are usually shorter than the evening ones, given that they would need to accomplish assignments, come back to school for group meetings, or prepare for cooking. Moreover, participants tend to engage in solo play in the afternoon, since during this time window it is more difficult to coordinate time with other teammates. Overall, the afternoon game sessions are less formal or lengthy, but more flexible.

As for weekends, participants are willing to spend longer time, sometimes starting in the afternoon or after dinner. For participants who have less structured weekend schedules, it is normal for them to spend three hours or more on gaming non-stop. During these game sessions, it is also common to team up to play. Overall, participants tend to reserve weekends to devote substantial time on gaming. Laura and William explicitly told me more than once to observe during the following weekend, because that would be when they "have time to play games" instead of the weekdays.

In fact, showing the participants' capability of managing the start, end and duration of each gaming session, the evidence contradicts the hypothesis that all players would perform online gaming as an addictive behavior. Instead of completely losing track and sacrificing discretionary time, players value these other obligations to balance time spent on gaming. For the participants, who are full-time college students, their primary obligations encompass two dimensions: *social and academic pursuits*. In other words, when making decisions on when to play MMOGs, they usually prioritize the time they need to spend with friends and the work related to school. This explains why they would have more opportunities to play during weekends. Moreover, depending on the habit of the individual, each player develops different strategies to incorporate gaming time into their schedules: some players have a relatively settled period during the day to play, while others perform more flexibility in gaming time and play whenever they are free from other obligations.

At last, beyond controlling the start and the end time of gaming, players may also choose to initiate *temporary abstinence*. In several instances, when I asked my participants if they would play in the near future, they said that they would not, given the intensity of school work they had. To my knowledge, Sherry used to spend more time playing LOL in the previous semesters; however, since this semester her schedule has become more hectic, she explicitly told me that she would not have that much of time available for online games. In addition, she could never inform me beforehand if she was going to play, implying that gaming has become not part of her planned schedule anymore. In another case, Henry reported that he did not "touch

games” at all in last week since he had five exams. Furthermore, Kevin, who used to connect with friends and play almost every day last year, informed me that he had “deleted all of the games” on his computer, so that he could concentrate on his GRE preparation. After his GRE examination, he resumed gaming activity, yet spending less time in comparison to last year.

Given these instances, we see that players have the ability to perform *self-imposed restraint on game time* by altering their accessibilities to the games. Thus, it implies that players are aware of the duration of game sessions and the inclination of extended play given the ludic design of the games, thus decide to prevent such undesired results from the beginning. Together, the behavior of choosing to start playing only when their obligations are met and the decision to restrain accesses to the games demonstrate the participants’ willingness to prioritize other obligations, and also their abilities to fit game time into their overall schedule.

Beyond play: Serious Leisure

Beyond the time players spend on actual gaming, they also devote extra time on game related activities and constantly talk about game contents. One typical game related activity is to watch online videos of professional gamers or World Championship. Almost all of the participants in the study who played LOL watched a live stream in one of the final games of World Championship. Because the game was held in Korea, they either stayed awake until or set an alarm to wake up at 3:00 am. Sherry also told me that one night after they returned home at 10:00 pm, she, Henry and Neal started

playing LOL until it was time for the Championship. Moreover, during self-imposed abstinence on gaming, Kevin also watched the stream of his favorite team and explained that “watching is not playing.”

As a result, many of the participants would devote extra time not actively playing the games but simply observing others playing them. As they reported in the interviews, the participants regard watching the Championship as an opportunity to learn: they would observe and adopt attack strategies, champion control and overall team management. The fact that they were spending time to learn implied their desire to become better and more skillful at these games.

In other words, playing MMOGs is a form of *serious leisure* (Majamäki and Hellman 2016), which is defined as a meaningful activity that “captivates its participants with its complexity and many challenges” (Stebbins 2001: 54). In terms of the time and mind devoted, gaming activity resembles other types of leisure activities, such as sports, composing, and watching drama (Majamäki and Hellman 2016). Similar to sports, players participate in the games to practice and build their skills. As a result, getting better at gaming serves the purpose of productivity, in which players receive awarding feelings. Moreover, in contrast to watching drama, players of MMOGs not only acquire a sense of productivity and self-accomplishment, but also benefit from participating in a social group. When multiple MMOG players come together in the same space, they tend to initiate conversation about the games. For instance, one day when Sherry stopped by our house and encountered Kevin, she asked whether he had watched the Champion game or had being playing LOL lately.

