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A STUDY OF LEADERSHIP BEHAVIORS IN ESPORTS CONTEXTS

by

Joseph C. Tucker

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Instructional Technology and Learning Sciences

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ABSTRACT

A Study of Leadership Behaviors in Esports Contexts

by

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Utah State University, 2022

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Department: Instructional Technology and Learning Science

Soft skills, leadership in particular, are highly sought-after traits for businesses when searching for new employees. Using games as a tool to teach soft skills is fairly well documented. One way that games can do this is by creating a space where learners can practice these skills. It was theorized that esports games specifically should help to encourage players to engage in leadership activities. In particular, the behaviors these players exhibit were expected to align fairly well with the theory of distributed leadership. This study answers the following three questions: What types of leadership behaviors are exhibited by participants in esports at USU? What are the social contexts in which these behaviors are exhibited? In what ways do these behaviors align with the theory of distributed leadership? This qualitative study uses interviews with students who were regularly engaged with esports as its main data source. The interviews were coded for themes that were then compared to distributed leadership frameworks. The types of leadership behaviors could be divided into seven main categories and varied based on how the participants were engaged with esports: formal teams, informal teams, and public

matches. While the way in which leadership was distributed varied across the three contexts, in all three contexts, participant behaviors aligned well with a particular framework of distributed leadership, and it was concluded that esports would therefore be an effective tool for training specific leadership skills.

(44 pages)

PUBLIC ABSTRACT

A Study of Leadership Behaviors in Esports Contexts

Joseph C. Tucker

Soft skills, leadership in particular, are highly sought-after traits for businesses when searching for new employees. Using games as a tool to teach soft skills is fairly well documented. One way that games can do this is by creating a space where learners can practice these skills. Esports in particular seem to be an already existing space where modern, dynamic types of leadership are already practiced. In order to determine if this was indeed the case, I interviewed people who were involved in different levels of esports about the ways they behaved while playing esports. I found that in order to succeed while playing esports, it was often necessary to share leadership across various members of the team. Because of this sharing of leadership, I found that esports could be a great tool for training and building leadership skills.

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Joseph C. Tucker

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CHAPTER I

INTRODUCTION

An important part of the success of any business is ensuring that employees have the necessary soft skills to function in the modern environment. Soft skills are twice as likely to be linked to top-performing employees than technical or cognitive abilities, and for executives these skills lead to success more frequently than either IQ or previous experience (Goleman, 1995). There is evidence that soft skills training has demonstrable positive effects (Botke et al., 2018) and using games as teaching tools is a fairly well-established method. For soft skills specifically, an entire category of games designed to teach these skills has been identified (Jan & Gaydos, 2016). In addition to games designed specifically to teach these soft skills, research has shown a significant positive correlation between these types of skills and participation in various recreational games (Barr, 2017; Castillo & Escribano, 2017).

A particularly sought-after skill in the business context is leadership. Research has found that participation in massively multiplayer online games (MMOs) is linked to increased demonstrations of leadership skills (Jang & Ryu, 2011). In addition, case studies for using games as a training tool in a business setting have demonstrated a link between the programs and increases in individual leadership skills (Henriksen & Børgesen, 2016). In those cases in particular, it was noted that one reason game-based training could be effective is that the design encouraged informal communication between team-members on leadership topics as a way to increase the likelihood of success.

Studies have also shown that it is not just the design of a game that leads to it being an effective tool for soft-skill development, but also the social environment and context in which that game exists (Barr, 2018). Taking this idea a step further, Falkenthal and Byrne (2021) theorized that esports games were particularly well-suited as an environment for leadership skills to develop. In particular, they noted that the behaviors participants exhibited aligned with the theory of distributed leadership (DL).

In contrast to the more traditional understanding of leadership as the actions of one individual with authority, DL is described by Spillane (2006) as a process in which leadership practice is “stretched” over various members of an organization. It has been shown that cooperative leadership is linked to an increase in organizational commitment (Hulpia et al. 2010), and it is predicted that many organizations will begin moving towards more malleable leadership structures in the future (Johansen 2017).

With the rapidly growing presence of forward-thinking businesses in Utah Valley’s so-called “Silicon Slopes,” comes an increased demand for employees with the skills to thrive in more modern business environments. Higher education institutions create business leaders through traditional means such as coursework and degrees. Thus, we can examine how organizations within the higher education ecosystem that encourage students to participate in esports activities, such as an esports club, could help further position universities to provide exceptionally talented individuals for businesses.

As Utah State University (USU) has both an esports club with involvement with collegiate level esports as well as a wealth of students who participate in esports recreationally, it was proposed that further research on the social and leadership

environment exhibited by students regularly engaged with esports be done to see if it matches desired leadership characteristics.

