The need to achieve: Players' perceptions and uses of extrinsic meta-game reward systems for video game consoles

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ABSTRACT

Microsoft’s Xbox and Sony’s PlayStation overlay achievement and trophy systems onto their video games. Though these meta-game reward systems are growing in popularity, little research has examined whether players notice, use, or seek out these systems. In this study, game players participated in focus groups to discuss the advantages and disadvantages of meta-game reward systems. Participants described the value of meta-game reward systems in promoting different ways to play games, giving positive feedback about game play, and boosting self-esteem and online and offline social status. Participants discussed completionists, or gamers that want to earn all of the badges associated with the meta-game. Though self-determination theory and its subtheory cognitive evaluation theory suggest that extrinsic rewards might harm players’ intrinsic motivation, our findings suggest players may see these systems as intrinsically motivating in this context. The implications of rewards systems for motivation, video game habits, and internet gaming disorder are discussed.

1. Introduction

Video games are reaching staggering levels of popularity as they continue to proliferate across a variety of media formats including consoles, personal computers, and cell phones. This surge in the availability of video games has been matched by a surge in the popularity of video games. Recent forecasts predict that the global market for video games will grow from $67 billion in 2012 to $82 billion in 2017 (Gaudiosi, 2012). Given the market stakes, gaming companies have sought methods to keep their consumers engaged and loyal. Microsoft’s Xbox achievement system and Sony’s PlayStation trophy system represent new ways the industry is trying to capture and maintain the interest of gamers.

Providing feedback is an important component of interactive systems (Sundar, 2007). Meta-game rewards are systems layered on top of the traditional gaming experience. These systems are most often associated with the badges that serve as visual indicators of the completion of a task, but transcend individual badges as they can give aggregate scores across multiple games. Essentially, these systems are an overarching game through which players earn points and rewards by playing other individual games.

Games provide lists of badges one can earn extraneous to completing the game, such as a badge for defeating 100 enemies or sneaking through the game without harming anyone. As players complete these tasks, a notification appears on screen with the title of the badge and associated trophy (PlayStation) or achievement points (Xbox). These trophies and points are uploaded to individuals’ system profiles, allowing their friends and anyone encountered online to see all of the games they have played and the various accomplishments they have earned during game play. Profiles also tabulate overall scores of one’s total achievements; the Xbox uses a “gamer score” that totals up every in-game achievement’s value, and PlayStation uses a level system that increases as one accrues more trophies. (We will use the term badges throughout the paper to refer to both trophies earned on the PlayStation trophy system and achievements earned on the Xbox achievement system.) These overlaid meta-game reward systems are relatively new, and it is not clear how gamers are affected by these systems. Self-determination theory (Deci & Ryan, 2000) and its two associated subtheories of organismic integration theory (Deci & Ryan, 2000) and cognitive evaluation theory (Deci & Ryan, 1980) provide us with an appropriate framework to understand

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how badges may affect individuals, particularly their motivation to play the game.

2. Theoretical background

2.1. Motivation

Individuals might play a game for two reasons: because they feel pushed by some outside force, such as rewards or threats, to do so (i.e., extrinsic motivation), or because they wish to do so for their own reasons (i.e., intrinsic motivation). Typically, intrinsically motivated individuals stick with a task longer and enjoy it more (Deci & Ryan, 1980). Considerable research suggests that giving someone a reward for a task not only increases extrinsic motivation, it decreases intrinsic motivation (Deci, Koestner, & Ryan, 1999; Lepper, Greene, & Nisbett, 1973). In other words, individuals start playing to receive more rewards rather than due to an internal desire to keep playing. This extrinsic motivation might be effective to influence behavior in the short term, but when the reward is removed, the impetus for action is removed, there is no internal motivation to continue with the task (Lepper et al., 1973). Typically, individuals play a video game because they are intrinsically motivated to do so; there is no external force directing one to play (Ryan, Rigby, & Przybylski, 2006). Thus, it is possible that the badge systems created for the Xbox, PlayStation, and other gaming platforms may hinder intrinsic motivation to play games. Self-determination theory and its subtheories of organismic integration theory and cognitive evaluation theory provide a useful framework for understanding how a variety of factors can impact intrinsic and extrinsic motivation.

2.2. Self-determination theory

Self-determination theory (SDT) posits that there are three core psychological needs: competence, the feeling that one has mastery and can influence outcomes; autonomy, the feeling that one’s are guided from within, rather than by outside forces; and relatedness, the feeling of being connected to others (Ryan & Deci, 2000). Research has found that need satisfaction results in an increase in intrinsic motivation (Ryan & Deci, 2000).