Another time, when Sherry, Henry, Peter, William and I went out to dinner, they started talking about the game experience they had the other night, each giving comments about how they performed.

In short, MMOG participants together create a culture in which they have a shared understanding and as well as a social identity. Within this culture, a moral standard on when and how to game is established and shared among the participants. Being able to bond with other players, the participants appear to be satisfied with their choice of time spent on this leisure. As a result, although players in fact unconsciously devote more time and effort to gaming activity beyond their own account of hours spent, they are capable of separating spare time from discretionary time, and seek accomplishment in both leisure and school obligations.

IMPLICATION: ONLINE GAMING IN THE CHINESE CONTEXT

Near the end of this project, Sherry, Henry and I had an interesting discussion over Henry's time spent on playing LOL. I asked if Henry thought that he spent too much time on games, and he firmly stated:

It is not too much, nor too little, just the right amount, since I always only play when I have completed all other things. Not like the two other people [implicitly giving out names of William and another friend]. While I think Peter is also different from these two; he has control, so that he only plays when he is not busy.

At this point, Sherry began to talk, "but your definition of things that must be done is not correct. You don't take into consideration of other things, or like long term

planning.” In fact, Sherry complained about Henry spending too much time on gaming multiple times the research period when the two of us were together.

Thus, what is an appropriate amount of time for this leisure activity? On one hand, spending little time to improve gaming skills is deemed as uncommitted. On the other hand, although indeed this group of participants have shown the ability to prioritize school obligations, they still receive judgement of spending too many hours on gaming from each other and are regarded as addicted to this leisure activity. In other words, these participants, who were deeply influenced by moral constraint on online gaming, unconsciously possess an extremely critical standard for gaming as a leisure, which even to some extent contradicts their own experience of game time. As mentioned, this collective consciousness is a result of the shared cultural background: in China, from governmental advocacy to parental discipline, an overarching stigmatization on online gaming pervades.

According to the CNNIC report in 2018, the largest group - 30% - of internet users was between age 20 to 29, while the second-large group was age 19 and below, with a percentage of 22.9% (Jiang 2019). Moreover, based on the prediction of by China Youth Internet Association in 2010, 14.1% of the adolescent internet users in urban China are subject to internet addiction, which would amount to 24 million of students. Specifically, Jiang’s book (2019) states that the research also has shown that nearly half of this group - 47.9% - have internet addiction because of spending a significant amount of time on online gaming.

In fact, the link between online gaming and internet addiction in China is constructed by the political influence and media representation in the beginning of this century - the same period of rapid economic development and social change. As the number of internet cafe increased and personal access to internet expanded, incidents related to Netizens took place and gave rise to a moral debate (Golub and Lingley 2008; Sun 2010; Jiang 2019): four teenagers set fire at an Internet cafe and killed 24 people in Beijing due to conflict with the owner (New York Times 2002); two students fell asleep and were killed on railroad tracks after overnight gaming (Watts, 2005); 19 gamers at an internet café were involved in a knife fight because of a conflict over treasure distribution in a MMOG (Liaoshen Evening News 2006).