The following questions were used as a guide for this study:

1. What types of leadership behaviors are exhibited by participants in esports at USU?
2. What are the social contexts in which these behaviors are exhibited?
3. In what ways do these behaviors align with the theory of distributed leadership?

CHAPTER II

LITERATURE REVIEW

Research has demonstrated increases in leadership skills using game-based learning (Sousa & Rocha, 2019), as well as other business-related soft skills (Castillo & Escribiano, 2017). Additionally, Falkenthal and Byrne (2021) showed that there was a clear link between participation in collegiate level esports and distributed leadership. The purpose of this review was to determine the current state of research as well as to guide the construction of this study. This literature review had three objectives.

- To determine the current state of research with respect to using games to teach leadership and soft skills.
- To determine the current state of research with respect to esports and leadership specifically.
- To use that information to determine the next best step for research in this area.

Keyword Search

The USU library quick search function, which includes a variety of databases, and Google Scholar online resources were the primary databases used to locate peer-reviewed research on game-based learning programs to teach leadership and soft skills. In order to locate this research, some of the following keywords, in various combinations, were used: *soft skills, game-based learning, leadership, esports, distributed leadership*.

Inclusion and Exclusion Criteria

Articles included in this review met the following criteria.

- The study was a published peer-reviewed primary resource.
- The study was conducted in the last 20 years.
- The study examines the development of leadership or related soft skills through games, especially esports-type games.

Review Discussion

A literature review was conducted on 14 articles using a coding table format in Google Sheets. Information was collected on variables within three broad categories including sample characteristics, research design characteristics, and research outcomes/conclusions. This section will present the results of this review. Broadly, through this literature review I found works that fit into three categories: games as tools for learning soft skills, esports games specifically, and discussions of distributed leadership.

Games and Soft Skills

To establish a case for using games to teach soft skills, a number of studies were referenced. While categorizing and explaining game-based learning as a whole, Jan and Gaydos (2016) identified a group of games that they called “21st Century Competency Games,” which were defined as games that aim to develop higher-order thinking and social skills. Sousa and Rocha (2019) found that participation in a game-based learning course was effective as an approach to leadership skills development.

Case studies for using games as a training tool in a business setting have demonstrated a link between the programs and increases in individual leadership skills (Henriksen & Børgesen, 2016). Multiple studies have also shown that soft skills can be learned from commercial games that were not specifically designed to teach them (Barr,

2017; Castillo & Escribano, 2017).

One difficulty that soft skills training often faces is that it can come in the form of a series of “tips” or specific actions that participants are advised to take, rather than as a simulation of the complex social event with specific required competencies that communication actually is (Hora et al, 2021). Massively multiplayer online games, or MMO games, are games in which high numbers of players exist in the same game space. Many of these games are specifically built to include challenges that can only be overcome by players forming groups and working together, and they generally include in-game components (often called “guilds”) that allow players to create and operate in hierarchical leadership structures to facilitate this (Chen et al., 2008). Two studies (Jang & Ryu, 2011; Mysirlaki & Paraskeva 2017) specifically looked at time spent playing MMOs and development of leadership skills and whether those skills were transferred. In both cases, evidence was found that there was at least a perceived link in the players between the development of leadership skills and their relevance in other situations.

Esports

Of particular interest to this study are esports games. Esports are a category of games in which players compete against one another, often in teams, so named for their superficial similarity to traditional sports (Kane & Spradley, 2017). While there are some popular esports that feature two individuals competing in one-on-one games (such as StarCraft) the focus for this study is on games that require teams of players to compete against other teams, because success in these games is tied to effective teamwork and communication skills (Tang, 2018). A wide variety of team-based esports games exist,

including some popular games such as League of Legends, Dota 2 and Overwatch.

Players can engage with esports on many different levels. Esports games will typically have built-in systems to match players with team members of a similar skill level. Within these systems, players can generally choose whether they wish to have their rank publicly displayed and tracked or if they wish to play a more “casual” game. Many popular esports also include official leagues run by either the publishers of the game or other third-party companies. Some particularly successful esports also have collegiate leagues in which college students compete in a school’s esports organization against other school organizations. Players competing at the highest level in competitive esports will often have the support of a team organization providing things such as coaching and access to tournaments.

A part of what makes games an effective tool for teaching leadership is the interactions between players that they facilitate (Barr, 2018). Siewiorek et al. (2012) showed that through the use of serious competitive games a number of different leadership styles could develop, even though these games were not specifically designed to teach leadership. Noting the nature of esports games in particular, Falkenthal and Byrne (2021) observed that participants in a collegiate level esports club exhibited behaviors consistent with the theory of distributed leadership. Specifically, they note that esports are generally information-heavy environments that reward players that quickly filter unnecessary feedback from information that needs to be quickly responded to for success (Falkenthal & Byrne, 2021).