2.3. Organismic integration theory

Researchers investigating the SDT framework created organismic integration theory (OIT; Ryan & Deci, 2000) to delineate the differences in intrinsic and extrinsic motivation. In OIT, Ryan and Deci (2000) expanded on traditional conceptualizations of intrinsic and extrinsic motivation by extending these concepts from a dichotomy to a continuum. OIT posits multiple types of extrinsic motivation that differ according to the degree regulations associated with the behavior are internalized and integrated (Ryan & Deci, 2000). Internalization refers to the extent individuals perceive their participation in the behavior as the result of internal or external forces. Integration is a transformative process in which regulations are changed by the individual into factors that are important to the self.

Deci and Ryan (2000) OIT posits the following four types of extrinsic motivation: external regulation, introjected regulation, identified regulation, and integrated regulation. Externally regulated behaviors are perceived as externally motivated and are completed to satisfy needs for rewards or external demands. Introjected regulation occurs when an individual perceives the locus of causality as somewhat due to external forces and performs the behavior in question for issues related to their ego. Most notably, individuals performing behaviors under introjected regulation may perform these behaviors to receive boosts to their ego (Deci & Ryan, 2000). Regulation through identification involves a locus of control that is perceived to be somewhat internal and the behavior in question is seen as important to the individual. Although introjected regulation involves ego-involvement, Deci and Ryan (2000) assert that regulation through identification is different as the individual now perceives their participation in the behavior as stemming from internal forces. Finally, integrated regulation occurs when the individual completely attributes their behavior to internal forces and has aligned the behavior with other core values. Integrated regulation is still considered a form of extrinsic motivation as individuals are not engaging in the behavior solely for the satisfaction of the basic psychological needs associated with SDT. The different types of extrinsic motivation may help us to understand the factors that are driving individuals to engage with metagame reward systems.

2.4. Cognitive evaluation theory

Cognitive evaluation theory (CET) focuses on experiences of competence and autonomy during an activity (Ryan & Deci, 2000). CET argues that the extent to which rewards affect a user’s intrinsic motivation depends on whether the reward is perceived as controlling or informational (Deci & Ryan, 1980; Ryan, Mims, & Koestner, 1983). Feedback or rewards that are considered controlling undermine intrinsic motivation as the recipients believe they are being coached to perform particular behaviors (Ryan & Deci, 2000). Informational feedback, however, can enhance intrinsic motivation provided it is relevant to the task and individuals perceive their participation in the behavior as driven by the self (Ryan & Deci, 2000). It is unknown whether badge systems for video games are perceived as informational or controlling, as this may influence players’ intrinsic motivation.

2.5. Signaling theory

In addition to understanding the role of video game badge systems on player motivation, there is little research on how information from a badge is used to make judgments about another player in video games or in other online communities that provide users with badges. Badge systems are inherently social and are often displayed through leaderboards or online profiles that allow for viewing and commenting on one another’s achievements. Badges serve as cues that offer information about a player. These cues can vary in meaning, depending on how they are interpreted (Harackiewicz, 1979). For example, a badge can denote how skilled a player is at a particular game, how much time that player has played a game, or how far through the story a player has progressed.

Signaling theory attempts to understand how communicators send and interpret information, particularly through transmitted cues (Donath, 2007). Cues provided intentionally by a party are referred to as signals. Donath (2007) proposed three types of signals: assessment, strategic, and conventional. A gamer’s interpretation of another gamer’s skill may be contingent on the classification of badges according to signaling theory.

Assessment signals are considered the best indicators of the characteristics in question as they are inherently reliable. For example, Usain Bolt’s world record of 9.58 s for the 100 m would be classified as an assessment signal for running ability as the signal is impossible to fake by the actor. The second category of signals are strategic signals. A strategic signal indicates ownership of a resource through flagrant wasting of the resource. These signals are not inherently reliable as individuals are capable of producing deceptive signals. Consider the person that buys an imitation
designer handbag to convey that they are wealthy. The last class of signals is commonly known as conventional (Donath, 2007). The relationship between this class of signals and the quality in question is determined by societal convention (Donath, 2007). More simply, some signals develop a common interpretation among particular communities.

Thus, the purpose of this research is to examine the role of video game badge systems in the game play experience. Specifically, we wanted to investigate how players felt badges influenced their play, their motivation, and their social perceptions of other players. Because this study is among the first to examine gamer perceptions of badge systems considering intrinsic and extrinsic motivation, we posed the following research questions:

RQ1: How do badge systems affect the different forms of intrinsic and extrinsic (external regulation, introjected regulation, identified regulation, and integrated regulation) motivation?
RQ2: What types of information can players gain from viewing a badge relative to their own performance or the performance of others?
RQ3: What, if any, impact do badges have on a player’s self-evaluation?
RQ4: What are the positive and negative aspects of badge systems?