As a response to the incidents, the Chinese Government soon started an anti-online gaming campaign through various means. In 2007, President Hu Jintao announced his concern on online gaming and stated that purification of the internet was required for building a better online community (Bax 2014). Meanwhile, the Ministry of Culture issued the Circular Concerning Further Strengthening the Management of Internet Cafés and Online Games to control the negative influence of online leisure activities on Chinese adolescents (Golub and Lingley 2008; Jiang 2019). In addition, the Government initiated a massive regulation on internet cafe in 2008, shutting down stores within a 200-meter range from schools, restricting operational hours, and setting an age restriction for entry (Sun 2010; Bax 2014). Same year, Dr. Tao Ren, an influential psychiatrist among Chinese clinical studies, officially documented internet addiction as a mental illness, making China the first and so far

the only country that has developed clinical treatment to cure the addictive behaviors (Sun 2010; Jiang 2019). The proposed diagnostic criteria, based on the assessment questionnaire DSM-IV for pathological gambling, defines a person as internet addict by symptoms of preoccupation and withdrawal, which basically refer to how much time one spends online (Golub and Lingley 2008; Jiang 2019). Following the policy changes, hundreds of boot camps and clinics emerged across the country to offer treatment for young adults who were concerned with internet addiction.

At the same time, the media reinforced the negative image of internet addiction, framing online gaming as an activity against the moral standard. Analyzing Chinese news articles between 1998 and 2009, Qiaolei Jiang (2019) discovered that there were two significant time periods when media coverage on the topic of internet addiction accelerated. The first wave initiated in 2002 majorly was concerned with defining and evaluating the internet problem; the second wave completely took off in 2009 with a focused discussion on finding a solution to the addiction (Jiang 2019). In short, frequently using the word “网络成瘾” (“internet causes addiction”) and reporting scholarly research on its negative psychological effect, the Chinese media displayed online gaming as an extremely risky activity, and suggested young adults as a high risk group (Golub and Lingley 2008; Jiang 2019). As a result, the social belief of online gaming is removed from simply a meaning of leisure, but was understood as a delinquent and problematic behavior similar to using drugs and mental illness. Not only has online gaming become associated with a moral crisis, but also the group of

young adults who engage in this leisure activity are labeled as immoral and are forced to be placed in the clinical institutions.

Indeed, the macro-level mediation on the development of online gaming in China unavoidably brought changes to the interpersonal relations of individual gamers: especially generated tensions between the adolescents and their parents. Due to the extremely competitive environment of the Chinese education system and the labor market, the majority of the Chinese parents see excellence at school the only path to upward-class movement in the future. When observing their children spending so much time and for some money as well on online gaming - a toxic and addictive publicized by the Government and the media platforms - the parents become extremely concerned for their children and believe they are distracted from their study obligation (Golub and Lingley 2008; Bax 2014). As a result, a number of parents who regard their children as internet addicts sincerely hope that their children can be cured, thus have sent their children to boot camps which applies electrical treatment on the patient (Bax 2014; Jiang 2019).

Overall, adolescents' participation in online gaming were inevitable under social transformation: it is a form of leisure in the new era. Relating to Anderson's theory (1961), standards for proper leisure are consistently changing, and are evaluated subjectively based on the social position of the participants. In the case of online gaming in China, the Government and the media played a crucial role in mediating its social understanding: they construct this supposed leisure into a behavioral addiction, which need to be banned from the society. At the same time, Chinese parents expect

their children to only fulfill obligation of studying and not spending much time on leisure also impairs adolescents' practice of self-control over time, which consequently creates conflict between the parent-child relationship.

Nevertheless, the widespread stigmatization on online gaming in China was not solely caused by the governmental and the media responses toward the incidents that happened; rather, the social context of the development of capitalistic market plays a crucial role in forging such interpersonal conflict (Golub and Lingley 2008). In China, the rapid economic development not only has led to the spread of technology, but also reshaped interpersonal relationships through changing the balance between work and leisure. What has not been unveiled in the mainstream research on online gaming is the transformation of work-leisure relation embedded in the social changes. Under the contemporary Chinese moral standards, the adolescents are given no agency in choosing between work and leisure; instead, they are expected to be fully dedicated to academic achievement in order to fulfill the moral standard. Nevertheless, the online gaming market has created a leisure that not only attracts the adolescents but also is easily accessible. On the other hand, the required long-hours of labor in urban settings consumes parents' time with their children, thus diminishing the effectiveness of parental control. As a result, for a number of Chinese adolescents who engage in online gaming, this activity not only represents a way to have fun, but also embodies a break from or even an rebellion against parental control. Essentially, the adolescents choose to play online games to avoid the only yet never-ending obligation of school work, which is pressured by their parents and rooted in the social expectation. Given

the ability to create identities and socialize with friends during gaming, it becomes understandable why there are many Chinese adolescents who spend a significant amount of time playing online games. Therefore, the moral panic toward online gaming in China should be understood as a byproduct of conflicts that occur during social transition, just as how watching television was once regard as a harmful leisure.