Distributed Leadership

As modern businesses are moving towards more dynamic leadership structures (Johansen, 2017), finding a type of leadership behavior that fits this environment becomes important. As defined by Spillane (2006), distributed leadership is a process in which leadership practice is “stretched” over various members of an organization. This definition puts it in opposition to more traditional “heroic” understandings of leadership as the actions of one individual, instead defining it as a social process emerging over time with various levels of participation by members of an organization (Bolden, 2011). In addition to describing whether or not leadership is distributed, it is also relevant to examine how and why leadership is distributed across the team. Bolden summarizes a number of frameworks for distributed leadership, including one by MacBeath et al. (2004) that describe six different ways that leadership can be distributed, including formal, pragmatic, strategic, incremental, opportunistic, and cultural (see Table 1). This framework was used in the study as a reference as I coded the interviews, because it aligned most well with the behaviors I have observed in my own experience playing esports games. In addition to matching my own experience, this was the only framework that focused on how and why leadership moved between individuals.

Other frameworks for DL include one by Spillane (2006) that divides DL into three general categories describing how individuals work to enact a leadership routine, those being collaborated (individuals work together in time and place), collective (individuals work separately), and coordinated distribution (individuals work in sequence). Another, by Leithwood et al. (2006), placed behaviors into four categories

Table 1

Distributed Leadership Framework Adapted from MacBeath et al. (2004)

| Distribution | Description |
|---------------|---|
| Formal | Leadership is assigned or delegated to a particular person. |
| Pragmatic | Leadership is divided based on negotiation |
| Strategic | Leadership is assigned to people with certain skills |
| Incremental | Leadership is obtained progressively over time as skills grow |
| Opportunistic | People willingly take on additional leadership roles |
| Cultural | Leadership is naturally assumed by certain individuals and shared organically |

based on whether the goals of different individuals were aligned and whether that alignment was planned or spontaneous (planned alignment, spontaneous alignment, spontaneous misalignment, anarchic misalignment). These frameworks were not chosen for this study, as they seem to be more relevant to formal organizational contexts such as schools, and they do not describe why leadership is distributed into each of their categories. These other frameworks were kept as references in case the coding phase of data analysis led to different results than expected.

In addition to distributed leadership, other leadership models were considered. Specifically, collective leadership, a style of leadership in which a decision is reached by consensus after a discussion (Contractor et al., 2012) was considered. It was expected that this style of leadership would be less common in esports environments where decisions typically had to be made quickly, but the previously described frameworks did not fully capture the range of behaviors I expected to see.

The primary justification for this study was twofold: first, social skills that are practiced in one environment, such as while playing esports, can be transferred to other

environments, and second, it was theorized that the social environment at the USU esports club should exhibit characteristics in line with the theory of distributed leadership, as defined above.

CHAPTER III

METHODOLOGY

This study is a qualitative study primarily based on data gathered from semi-structured interviews with members of the USU Esports club and others involved with esports. As the primary purpose of this study was to generate an explanation for how leadership happens in esports contexts, a grounded theory approach was used (Creswell, 2018).

Setting and Participants

The USU esports club is organized similarly to traditional intramural sports clubs. At the beginning of the semester players participate in tryout matches and then they are placed on various teams based on their performance. These teams will then participate in tournament leagues with teams from other schools and compete for cash prizes and other titles. The USU Esports Club currently runs teams in the following games: Counter Strike: Global Offensive (CSGO), Hearthstone, League of Legends, Overwatch, Rainbow Six: Siege, Rocket League, and Valorant. Students who join the club but do not make any of the teams after tryouts are still given access to club social spaces as well as computer facilities. In addition to the club, USU also offers a class named “Intro to eSports” which is designed to introduce students to esports as a competitive and social practice. Students participating in both the class and the club have a wide range of previous experiences with esports.

For this study I sought to recruit students who were significantly involved in

esports, and thus used both the class and the club as tools for finding participants. After obtaining IRB approval (USU IRB# 12206), five participants for this study were recruited through the USU Esports Club as well as an esports class via a message that explained both the purpose of the study as well as the reason for their participation. I interviewed participants until thematic saturation was reached (Guest et al., 2020). The semi-structured interviews with each participant in the esports club ranged from 20 to 45 minutes and were recorded via Zoom. Afterwards, these interviews were transcribed and then coded for themes (Saldaña, 2021). I interviewed players from three different games (League of Legends, Dota 2, and Overwatch) and with different lengths of time that they had been involved with esports to ensure a variety of perspectives. Having players from different games helped to determine whether and how much the specific game the players are involved with affects their leadership practices.