3. Method
3.1. Participants
Participants were 27 men and 9 women from a Midwestern university who had indicated that they had played at least 50 h of video games within the last six months and owned a video game console. Participants in the study ranged from 18 to 38 years old ($M = 22.5, SD = 3.42$). Nine focus groups were conducted containing between 3 and 6 participants.

3.2. Procedure
This study employed a focus group methodology given limited research on gamer perceptions of badge systems. Two male moderators (the first and second authors) trained in focus group methodology and familiar with the subject matter conducted the groups.

When discussants arrived at the study location, they were greeted by the moderator(s). Participants were provided with a copy of the consent form and welcomed to ask any questions both before and during the study. Participants completed a brief demographics questionnaire. The moderators worked from the same general script in order to ensure a level of consistency across all of the focus groups. General questions were asked to the group as free responses, and additional questions were asked to get feedback from each individual.

3.3. Coding
An open coding process was adopted for the study data (Strauss, 1987). During the initial coding session, the authors discussed notes taken during the focus groups and highlighted common themes. The authors then coded the first focus group together. The initial set of codes developed was used as a framework for subsequent video coding including the next two focus groups which were coded separately to ensure agreement on themes. The remainder of the focus groups were coded for all themes and then compared to the initial set of codes developed during the first coding session. During this comparison process, codes were elaborated upon by the authors and any disagreements regarding themes were discussed until a consensus was reached. For example, the completionist theme initially focused solely on individuals interested in earning all of the badges available in a particular game. However, subsequent discussions revealed that third-party perceptions of completionists were just as important in understanding these gamers as was first-hand experience. The theme was subsequently expanded to include both explanations of completionist behavior and attempts to understand completionists from a third party perspective. Code names are used in describing the results of the study to protect participants’ identities.

4. Results
4.1. Evaluation
Participant responses to badge systems ranged from indifference to extreme positivity. Some participants expressed mixed feelings. For example, Randy stated, “I’d give them a 10 [out of 10]. There is no downside to achievements.” Roxanne claimed, “I’m different because I like every single achievement. Even if it’s something simple I’m like ‘yay!’” Although these badge systems are relatively new, Gordon asserted, “I think a game needs them.”

Not all participants agreed that badges were beneficial. Clover stated: “I’m mostly indifferent but I know if those achievements didn’t exist there are some games I wouldn’t care about. They do add a bit of an extra incentive.” Allen did not include any of the positivity found in Clover’s comment: “I don’t care for it. It doesn’t make me want to play any more or less. It’s just something that pops up on the screen. It’s not why I play, I guess.” Dillon expressed a similar sentiment when he stated, “When I play Xbox, if you look at my game there are barely any achievements unlocked. The only thing I do is to go play online.” Participants that did not express positive feelings regarding badges indicated mixed feelings on the badge system or a preference for playing the game in a way that did not require or use badges.

4.2. Purpose of badges: informational vs. controlling
Badges were seen as both rewards one receives for completing in-game tasks as well as assignments that one must complete. The difference in perception between rewards and assignments appeared to influence whether participants perceived the badge to be informational or controlling. Generally, badges as rewards were considered to be something one gets when one “complete[s] certain tasks. The harder the task the better the reward,” as Sam described. Badges that were perceived as rewards were evaluated positively by participants. According to Sam,

may be it’s that little thing that dings up at the corner of the screen that lets you know that you’ve achieved something. I guess it lets you know that, like, there’s still more that you can do…. A new way to play that gives me a new way to challenge myself.

Sam describes the badge system as one that provides informational, rather than controlling, feedback: it lets him know when he has done well, but is not overbearing or forceful. Moreover, Sam’s description of the badge system also reflects the introjected regulation extrinsic motivation type, as in-game reminders of one’s accomplishments can provide a momentary boost to one’s self-esteem. When participants perceive the badge to be a reward for work accomplished, they perceive this as positive feedback and are motivated to continue playing.
On the other hand, badges were also seen as objectives given to extend gameplay and offer extra assignments for the player to complete that are not explicitly described by the game’s narrative. Travis viewed these badges as controlling, believing that these are meaningless additions included just for the sake of adding content: “Yeah, like pick something up and run around something five times, and you get some weird stupid achievement. You have to do something absurd just to get some achievement.” Dexter stated, “I feel like it’s a ploy to make you play the game all over again.” After further consideration, Dexter remarked, “Achievements are a good ploy a business can use to keep you buying the next game.” This perception of badges as ploys to encourage meaningless behavior or increase replay value and brand loyalty indicate that some gamers view the presence of badge systems as an attempt to influence their behavior.