Nevertheless, this article does not intend to minimize the actual consequences that excessive online gaming could lead to: diminished attention to physical care, over consumption of gaming features given targeted marketing, and school dropouts. Rather, the analysis suggests that the solution to these problems could be better addressed if we comprehend the complications of online gaming in relation to the social context. Relating back to this research on college students' gaming routine, the results show that individual gamers spend different amounts of time on online gaming by persistently finding their own balances between obligation and this leisure activity. Thus, solutions for the excessive gamers should be based on forging social engagement and opportunities for other types of interest, instead of physically isolating them from the internet. On one hand, to help the adolescents who have led online gaming impair their daily life, parents should provide opportunities for other types of interest cultivation, whether for leisure or for study. At the same time, to support the adolescents to achieve better self-control, the parents should allow them to have time for leisure and independently achieve a balance between study and leisure. On the other hand, instead of putting restraints on game time and limiting access to internet, the Government should encourage adolescents' participation in

extracurricular activities, such as student organizations or sports teams, and embed it as a part of the standard of the Chinese education system. Last, the academia and media should cease reinforcing a stigmatized image of online gaming, by not deliberately creating moral panic and portraying it subjectively. All in all, it is not the games nor the gamers that are inherently addictive or problematic, but the result of an institutionalized moral standard that arose with societal transformations.

CONCLUSION

By studying the temporal experience of nine Chinese students who are now studying full-time in the US, this research sought to understand the meaning of online gaming. As a result, I found that, contributing a large amount of time and emotional effort, the players regard gaming as a serious leisure. Consequently, they participate in MMOGs not only because of the motivations suggested by the previous research. Instead, players desire self-achievement in gaming. Thus, by exchanging experiences and teaching each other strategies to win, these players engage in the creation of an emergent leisure culture, which is in contrast to how the previous studies have theorized: online gaming as an isolated activity from real life.

On one hand, due to the temporality shift in gaming experience, players often *do not possess absolute time control* over gaming duration. Nevertheless, this phenomenon appears in any type of leisure, because people have a tendency to prolong the production of fun (Schulte 2014; Fine and Corte 2017). On the other

hand, the demonstration of time management over gaming in their structured college life implies that the participants are capable of managing time for this leisure activity.

Moreover, through observing and inquiring the time notion embedded in gaming culture, this research complemented the limited analytical perspective of spatial relationship between the gaming world and the reality in previous literature. In contrast to the theory of the magic circle, this research found that players are not completely cut off from reality when engaging gaming activity; instead, they are responsive to the events going on around them during gaming and react accordingly when obligations emerge. Specifically, players are capable of engaging in conversation and interaction with other people in the space, and appear to have a relatively fluid transition in and out of the game world.

Overall, this research has demonstrated significant contributions in several aspects. First, the research bridges the existing theoretical gap between online gaming activity and temporal experiences, providing more thorough understanding of the emerging gaming culture. Second, observing players' gaming routine introduces a novel field research method which can apply to related studies on leisure activities. Moreover, the findings of the study provide implications about how college students balance study and leisure activity. As a result, the argument of proper leisure reflects the significance of cultural values, which can be generated and further reinforced through political means and media representations.