Data Sources

An interview protocol was created based on the research questions that were used to guide this study. Each of the questions in the interview was aligned with the research questions in some way (Table 2).

Materials

The interview protocol for this study focused on DL aspects (see the Appendix). Specifically, the interview was divided into nine primary questions to gather information on the leadership behaviors that the participants engage in throughout various stages of

Table 2*Triangulation of Research Questions, Data Sources, and Analysis*

| Research question | Data sources | Analysis |
|--|-------------------------|---|
| What types of leadership behaviors are exhibited by participants in esports? | Interview questions 3-9 | Code for themes related to DL (Saldaña, 2021) |
| What are the social contexts in which these behaviors are exhibited (that is, during official matches, practice matches, or other times the team is together)? | Interview questions 1-9 | |
| In what ways do these behaviors align with the theory of distributed leadership? | Interview questions 1-9 | |

their participation in esports activities. These interviews were conducted separately with each individual participant. One participant was given a brief follow-up interview in order to clarify certain topics they had brought up.

Zoom allows for the recording and storage of these interviews so that they can be transcribed and then coded. Participant data was safe-guarded through the use of password-encrypted files. After interviews were recorded, they were transcribed within 10 days of recording, then, recorded interviews were stored in encrypted files. Any data that was by others (e.g., an advisor or a secondary coder) was deidentified to protect the privacy of participants.

Analysis

After transcribing the interviews, I created a codebook based on DL principles, seeking to find any consistently repeated themes in the experiences of the interviewees. Initially, codes were created for each instance in which an interviewee noted that a decision for the team had been made. These codes that I had come up with were then

compared against the frameworks described earlier to determine if they were a good fit or if a different framework would need to be created. Upon comparison, they were found to align with the framework most closely for distributed leadership by MacBeath et al. (2004). As a way to check the validity of the conclusions, member checking was used (Creswell & Miller, 2000). Specifically, I reviewed the codebook with another person familiar with esports participation to ensure the themes and categories I had identified matched their understanding and made sense to them.

CHAPTER IV

RESULTS

Players of three different games—League of Legends, Dota 2, and Overwatch—were interviewed for this study. Additionally, some of those players were on official varsity and junior varsity teams, while other interviewees were enthusiasts that frequently played competitive multiplayer team-based games. The patterns that emerged from the analysis of those interviews will be presented in this section by giving a breakdown of the types of leadership behaviors that occurred and reviewing the contexts in which they happened.

After coding was completed, I found that the behaviors of the participants could be divided into seven categories. The majority of the leadership behaviors observed by the participants fit well into the framework of distributed leadership by MacBeath et al. (2004, see also Table 1). In addition to behaviors that lined up with that framework for distributed leadership, I also noted players engaging in behavior best described as collective leadership (Contractor et al., 2012). The behaviors I observed are described in Table 3.

All forms of distributed leadership as defined by MacBeath et al. (2004) were described by participants during interviews, though formal leadership distribution was only present in situations involving varsity or junior varsity teams, as those involved specific people that were assigned leadership roles.

The leadership behaviors exhibited by the people involved in this study depended heavily on the context in which they were playing the games. Leadership functioned in

Table 3*Leadership Codes and Definitions*

| Code | Description | Example |
|---------------|---|--|
| Formal | Leadership is assigned to a specific player by an organization (e.g., a coach on an esports team) | All decisions made by team coaches or team captains because of this role would fall in this category |
| Pragmatic | Leadership is divided based on negotiation between players as issues arise during gameplay | The players encounter an unusual strategy that only one player is familiar with, this one player makes decisions because of this |
| Strategic | Leadership is assigned to people who are added to a team based on their skills | An esports team recruits a player based on a specific need for the team, decisions made by this player because of this fall into this category |
| Incremental | Leadership is obtained progressively over time as a player's skills grow in certain in-game roles | A player is assigned a role they are unfamiliar with. As they learn how to act in this role and make more decisions based on it |
| Opportunistic | People willingly take on additional leadership roles based on emerging or changing circumstances during a game | A player is performing poorly and decides to make a change so they can remedy their own situation |
| Cultural | Leadership is naturally assumed by certain individuals and organically distributed based on cultural expectations | Players defer to a team member who has a higher in-game rank than them |
| Collective | A leadership decision is made after a group discussion and a consensus is reached | Players discuss character choices before a match starts and decide together who to pick. |

three main ways, depending on the context: (1) formal environments (e.g., esports teams), (2) informal environments (e.g., playing with friends), and (3) public matches. A breakdown of the frequency of each code is shown in Table 4. In the following sections, each of these contexts will be discussed in more detail.