4.3. Gameplay experimentation

Players also liked badge systems because the systems also offer suggestions for playing the game in an entirely different way. As Randy stated, “I feel like the whole point of achievements is to make you play another play style.” Austin agreed: “I like games that have achievements that make you play the game differently. Or do something out of the ordinary.” Quincy argues, “They have some challenging achievements. There was one achievement where you had to beat a level without adjusting your bike. And it took me an hour to get, and it was pretty rewarding when I got it.” For Quincy, the achievement not only promoted a different way of playing the game but the challenge and badge associated with this new style of gameplay increased the enjoyment Quincy derived from the experience.

Danny discussed how the presence of achievements can alter strategies during a second playthrough of a game: “If I am already planning on going through the game anyway I might try to get some of the achievements. Like so many kills with the assault rifle if I didn’t use it on my first playthrough.” Achievements did not necessarily increase the replay value for Danny, but nevertheless promoted a different gameplay experience.

4.4. Ego maintenance

Participants repeatedly mentioned how earning badges can affect their sense of self. For these gamers, badges seem to be tied to their ego, and participants reported feeling pride and a sense of accomplishment upon receiving badges. They were most proud of an achievement that required an extensive amount of skill and time. As Blake stated, “I feel a sense of accomplishment, especially if [the badge] was a more difficult one.” Time invested also led to an increase in reported feelings of satisfaction, as Thomas said:

If you are going out of your way, like I am going to kill this many people with this gun or I am going to explore this area like you put in the time, it’s just like a reminder. Like an affirmation almost. Yeah, you did this, pat on the back, good job.

The issues of difficulty and time were frequently raised by gamers that actively pursued badges, supporting research that individuals who seek out challenges are more intrinsically motivated to achieve a difficult goal (Bandura, 1982). Natalya’s experience concerning difficult achievements best illustrates how difficult assignments have the potential to be intrinsically motivating:

When you are going for something really difficult, there is a fine line there where it is so difficult that it’s aggravating and you are just mad about it. Then there’s a really fine line where it’s difficult enough that you actually feel accomplished like when you achieve it.

Natalya’s pursuit and attainment of difficult badges provides her with the opportunity to prove her gaming competence. According to SDT, activities that allow individuals to affirm their competence are likely to be intrinsically motivating.

4.5. The completionist

Across all of the focus groups, participants discussed the “completionist,” who Randy described as “someone who wants to beat the game entirely.” Essentially, a completionist (also described as a “hundred percent”) is an individual who attempts to earn every possible badge in a given game. The majority of participants agreed that badge systems offer more assignments for a completionist to accomplish. The traits of a completionist provided by participants are similar to those described of one high in the need for achievement (McClelland, 1961): they are independent, value challenges, and can devote themselves to long-term goals with a singular focus. Participants who self-identified as completionists mentioned the drive not just to finish the game, but to achieve all of the tasks within the game. As Shawn said,

At first I was just interested in … playing the game. And then I beat the game and kept playing it online, and I got closer and closer to mastering each weapon. And the closer I got the more motivated I was to finish … and I just had to do it.

In describing her behavior, Natalya stated, “I am a total achievement whore.” This slang refers to a pattern of behavior that is common in gaming communities related to meta-game rewards (Dixon, 2013). Clover described an achievement whore as “someone that goes after achievements relentlessly.” This player type appreciates the reward system and acknowledges that it keeps them committed to games despite their interest in the game itself. As Natalya stated, “I would also like to say kudos to the gaming industry. I have picked up games that I would never have played again in order to get some achievements.” Similarly, Sam stated, “If the gameplay is so-so, I’ll go back for the trophies.”

For self-described completionists, the presence of additional achievements increases the likelihood they will return to the game even if they did not enjoy playing through it. For a completionist, badges can be classified as an example of identified regulation. Completionists have begun to internalize the badge system’s goals as additional challenges to complete and as praise for completing tasks. However, completionists have not completely aligned the goals of the badge system with their other behaviors, which is evident from the anger and frustration that completionists report when they are incapable of earning all of a game’s badges.

Jeanette’s comment highlighted the incomplete merging of the goals of the achievement system with her behavior: “Anything that has an achievement bar is really problematic for me. I want to collect all the things.” Being unable to complete a task would be intensely dissatisfying for a completionist, as Randy demonstrated:

[In] Call of Duty 4, I had all of the achievements but two. And I got really mad at the game because it glitched out and I couldn’t get one. And now it’s impossible for me to get that last one.

Thomas noted that this dissatisfaction can linger well after a game is defeated: “It’s so irritating if you miss one … [The game
has been beaten since I was like ten, but I still go back and it’s like, ‘I gotta do this’” [shakes his fists].

These quotes illustrate that a completionist perceives badges as informational and competence-reflecting, which indicates that badge systems should be particularly motivating for a completionist although they might not be for other individuals. However, a badge system that features especially difficult assignments or a game error that keeps a player from earning all available badges could backfire and cause much more frustration in a completionist than a typical gamer.