Given the subjectivity of social standards on good and bad leisure (Anderson 1961), the study suggests that regarding online gaming as an addiction and forcing

players to receive treatment not only has formed social stigmatization but also has led to conflicts in interpersonal relations. In the case of Chinese adolescents' gaming activity, the academia and the media failed to look pass the variations among individuals' gaming habits, the impact of test-oriented education system nor the insufficiency of parental presence as a result of social transformation. Although the situation in China seems an extreme case, similar research on problematic internet use has been conducted in various countries as well: Sweden, German, Turkey, the UK, the US, Canada, and Korea. This tendency of linking psychological weakness such as lack of self-control, depression and social detachment to internet use and online gaming disregards the complication of social factors and reduces the problem to traits of the individuals. Therefore, future research should look at the activity of online gaming in a global context: examine the interdependent relation between different culture and this leisure activity, and evaluate the effectiveness and necessities of the existing policies in various countries.

Bibliography

- Anderson, Nels. 1961. *Work and Leisure*. New York: Free Press of Glencoe.
- Anderson, Monica, and Jingjing Jiang. 2018. *Teens, Social Media & Technology* 2018. Pew Research Center. Retrieved April 29, 2019 (<https://search.proquest.com/docview/2063163964>).
- Anon. 2014. "Youth and Internet Addiction in China." *Choice Reviews Online* 51(06):51–3311. Barker, Kim, 2012. "MMORPGing - The Legalities of Game Play." *European Journal for Law and Technology*: Vol. 3, No. 1. Retrieved April 29, 2019 (<https://pdfs.semanticscholar.org/3d2b/bacfcbb8e984c5405a69e4e12687a6ce7dd3.pdf>).
- Bax, Trent. 2014. "Internet Addiction in China: The Battle for the Hearts and Minds of Youth." *Deviant Behavior* 35(9):687. Retrieved April 29, 2019 (<http://ezproxy.macalester.edu/login?url=https://search.proquest.com/docview/1534131723?accountid=12205>). doi:<http://dx.doi.org/10.1080/01639625.2013.878576>.
- BBC. 2017. "Teen's death at Chinese internet addiction camp sparks anger." Retrieved April 29, 2019 (<https://www.bbc.com/news/world-asia-china-40920488>).
- Bessière, Katherine, A. F. Seay and Sara Kiesler. 2007. "The Ideal Elf: Identity Exploration in World of Warcraft." *CyberPsychology & Behavior* 10(4):530-535. Retrieved April 29, 2019 (<http://ezproxy.macalester.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=26271127&site=ehost-live&scope=site>).
- Brown, Douglas. 2011. "The Only (End)Game in Town: Designing for Retention in World of Warcraft." *Gamers : The Social and Cultural Significance of Online Games*. Hoboken: Taylor & Francis. Caillois, Roger and Meyer Barash. 2001. *Man, Play, and Games*. Urbana: University of Illinois Press.
- Crawford, Garry, Victoria K. Gosling, and Ben Light. 2011. "The Social and Cultural Significance of Online Gaming." *Gamers : The Social and Cultural Significance of Online Games*. Hoboken: Taylor & Francis.
- Chuang, Yao-Chung. 2006. "Massively Multiplayer Online Role-Playing Game-Induced Seizures: A Neglected Health Problem in Internet Addiction." *CyberPsychology & Behavior* 9(4):451-456. Retrieved April 29, 2019 (<http://ezproxy.macalester.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=21895816&site=ehost-live&scope=site>).
- Dong, Guangheng, Jiangyang Wang, Xuelong Yang and Hui Zhou. 2013. "Risk Personality Traits of Internet Addiction: A Longitudinal Study of Internet-addicted Chinese University Students." *Asia-Pacific Psychiatry* 5(4):316-321. Retrieved April 29, 2019 (<https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1758-5872.2012.00185.x>).
- Drachen, Anders. 2011. "Analyzing player communication in multi-player games." *Gamers : The Social and Cultural Significance of Online Games*. Hoboken: Taylor & Francis.