Formal Esports Teams

First, there was the more formal environment of people that were actively on official teams. In this environment there were people that were specifically assigned to be

Table 4

Frequency of Occurrence of Different Codes Separated by the Context in Which They Occurred

| Code | Formal teams | Informal teams | Public matches |
|---------------|--------------|----------------|----------------|
| Formal | 11 | | |
| Pragmatic | 6 | 5 | 1 |
| Strategic | 6 | 3 | |
| Incremental | 3 | 2 | |
| Opportunistic | 12 | 8 | 4 |
| Cultural | 6 | 5 | 2 |
| Collective | 6 | 4 | 1 |

leaders, and thus there were specific individuals upon whom final approval for decisions fell. However, as these games are quite fast paced and require quick reactions, even in formal environments leadership was still distributed based on the changing situation and uneven distribution of important information between players. Opportunistic distribution, which was defined as people willingly taking on additional leadership roles, was observed fairly frequently. For example, one player noted, in reference to the choice to change characters in a game of Overwatch: *Yeah, it's... it's technically on the coaches and the main tank to kind of call that out. But if somebody else sees it, it is a very open environment where one of the healers is like, "Hey, guys, this isn't working; tanks, can you switch?"*

One frequent motivator for the opportunistic distribution of leadership in this environment was when an individual was performing poorly. Multiple interviewees noted that if they were doing poorly, especially if they were dying frequently during a match,

both the desire for a more pleasurable time with the game as well as the responsibility they felt towards the team to perform well would drive them towards deciding to change the strategy that they were having a tough time with. One player in this situation described how he would bring this up to his team: “...like, ‘Hey, let’s just run it by you guys. I think next time I die, I’m going to switch to this hero.’ And it’s generally like, if nobody has any qualms with that... then I’m going to do it.”

In formal situations, strategic distribution, when leadership is distributed based on member skills, was also more common than in other contexts ($n = 6$). On the Overwatch team, one player noted that they had been having difficulty keeping track of the capabilities of the enemy team and the amount of time they had before their most powerful abilities were ready to use. In response to this difficulty, the team had been looking to find someone who was especially good at keeping track of those things and having them take that responsibility. On another team in a similar situation, no person to fill the missing role was found. In order to rectify this, a specific person was told to keep track of the relevant information. When the player was first assigned this duty, they were told that the rest of the team would try to keep track as well. Thus, leadership in this particular instance was distributed incrementally, as their ability to make decisions for the team based on what they were seeing increased over time.

A number of decisions made by formal teams were made through a collective process where a decision was only made upon reaching a consensus, rather than through the actions of one individual. In general, this only happened when there was down-time between matches, such as during a phase of the game in which players were able to pick

the characters they were going to play. Discussions that led to decisions like this were less common on official teams, as leadership decisions were more likely to be made by individuals. While many of the decisions on these official teams fell on leaders who had a formal role, the fast-paced nature of the games and the uneven distribution of information meant that success was often tied to the team's ability to distribute leadership.

Informal Teams

The second type of environment in which particular leadership skills were observed was one in which people had full teams that they played with regularly but were not part of formal organizations. These players would often participate in public weekly leagues set up by the developers of the games they played. In this situation, the role of a "leader" would often fall to one participant with more experience or that the others trusted, an instance of cultural distribution. This was more negotiable and subject to change based on the circumstances of any game, and participants in these leagues would often shift the mantle of leadership in various situations. One player in this situation described the reason he considered himself the leader of their team despite there being no formal role:

While we're in the game, I am the highest ranked player. And so I am, a lot of the time, the one being like, "Hey, okay, this is the objective we need to be on. This is where we need to be on the map right now."

Despite the informal role of team leader that the last player held, leadership was stretched over the entire team quite often. For example, this player noted a frequent opportunistic distribution of leadership where players who were doing poorly in a

particular match would typically be the ones to make a call on switching places with another player to alleviate some of the pressure they were under. In this situation, the player who was doing poorly negotiated directly with the player with whom he wanted to swap positions, and the agreement to change the strategy was made without the involvement of the “leader” of the team. This particular motivation for leadership distribution was also seen in the more formal environment described previously, though in this situation the players felt no need to check and make sure the “leader” of the team would not object, as was described by players in formal teams.

Leadership in the context of informal but consistent teams was occasionally strategically distributed. One player noted that she had little interest in keeping track of a certain kind of statistic, but that another player was really familiar with the online tool used to publicly track the statistics of all players. Because of this, they decided that this second player would keep track of and make decisions based on those publicly available stats. Another player described a similar situation in which a certain player took the leadership role when it came to tracking specific in-game statistics: “He’s very good at looking at stats and like, ‘oh, wait, that guy has like half an item more than me. Like, I should be careful when I’m trading with him.’”