Although completionists focused on the positive aspects of badge systems, the experiences they shared belied a tension for this type of gamer. They take pleasure in striving for badges, but obstacles to obtaining badges were particularly frustrating for this group. Whereas a regular player might give up rather than be continually frustrated or angered by a seemingly impossible badge, completionists are not satisfied with abandoning the goal. For example, Steve stated, “Once you get all the trophies, it’s the finality. You can say I conquered this.” Sam agreed:

That’s the first thing I do. If I can get all the trophies by doing hard mode, I am going to play hard mode even if I am going to resist the urge to tear my hair out and throw my controller across the room.

For Steve and Sam, their willingness to devote considerable time and exhaust their patience to earn all the badges available in a game reflects the concept of obsessive passion, which occurs when an individual feels compelled to engage in a particular activity due to the outcomes associated with the activity (Vallerand et al., 2003). In particular, boosts in self-esteem may be particularly problematic for passions that are classified as obsessive. For example, Karl stated, “Firm difference between completion and achievement. You can get 100% in most story modes — that’s the standard. If you get all the trophies that feels a lot better.” Karl’s quotation highlights the emotional boost that completionists derive from earning all the trophies available in a particular game. Research has found evidence that obsessive passion associated with computer games is linked to a measure of computer game addiction (Wang & Chu, 2007). Additionally, completionists’ comments suggested that seemingly impossible badges actually decreased their enjoyment and liking of games in which these occurred. Thus, although they are proponents of badge systems in games, completionists seem at highest risk for these systems’ negative consequences.

Interestingly, there was a clear divide between those who described themselves as completionists and those that did not. Whereas completionists described badge systems as very motivating and important, non-completionists thought that a singular focus on the badge system was missing the point of playing the game. Although self-described completionists typically viewed themselves as driven to achieve, others framed the compulsive game. Although regular players might give up rather than be continually frustrated or angered by a seemingly impossible badge, completionists are not satisfied with abandoning the goal. For example, Steve stated, “Once you get all the trophies, it’s the finality. You can say I conquered this.” Sam agreed:

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4.6. Signaling value of badges

Badges have augmented the social nature of console-based gameplay by providing an objective point of comparison for players rather than subjective self-reports of one’s accomplishments. Participants’ arguments indicated that badges are still a source of scrutiny, however. Specifically, players disagreed about whether badges were clear indicators of skill or merely artifacts of time investment. Karl claimed that PlayStation trophies indicated skill: “You get those trophies because you have skill. They are a visible display of your skill.” Similarly, Arlene argued, “I generally think they are better (than me) if they have more badges.” Karl and Arlene’s belief that badges serve as visual displays of skill reflects research on performance-contingent rewards, which are typically provided for excellent performance (Deci & Ryan, 1980). Pursuit of badges gave players informational feedback on their gaming skills and “show[ed] something good you’ve done [as] people know what it took to get,” as Dillon said. Badges provide information about playing skills to individual gamers and their surrounding community. In addition to reflecting the research on performance contingent rewards, Karl and Arlene’s quotations indicate they interpret badges as an assessment signal in the realm of gaming competence. Assessment signals are the easiest signal to interpret as the presence of the signal, in this case badges, indicates the presence of gaming skill.

Some participants were firmly in the camp that these badges did not indicate ability. Rather, as Tony argued, “They indicate how much time you put in.” Blake claimed, “You could just be spending all of your time trying to get those badges.” For these gamers, badges indicated time spent as opposed to skill. Badges viewed as a product of time invested are engagement-contingent rewards. These rewards are given to individuals solely for their participation, regardless of performance. Engagement-contingent rewards typically do not incentivize behavior as these rewards are perceived as controlling and result in decreasing intrinsic motivation (Deci & Ryan, 1980). Perhaps the best summation of engagement-contingent badges was provided by Dina: “You don’t want a participation plaque.” Some gamers coupled this perspective of time invested with the idea that the pursuit of rewards is only for intensive gamers. Dexter claimed, “I don’t see a gamer score like that [as] showing how good someone is at a game. It’s more like just the stats from a game. How much of a gamer [the person is] maybe?” Similarly, Bill claimed, “Someone looks at your achievements and says you play too many games.” In this regard, badges are not viewed positively as a symbol of one’s video game prowess but instead reflect a pattern of playing too frequently. This interpretation of badges as not indicative of skill but instead time spent serves as an example of a conventional signal. Conventional signals vary in interpretation and it appears that there is a significant difference in how individuals interpret badges. For invested individuals, badges are assessment signals that reflect gaming competence while the uninterested view these as conventional signals indicating only time spent.