- Epel, Elissa S., Bandura, Albert and Zimbardo, Philip G.. 1999. "Escaping Homelessness: The Influences of Self-Efficacy and Time Perspective on Coping with Homelessness1." *Journal of Applied Social Psychology* 29(3):575-596. Retrieved November 20, 2018 (<https://search.proquest.com/docview/1873344936>).
- Ernkvist, Mirko and Patrik Strom. 2008. "Enmeshed in Games with the Government: Governmental Policies and the Development of the Chinese Online Game Industry." *Games and Culture* 3(1): 98-126.
- Falcão, Thiago and José C. Ribeiro. 2011. "The Whereabouts of Play, or How the Magic Circle Helps Create Social Identities in Virtual Worlds." *Gamers : The Social and Cultural Significance of Online Games*. Hoboken: Taylor & Francis.
- Fine, Gary A., and Ugo Corte. 2017. "Group Pleasures: Collaborative Commitments, Shared Narrative, and the Sociology of Fun." *Sociological Theory* 35(1):64-86. Retrieved April 29, 2019 (<https://doi.org/10.1177/0735275117692836>)
- Flaherty, Michael G., and Gary A. Fine. 2001. "Present, Past, and Future." *Time & Society* 10(2-3):147-161. Retrieved November 20, 2018 (<https://doi.org/10.1177/0961463X01010002001>).
- Gamepedia. 2018. "Riot Games League of Legends World Championship." Retrieved April 29, 2019 (https://lol.gamepedia.com/2018_Season_World_Championship)
- Gershuny, Jonathan. 2000. *Changing Times : Work and Leisure in Postindustrial Society*. Oxford England: Oxford University Press.
- Glas, René, Kristine Jørgensen, Torill Mortensen and Luca Rossi. 2011. "Framing the Game: Four Game-Related Approaches to Goffman's Frames." *Gamers : The Social and Cultural Significance of Online Games*. Hoboken: Taylor & Francis.
- Goodin, Robert, James M. Rice, Antti Parpo, and Lina Eriksson. (2008). Discretionary time and temporal autonomy. *Discretionary Time: A New Measure of Freedom* (pp. 27-60). Cambridge: Cambridge University Press. Retrieved April 29, 2019 (doi:10.1017/CBO9780511611452.003)
- Golub, Alex and Kate Lingley. 2008. "'Just Like the Qing Empire' : Internet Addiction, Mmogs, and Moral Crisis in Contemporary China." *Games and Culture* 3(1):59-75.
- Guegan, Jerome, Moliner, Pascal and Buisine, Stephanie. 2015. "Why are Online Games so Self-Involving: A Social Identity Analysis of Massively Multiplayer Online Role-Playing Games." *European Journal of Social Psychology* 45(3):349. Retrieved April 29, 2019 (<https://doi-org.ezproxy.maclester.edu/10.1002/ejsp.2103>).
- Huizinga, Johan. 1955. *Homo Ludens : A Study of the Play-Element in Culture*. Boston: Beacon Press.
- Humphreys, Sal. 2008. "Ruling the Virtual World: Governance in Massively Multiplayer Online Games." *European Journal of Cultural Studies* 11(2):149. SAGE Publications.
- Jiang, Qiaolei. 2018. "OFF THE HOOK: EXPLORING REASONS FOR QUITTING PLAYING ONLINE GAMES IN CHINA." *Social Behavior and Personality* 46(12): 2097-2112. Retrieved April 29, 2019