In addition to the distributed leadership behaviors previously described, players also occasionally described situations in which the team would discuss some issue and then reach a consensus, an example of collective leadership. One typical example from an interviewee that played League of Legends, in talking about how her team responds to unusual strategies.

Now, we typically don't respond to it. Um, a lot of the time, if we change the strategy that works for our team, specifically, it will fall apart. And so when we make, like, large adjustments like that, it's not always the best idea. So that's more of the team effort discussion of, you know, how do we feel about this? Like, what do we want to do for this today?

The way that leadership happened in unofficial but consistent teams was different from official teams in that there was never a leader who had been given that role formally, but success was again tied to the ability of a team to dynamically stretch leadership across its members and react to an ever-changing situation.

Public Matches

The third context in which players found themselves was in public matches with a system designed by the game developers that matches them with other people of a similar skill level who happen to be playing at the same time. In these situations, all three of the games had built-in systems to indicate to the other players which role one preferred to play. Players would often briefly communicate how they planned on fulfilling their role, but typically each player was allowed to play at their own discretion. There is no specific leader in these situations, but coordination is still important for victory. Typically, people will briefly make calls for the team as situations arise, usually only for one specific instance. In this situation, leadership is almost entirely opportunistically distributed between the players based on the information each individual player has access to. Communication was much less common in general in public matches, meaning leadership had fewer chances to be distributed across the team. One player described the difference between games using a matchmaking system and games with their team

succinctly: “I think it really can be simplified to this, when I’m with my team I’m on open mic, I always leave it on. And in just random games I have push-to-talk on so, when I want to say something, I have to push a button.”

Notably, there were no instances of either pragmatic or strategic leadership distribution in public matches. This can be explained by the relatively disconnected nature of each game from the other, and from the fact that the teams were simply created by a system. In that situation, there is no chance for players to strategically divide specific responsibilities among players that were more interested in taking on those roles, since there was no way to know before-hand who you’d be matched with. Additionally, incremental leadership makes no real sense in this environment, as players are not spending significant amounts of time with the same individuals and gradually taking more responsibilities. Collective decisions were occasionally made in this environment, but it was much rarer, as players were less inclined to more detailed discussions in an environment where they were playing with strangers.

Cultural distribution did play a role in these public matches, though. Interviewees from all three games described certain in-game roles that playerbases had collectively decided were “leadership” roles. For example, when speaking of Overwatch, one player described how it was quite common for players who were playing the “tank” role (that is, the role of a durable front-line character who was able to take more damage) to be more likely to speak and be listened to in public matches because they were the players who were the first to enter into conflict with enemy teams, typically. It was noted that this type of cultural distribution only happens at higher skill brackets in public matches, as it is not

something a new player would automatically be familiar with, and typically a cultural practice that players absorbed from participating in online communities related to their game for some amount of time.

The context in which a game was played seemed to have a more impact on how leadership happened than which specific game was played, as similar patterns were found in all three games in the three discussed contexts. In all three contexts, however, it was common for leadership to be distributed across the team, though the exact nature of how leadership was distributed did change from situation to situation.

CHAPTER V

DISCUSSION

Key Findings

To return to the introduction of this study, I sought to answer the following questions.

1. What types of leadership behaviors are exhibited by participants in esports at USU?
2. What are the social contexts in which these behaviors are exhibited?
3. In what ways do these behaviors align with the theory of distributed leadership?

To answer the first question, I found that for the people I interviewed, leadership was more consistently a distributed process. Even in situations where there was a leader who was formally appointed to their position, the nature of the games led all the players to communicate and become leaders at different times throughout the process. In addition to the more common behavior of distribution, I also saw collective leadership, where decisions were made based on discussions and consensus.

To answer the second question, I found that the way leadership worked for these players depended on who they were playing with and whether or not they were playing as a part of an official organization, a division not found in previous literature. The main difference in these three contexts was that formal situations were the only ones in which teams had an “official” leader, and in contexts where the players did not know their teammates at all, communication, and thus leadership distribution, was much less common. That being said, in all contexts coordination was important for success and thus

players were encouraged to make calls for the team and take on the role of a leader, even if in most cases that was only temporary and based on the current context of the game.

As far as distributed leadership is concerned, I found that it was indeed the best way to describe most of what was happening during the games. Of all the frameworks I looked at, I found that the one by MacBeath et al. (2004) best described the different ways in which leadership was distributed. I did also find that the process for leadership did not always match perfectly with the theory of distributed leadership, though, as there were some situations in which a decision was not made by having leadership be stretched across the team based on the situation, but rather it was made through discussion and consensus, which matches the process of collective leadership (Contractor et al., 2012).