4.7. Social status and bragging rights

When discussing badges, gamers often made reference to the concepts of bragging rights and social status. For some gamers, earning all of the achievements in a game conferred a status among their family members, friends, and other gamers they...
may meet online. Moreover, this newfound social status granted the individuals bragging rights. Sam’s description of his relationship with his family members provides a clear illustration of this link:

Yeah, it’s the playground dick-measuring contest. Every male member of my family and a few female members have PlayStation accounts. My brother and I share an account. Our account is 15 almost 16 and everyone else is around 10. We go, “Wow, you guys don’t have any skill,” even though we know most of the trophies don’t require any skill. The fact that we have more means that we are better in some way or we just have more time.

Although Sam acknowledges that time plays a role in his collection of PlayStation trophies, he still uses his extensive PlayStation network profile to elevate his stature amongst his family. Not only does Sam brag about his video game accomplishments but he believes that these accomplishments signify his superiority. Similarly, Marco claimed, “I know on Xbox you get all these points and it makes you look better, especially for your friends. You can see how people do on every game.” Natalya, on the other hand, used the achievement system as a way of establishing her status in the online community:

My motivation for achievements is that they are serious nerd credit on Xbox. You could have played 100 games and not played one and because you didn’t play that one and you’re a chick, it’s like ‘Oh god, you don’t know anything.’ I feel like I have to have those achievements because it just gets people off my back.

Natalya’s discussion of meta-game rewards as a form of “nerd credit” is comparable to Consalvo’s notion of gamer capital (2007). According to Consalvo (2007), gaming capital is credit amassed within the gaming community on the basis of specialized knowledge such as how to unlock hidden badges. Natalya’s constant acquisition of meta-game rewards is at least in part fueled by her desire to be seen as an equal member of the gaming community.

Similarly, Consalvo (2009) argues that the acquisition and demonstration of gaming capital is completed for the purpose of establishing one’s place in a gaming community. The Entertainment Software Association (2014) estimates that females make up approximately half of the gaming audience, yet women are perceived as outsiders and are often targeted for harassment (Fox & Tang, 2014). Thus, female gamers like Natalya face a variety of hurdles if they wish to achieve levels of stature in the gaming community comparable to their male counterparts.

Status within the system is not always sufficient for players like Jeremy: “I guess it’s also you don’t want to complete the game if your friends don’t have it because then you won’t be able to brag about it.” Jeremy indicates that although other gamers are capable of recognizing the work involved in acquiring specific accomplishments, an inability to brag about these accomplishments among friends renders the system meaningless for some gamers.

4.8. Disruption to engagement

One of the most commonly cited negative aspects of badge systems was the disruptive nature of the in-game badge notification. Typically, notifications occur in a small on-screen pop-up that obscures a portion of the screen, accompanied by a sound and title of the achievement earned. When participants are enjoying a media experience, they are absorbed and feel immersed in the environment; interruptions disrupt this experience (Green, Brock, & Kaufman, 2004). As Trent noted, notifications can disturb that sense of immersion and enjoyment: “In a game that’s all story … in a dramatic cut scene and you hear that bop and see the green bubble it does kind of break up the moment a little bit. It loses a bit of the drama.” Shawn describes how notifications can interfere with play:

Somebody got an achievement and it popped up on the last kill … and I didn’t get the kill because that thing popped up right in front of me. It didn’t ruin the game by any means, but I was really aggravated.

Sam noted there could be larger consequences in game: “It’s usually right when I’m in the middle of this important firefight, and you get the ping and you’re like, what? And then boom, you’re dead.” Mandy claimed, “Sometimes you get badges for stupid things and you are like, stop bothering my game.” Most described this as only a minor annoyance, however, and not a reason to cease playing the game, as Steve said:

It is a little annoying if it would pop up right there if you’re doing the story mode and it’s [a cut scene] and it pops up. It does annoy me a little bit, but it’s not like, ‘Screw this game, I’m not going to play anymore.’

5. Discussion

5.1. Interpretation of findings

In this exploratory study, focus group participants offered insights into their interactions with and their perceptions of badge systems. We were interested in understanding how badges affected intrinsic and extrinsic motivation, specifically whether these systems give gamers new reasons to play or whether the addition of extra objectives creates more pressure on players to complete the objectives. Whether an individual finds these systems motivating depends on individual factors such as the need for achievement in addition to characteristics of the game and the badge system. Though badge systems are required for Xbox and PlayStation games, there are no universal guidelines for creating these systems. Designers are free to make them as easy, difficult, social, or distracting as they choose and this lack of unity showed up in our participants’ responses. However, some concrete themes emerged that can help indicate how gamers perceive these badge systems and indicate how motivating they might be.