- (<http://ezproxy.macalester.edu/login?url=https://search.proquest.com/docview/21536309> 89?accountid=12205). doi: <http://dx.doi.org/10.2224/sbp.7103>.
- Jiang, Qiaolei. 2019. *Internet Addiction among Cyberkids in China : Risk Factors and Intervention Strategies*. Singapore: Springer. Retrieved March 27, 2019 (<https://macalester.on.worldcat.org/oclc/1085974114>).
- Juul, Jesper. 2012. *A Casual Revolution: Reinventing Video Games and Their Players*. Cambridge, Mass.: MIT Press.
- Liaoshen Evening News. 2006. "Online game fighting doesn't satisfy their cravings: 19 youths bathe a *wang ba* in blood." Retrieved April 29, 2019 (http://www.gmw.cn/content/2006-01/18/content_498861.htm).
- Longman, Huon, Erin O'Connor and Patricia Obst. 2009. "The Effect of Social Support Derived from World of Warcraft on Negative Psychological Symptoms." *CyberPsychology & Behavior* 12(5):563-566. Retrieved April 29, 2019 (<http://ezproxy.macalester.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=44564373&site=ehost-live&scope=site>).
- Lukavska, Katerina. 2012. "Time Perspective as a Predictor of Massive Multiplayer Online Role-Playing Game Playing." *Cyberpsychology, Behavior, and Social Networking* 15(1):5-54. Retrieved April 29, 2019 (<http://www.liebertonline.com/doi/abs/10.1089/cyber.2011.0171>).
- Luo, Man. 2018. "不可给网络游戏扣上一顶有罪的帽子" ("Do Not Condemn the Online Games"). China: Sina News. Retrieved April 29, 2019 (<http://news.sina.com.cn/s/2018-09-08/doc-ihivtysi6802654.shtml>).
- Maines, David R. 1987. "The Significance of Temporality for the Development of Sociological Theory." *The Sociological Quarterly* 28(3):303-311. Retrieved April 29, 2019 (<http://www.jstor.org/stable/4120644>).
- Majamäki, Maija, and Matilda Hellman. 2016. "'When Sense of Time disappears' – Or does it? Online Video Gamers' Time Management and Time Apprehension." *Time & Society* 25(2):355-373. Retrieved April 29, 2019 (<http://ezproxy.macalester.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=116314006&site=ehost-live&scope=site>).
- Mei S, Yau YH, Chai J, Guo J, and Potenza MN. 2016. "Problematic Internet Use, Well-Being, Self-Esteem and Self-Control: Data from a High-School Survey in China." *Addictive Behaviors* 61:74–79.
- Ministry of Education of the People's Republic of China. "综合防控儿童青少年近视实施方案." ("Integrated Program of Prevention and Control on Adolescents Myopia"). Beijing, China: MEPRC. Retrieved April 29, 2019 (http://www.moe.edu.cn/srcsite/A17/moe_943/s3285/201808/t20180830_346672.html).
- Nardi, Bonnie A. 2010. *My Life as a Night Elf Priest : An Anthropological Account of World of Warcraft*. Ann Arbor: University of Michigan Press. Retrieved November 20, 2018 (<https://macalester.on.worldcat.org/oclc/649029355>).
- Nippon Hoso Kyokai. "三和人材市場." ("Sanhe Human Resource Market"). Retrieved April 29, 2019 (<https://www.youtube.com/watch?v=YcidornQ7rU>).
- O'Connor, Erin L., Longman, Huon, White, Katherine M. and Obst, Patricia L.. 2015.