While research done on leadership in esports environments are relatively rare, what research has been done lines up well with outcomes observed in this study. Previous studies have connected time spent playing games with soft skills development broadly (Barr, 2017; Castillo & Escibiano, 2017), as well as leadership in particular (Jang & Ryu, 2011; Mysirlaki & Paraskeva 2017). Other researchers have connected esports specifically to distributed leadership (Falkenthal & Byrne 2021). This thesis builds on that research by further describing the particulars of how leadership happens in esports environments, and it describes three specific contexts in which those behaviors happen. The increased understanding of how leadership happens in these contexts should help give instructional designers using esports as a tool a better idea of how participants in their programs may behave, which in turn may help decide if esports is the best tool for their training goals.

Limitations

As this study was based entirely on interviews, it is possible that players did not accurately remember all of the behaviors that they exhibited, or perhaps felt the need to portray their own behaviors in a positive light. A follow-up study including direct observations of the players participating in the esports would be helpful to give a fuller picture of the behaviors associated with esports contexts. Additionally, as the leadership behaviors of interest for this study were social, it is possible that focus groups could have provided useful information that might not appear in individual interviews. Also, this study focused on a fairly narrow group of participants, that being college age students already involved with esports. Thus, the direct transferability of this study might be low for certain contexts.

Implications

At the beginning of this paper, I spent some time talking about the desirability of modern and dynamic leadership skills in today's business world. As I have shown in the previous section, people who participate regularly in team-based esports already occupy a world in which those types of skills are naturally encouraged. Game-based learning can be very effective for training soft skills, especially if it is paired with framing so that participants know they are there to learn leadership skills (Henriksen & Børgesen, 2016). Based on this, a logical next step after this study would be to have an aspiring instructional designer attempt to take advantage of esports as a tool for intentionally training leadership skills.

Conclusion

Ultimately, I found that the types of leadership behaviors players engaged with esports exhibit can be divided into seven main categories. The distribution of these behaviors varies based on the context in which the players are engaged with esports: formal teams, informal teams, and public matches. While the way in which leadership was distributed varied across the three contexts, in all three contexts, leadership was always a dynamic process that involved various members of the team at different times.

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APPENDIX

INTERVIEW PROTOCOL AND RECRUITMENT MATERIALS

Interview Protocol

The following interview protocol was used as a guide to collect data for this study.

As this was a semistructured interview, it was not followed exactly in each interview.

Table A1

Interview Protocol

| Interview question | Distributed leadership aspect addressed |
|---|--|
| Background questions (may not be asked during the actual interview, but would be relevant info to have) | |
| <ul style="list-style-type: none"> • In the esports club, which game(s) do you play? • How long have you been playing this/these game(s)? • How long have you been playing with this particular team? | Leadership and behavior are affected by the environment that people act in. Thus, we may find that people playing different games would not exhibit the same behaviors, which might lead us to conclude that some games are more suited to training/practicing leadership skills. |
| Main questions (some will likely be slightly adjusted to fit the specific game interviewee plays) | |
| 1. How would you describe your relationship to the other members of your team? | An important aspect of distributed leadership is that multiple people feel they have the ability to take control or make a leadership decision at different times. Depending on the relationship a player has with the rest of their team, they may feel more or less likely to take that leadership role. |
| 2. Talk to me about the types of leaders on your team, please give examples. <ul style="list-style-type: none"> • <i>Would you describe any one particular person on your team as the leader?</i> • <i>If so, who is it? Why is that? Have you felt the same way since the team was formed?</i> | If there is one person who is a dedicated leader, it may affect how often leadership is distributed among the rest of the team. This doesn't mean that distributed leadership is not happening, but it might mean that the "leader" is making a bigger share of the decisions than some other players. |
| 3. Describe how you typically approach practice matches, is there a specific plan for how those matches will be approached, or do you treat them exactly the same as you would an official match? <ul style="list-style-type: none"> • <i>Could you describe the process your team takes for approaching a practice match?</i> | Previous studies have looked at player behavior and communication during official matches. Gathering information about player behavior outside of this can help to further the general understanding of how leadership is practiced in collegiate esports leagues. |
| 4. Could you describe the process for making decisions about strategy that take place before playing a specific match? <ul style="list-style-type: none"> • <i>Do you have a specific player that does research on your opponents? If so, is that player involved in decision making, or do they simply report their findings?</i> | Similar to the last question, this asks players to describe behavior outside of official matches but directly connected to them. |