Our participants continually spoke of badges as both assignments to complete and rewards received for performing tasks. Part of the problem that emerges from studying these systems theoretically is that it is very hard to differentiate between badges as assignments or rewards, and much of the difference may depend on the type of gamer playing and in what way that gamer is exposed (or chooses to approach) the overlaid badge system. For example, gamers who were completionists looked to badges for additional objectives or new ways to complete the game and spoke of badges as assignments to complete. These gamers often surveyed the list of badges before playing the game and would play through the game with intention of earning the badge as opposed to alternative goals, such as defeating the game quickly or playing through the game to see the end of the narrative. Gamers who spoke of the social status benefits of badges and those who were indifferent about the badge system tended to speak about badges as rewards. These gamers often played a game without

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knowing what badges were available and stumbled onto earning various badges, and thus the badges were perceived as rewards for their efforts. Badges that were interpreted as arbitrary by participants were oftentimes perceived as controlling as opposed to informational. These badges may have been considered controlling because they required participants to engage in behaviors that did not allow participants to demonstrate their competence. Arbitrary rewards for performing a behavior closely resembles the engagement-contingent rewards that some participants actively disliked.

Indifferent individuals indicated that the badge systems did not appeal to their particular drives for playing games. Others highlighted the lack of tangible benefits, such as the exchange of gamer points for coupons. For these gamers, the badge system was too abstract to matter.

There was a divide among participants regarding what earning a badge meant. Some participants indicated badges were assessment signals indicating gaming competence while other participants argued badges primarily demonstrated time spent not the possession of skill. Key factors that could impact this interpretation included when the game was released, perceptions of difficulty, and other indicators of skill on the owner’s profile (e.g., places and on leaderboards or trophies for winning competitions). Thus, the information one can gain from a profile with badge information may actually decrease over time, as it becomes difficult to determine whether one achieved a badge through skill or sheer effort and time. Designers might circumvent this problem by indicating the number of times a gamer attempted to successfully earn a badge in the player’s profile. Designers could also implement a menu that allows players to indicate when they are attempting to earn a particular badge. Adding this information to a profile may help to offset difficulties in determining a player’s skill when viewing older or unfamiliar games on one’s profile. Furthermore, other gamers could offer to help an individual to earn a badge that requires multiple players if this information is posted on a gamer’s profile.

One consistently cited benefit to earning a badge is that it can provide a short-term ego boost. When respondents believed that earning the badge was difficult and time-consuming, they felt a sense of efficacy and pride. This momentary increase in pride may be indicative of the introjected regulation extrinsic motivation posited by Deci and Ryan (2000). Conceptually, the Xbox or PlayStation badge systems are measures of a gamer’s performance across all games. Rather than being an indicator for each individual game, the player’s profile that displays earned badges and total achievement points represent a gamer’s aggregate performance. Because this profile is more representative of a gamer as a whole, it is likely that this is seen as more important and defining of the player’s aggregate experiences with video games.

As badge profiles continue to grow in popularity websites have sought ways to capitalize on the spread of these badge systems. Some websites, such as Giantbomb.com compile individual badge profiles from sources such as Steam.com, Xbox, and PlayStation into comprehensive “player dossiers” that provide in-depth analyses regarding game-play habits across a variety of badge systems (Medler, 2011). Individuals highly concerned with achievement would likely be interested in beating this meta-game (Carter, Gibbs, & Harrop, 2012). The meta-game score differs from individual game scores as it gives information about the player’s game-playing habits and genre preferences. The aggregation of all of this information outside of individual systems creates a new form of social presence for players and a new domain for information-seeking and social comparison.

5.2. Limitations

As this was an exploratory study into gamer perceptions of badge systems there are limitations. Although the use of focus groups allowed the research team to gain deep insight into how members of the gaming community perceive the badge systems, we cannot make claims regarding the generalizability of the opinions expressed by the college-aged individuals in our sample. The rich data produced as part of our focus groups will serve to guide future quantitative research designed to address the degree to which the attitudes expressed in this piece are common across wider samples of gamers.

5.3. Future research

In addition to examining how video game experience and age affect perceptions of badge systems, future research may want to explore how different types of badges and badge systems appeal to different types of gamers. A recent framework proposed by Stewart (2011) merges the classic Bartle (1996) typology on gamer types with the four Keisey temperaments. Under this unified model, Stewart (2011) proposes the following combinations of temperament and player types: Idealist/Socializer, Guardian/Achiever, Rational/Explorer and Artisan/Killer. Stewart (2011) summarizes the combinations as idealist/socializers seeking identity, artisan/killers seeking new sensations, rational/explores seeking knowledge, and guardian/achievers seeking security. We believe this integrative framework can be tested in relation to patterns of gameplay associated with meta-game reward systems. For example, Natalya spoke of badges as being “nerd credit” in primarily male online communities which reflects the dimension of security seeking associated with the guardian/achiever type. According to Stewart (2011), individuals that fall into the guardian/achiever type are interested in status affirming possessions, such as badges, that are capable of securing one’s standing in a world that generally lacks security. In the case of badges, they possess the capability to secure one’s standing in an ever-changing gaming community.