- "Sense of Community, Social Identity and Social Support among Players of Massively Multiplayer Online Games (MMOGs): A Qualitative Analysis." *Journal of Community & Applied Social Psychology* 25(6):459-473. Retrieved November 20, 2018 (doi: 10.1002/casp.2224).
- Paaßen, Benjamin, Thekla Morgenroth and Michelle Stratemeyer. 2017. "What is a True Gamer? The Male Gamer Stereotype and the Marginalization of Women in Video Game Culture." *Sex Roles* 76(7-8):421.
- Park, Bong-Won, and Jae-Hyeon Ahn. 2010. "Policy Analysis for Online Game Addiction Problems." *System Dynamics Review* 26(2):117-138. Retrieved April 29, 2019 (<https://onlinelibrary.wiley.com/doi/abs/10.1002/sdr.436>).
- Pearce, Celia, Tom Boellstorff, Bonnie A. Nardi. 2009. *Communities of Play: Emergent Cultures in Multiplayer Games and Virtual Worlds*. Cambridge, Mass.: MIT Press.
- Phillips, Tom. 2017. "Electronic heroin': China's boot camps get tough on internet addicts." *The Guardian*. Retrieved April 29, 2019 (<https://www.theguardian.com/world/2017/aug/28/electronic-heroin-china-boot-camps-internet-addicts>)
- Rea, Stephen C. 2018. "Calibrating Play: Sociotemporality in South Korean Digital Gaming Culture." *American Anthropologist* 120(3):500-511. Retrieved April 29, 2019 (<http://ezproxy.macalester.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=131352013&site=ehost-live&scope=site>)
- Riot Games. 2016. "Game Info." Retrieved April 29, 2019 (<https://na.leagueoflegends.com/en/game-info/>)
- Rutter, Jason and Jo Bryce. 2006. *Understanding Digital Games*. London: Sage.
- Salen, Katie and Eric Zimmerman. 2004. *Rules of Play : Game Design Fundamentals*. Cambridge, Mass.: MIT Press.
- Schulte, Brigid. 2014. *Overwhelmed : Work, Love, and Play When No One Has the Time*. First ed. New York: Sarah Crichton Books, Farrar, Straus and Giroux.
- Silverman, Mark and Bart Simon. 2009. "Discipline and Dragon Kill Points in the Online Power Game." *Games and Culture* 4(4):353-378. SAGE Publications
- Simpson, Joseph M. 2008. "Virtual Rituals: Structural Ritualization Theory and Massive Multiplayer Online Role-Playing Games." ProQuest Dissertations Publishing. Retrieved April 29, 2019 (<https://search.proquest.com/docview/193994693>).
- Stebbins, Robert. 2001. "Serious Leisure." *Society* 38 (4): 53 – 57. Retrieved April 29, 2019 (doi:10.1007/s12115-001- 1023-8)
- Steinkuehler, Constance A., and Dmitri Williams. 2006. "Where Everybody Knows Your (Screen) Name: Online Games as "Third Places"." *Journal of Computer-Mediated Communication* 11(4):885-909. Retrieved November 20, 2018 (<https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1083-6101.2006.00300.x>).
- Sun, Helen. 2010. *Internet Policy in China : A Field Study of Internet Cafés*. Lanham, Md.: Lexington Books.
- Szell, Michael, and Stefan Thurner. 2010. "Measuring Social Dynamics in a Massive Multiplayer Online Game." *Social Networks* 32(4):313-329. Retrieved April 29,

-
- 2019 (<https://www.sciencedirect.com/science/article/pii/S0378873310000316>).
- Taylor, Kate E. 2011. "Wordslinger: Visualizing Physical Abuse in a Virtual Environment." *Gamers: The Social and Cultural Significance of Online Games*. Hoboken: Taylor & Francis.
- Taylor, T. L. 2009. *Play between Worlds : Exploring Online Game Culture*. 1st MIT Press pbk. ed. Cambridge, Mass.: MIT Press.
- The Associated Press. 2002. "24 Killed in Fire at Internet Cafe in Beijing." *The New York Times*. Retrieved March 27, 2019 (<https://www.nytimes.com/2002/06/16/world/24-killed-in-fire-at-internet-cafe-in-beijing.html>)
- Watts, Johnathan. 2005. "Harsh reality of China's fantasy craze: Online games blamed for thefts, suicides and murders." *The Guardian*. Retrieved March 27, 2019 (<http://www.guardian.co.uk/china/story/0,7369,1448786,00.html>)
- Weber, Ian, and Lu Jia. 2007. "Internet and Self-Regulation in China: The Cultural Logic of Controlled Commodification." *Media, Culture & Society* 29(5):772-789. Retrieved April 29, 2019 (doi: <http://dx.doi.org/10.1177/0163443707080536>)
- Yee, Nicholas. 2002. "Ariadne –Understanding MMORPG Addiction." Retrieved April 29, 2019 (<http://www.nickyee.com/hub/addiction/home.html>).
- Yee, Nick. 2006. "The Demographics, Motivations, and Derived Experiences of Users of Massively Multi-User Online Graphical Environments." *PRESENCE: Teleoperators and Virtual Environments* 15(3):309-329 . Retrieved April 29, 2019 (<http://www.mitpressjournals.org/doi/abs/10.1162/pres.15.3.309>).
- Young, Kimberly S. and Cristiano Nabuco de Abreu, eds. 2018. *Internet Addiction in Children and Adolescents : Risk Factors, Assessment, and Treatment*. [Enhanced Credo edition] ed. New York New York: Springer Publishing Company.