Another interesting line of inquiry might examine the relationship between Stewart’s (2011) model and internet gaming disorder. Recently the American Psychological Association’s Diagnostic and Statistical Manual of Mental Disorders (DSM) noted internet gaming disorder as an area worthy of future research (as cited in Pontes, Király, Demetrovics, & Griffiths, 2014). Internet gaming disorder, previously known as “problem video game play,” “video game dependency,” and “video game addiction,” has been linked to perceptions of gaming convenience (Huh & Bowman, 2008) and decreased academic performance (Skoric, Teo, & Neo, 2009). Future research should map Stewart’s (2011) model onto the recently developed internet gaming order scale (Pontes et al., 2014) to determine the relationship between game play styles, temperament, and internet gaming disorder. Researchers interested in understanding internet gaming disorder should also develop quantitative assessments of badge systems as research has highlighted meta-game rewards as a potential contributor to problem video game play (King, Delfabbro, & Griffiths, 2010). Finally, the link between the completionist and problem video game play should be examined more thoroughly as previous work has found completionist behavior to be a sign of problem video game play (King & Delfabbro, 2009).

Future research may investigate how perceptions of badges in the video game context differ from those implemented in other contexts such as mobile phone applications (Munson & Consolvo, 2012) and school (Fishecker & Hickey, 2014; Hanus & Fox, 2014; Pytash & Ferdig, 2014). This process of applying game mechanics

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to non-game settings is known as gamification (Deterding, Bjork, Nacke, Dixon, & Lawley, 2013; Deterding, Dixon, Khaled, & Nacke, 2011). Scholars interested in understanding how perceptions of badges vary according to context should also consider the influence of personality traits such as goal orientation (Hakulinen & Auvinen, 2014).

5.4. Design implications

Based on our findings, we can make several recommendations to game designers about badge systems. First, game designers should focus on implementing performance-contingent badges. Some participants indicated badges should only be given for extraordinary behaviors, such as defeating difficult bosses or collecting rare items, instead of being awarded for ordinary behaviors such as watching the credits or beginning the game. It is not advisable to release a game with only performance-contingent badges as some participants indicated enjoyment regardless of the difficulty associated with earning a badge; however, designers should focus on including more than a few token performance-contingent badges. Some gamers indicated that the experience of pride following the reception of a badge is due in part to the fact that the reception of a badge reflects one’s competence. For these individuals, the presence of additional performance-contingent badges is likely to bolster their engagement with the badge system.

In addition to reflecting one’s own competence, badges are capable of providing evidence of one’s competence to other gamers. Performance-contingent badges are what allow gamers to accumulate “gaming capital” (Consalvo, 2007) or “nerd credit” as they provide visual evidence of one’s skill. Moreover, badges are difficult if not impossible to falsify on a gamer profile, thus providing a judgment cue that is free from manipulation or control (DeAndrea, 2014). Performance-contingent badges are likely to carry more weight than engagement-contingent badges in communities where individuals understand badge systems.

Another issue is that some participants in our study indicated frustration with the appearance of badges during the gameplay experience. Participants indicated that the appearance of badges accompanied by a sound indication could disrupt participants’ sense of presence and transportation into the gameplay experience. The appearance of badges disrupts these experiences by reminding participants that they are playing a video game. One way to minimize the distraction associated with the appearance of badges on screen is to allow users to completely disable notifications as both the PlayStation trophy and Xbox achievement system currently allow users. However, badge systems should provide users with the option to turn on notifications without the accompanying sound or to turn on the sound associated with notifications without the onscreen visual component (Growcott, 2013). Greater flexibility in the onscreen display of information would help to offset the concerns raised by the gamers in our sample while simultaneously affording interested gamers greater control over their gaming experience.

Another strategy for game designers would be to link badge systems with extra game content to get players more engaged with the badge systems. Indifferent participants cited the lack of meaning in the badges; attaching badges to downloadable content should increase interest in the badge system and time spent playing the game. Connecting the reception of badges to the earning of downloadable content will boost player interest in these systems as most contemporary games typically offer players downloadable content in the form of new characters or maps for additional costs. Providing players with the ability to earn this new content in addition to the default option of paying for it adds an additional layer to the gaming experience.

6. Conclusion

This study is among the first to explore the interpretation and impact of badges among video gamers. As these badge systems are becoming increasingly common both in video game contexts and real world settings, it becomes exceedingly important to understand how the existence of these systems act on players and how players act on these systems. Completionists derive great satisfaction from earning all of the badges available in a game but can become frustrated if they are unable to earn all of the available badges. Interpretations of these badges as skill indicators varies according to an individual’s level of investment with the system. Badge systems can enhance motivation for interested players, and increase enjoyment, engagement, and time spent playing the game.

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