| Interview question | Distributed leadership aspect addressed |
|---|---|
| <p>5. In many esports games, players are often divided into different specific roles that they will be playing during a match. How would you describe the decision-making process for who gets each of these roles?</p> <ul style="list-style-type: none"> <i>Is this something that changes over time, or are these roles static for each player? Why is that? Are these roles related at all to who you'd consider the "leader" or the team?</i> | <p>One feature of distributed leadership is that members of an organization may make leadership decisions at different times based on their roles in that organization. As esports teams often have players that operate in specific roles, this question clarifies how roles affect behavior and practice of distributed leadership in collegiate esports.</p> |
| <p>6. In many esports games, there is a brief phase in the beginning of a match in which the players choose characters and items they will be using. During this phase, how would you describe the decision-making process for making these choices?</p> <ul style="list-style-type: none"> <i>Who is involved? Does this change from game to game? Could you walk me through an example of this pre-game process?</i> | <p>I would like to get some data about player behavior in relation to leadership and communication in each of the stages of the games they are playing so that I can get a clearer picture of how the environment shapes their behavior. This question is about the beginning stages of a match.</p> |
| <p>7. In order to succeed, adjustments to strategy and tactics will need to be made throughout the course of a match. How would you describe the general process for making these adjustments?</p> <ul style="list-style-type: none"> <i>If a decision is made to change the overall strategy for a match how does the team ensure that each player makes the necessary adjustments? Could you walk me through an example of some mid-game adjustments your team has made that led to success?</i> | <p>Similar to the last question, this is asking about the players behavior throughout the match after the initial phase.</p> |
| <p>8. Each player likely has access to different information, how do you decide when to take an active role in communicating and responding to that information?</p> | <p>Distributed leadership involves "stretching" leadership responsibilities over various members of an organization. This question is designed to have the players reflect on what situations lead them to take on that leadership role.</p> |
| <p>9. After a match, how would you describe the process of reviewing your gameplay for ways to improve the team?</p> <ul style="list-style-type: none"> <i>Is there a specific person in charge of reviewing footage? Do players give feedback to one another based on performance in a specific match? When making decisions about what to practice/how to train, do players self-direct or does a leader give them guidance on how to improve?</i> | <p>Similar to earlier questions about behavior before official matches, this question asks about what happens after matches. I want to get a holistic view of player behavior in relation to their participation in collegiate esports.</p> |

Recruitment Materials

Informed Consent Document

Introduction

You are invited to participate in a research study conducted by Lisa Lundgren, an assistant professor in the Instructional Technology and Learning Sciences department at Utah State University. The purpose of this research is to learn more about leadership in an esports environment. Your participation in this study is voluntary and you may withdraw your participation at any time by notifying joseph.tucker@usu or during the interview by closing the software used for the interview for any reason.

This form includes detailed information on the research to help you decide whether to participate. Please read it carefully and ask any questions you have before you agree to participate. You may also download a pdf version of this document [here](#).

Procedures

Your participation will involve a one-on-one interview that should last no longer than one hour. We anticipate that 6 to 15 people will participate in this research study. The data collected from this interview will include a video recording of the interview as well as a text transcription of the interview.

Risks

This is a minimal risk research study. That means that the risks of participating are no more likely or serious than those you encounter in everyday activities. The foreseeable risks include loss of confidentiality. In order to minimize those risks and discomforts, the researchers will store all collected data in password protected databases and attempt to remove all identifying data. Your identity will not be revealed in any publications, presentations, or reports resulting from this research study. However, it may be possible for someone to recognize your particular responses story/situation/response.

Benefits

Although you will not directly benefit from this study, it has been designed to learn more about leadership practices in esports environments.

Confidentiality

The researchers will make every effort to ensure that the information you provide as part of this study remains confidential. Your identity will not be revealed in any publications, presentations, or reports resulting from this research study.

We will collect your information through recorded Zoom interviews. Online activities always carry a risk of a data breach, but we will use systems and processes that minimize breach opportunities. This information will be securely stored [in a restricted-access folder on Box.com, an encrypted, cloud-based storage system. This form will be kept for three years after the study is complete, and then it will be destroyed.

It is unlikely, but possible, that others (Utah State University or state or federal officials) may require us to share the information you give us from the study to ensure that the research was conducted safely and appropriately. We will only share your information if law or policy requires us to do so.

Voluntary Participation & Withdrawal

Your participation in this research is completely voluntary. If you agree to participate now and change your mind later, you may withdraw at any time by notifying joseph.tucker@usu.edu. If you choose to withdraw after we have already collected information about you, video and transcription data will be destroyed.

Findings

Your information, identified or de-identified, will not be used or distributed for future research studies, even if all of the identifying information has been removed.

IRB Review

The Institutional Review Board (IRB) for the protection of human research participants at Utah State University has reviewed and approved this study. If you have questions about the research study itself, please contact the Principal Investigator at (801) 428-7149 or joseph.tucker@usu.edu. If you have questions about your rights or would simply like to speak with someone other than the research team about questions or concerns, please contact the IRB Director at (435) 797-0567 or irb@usu.edu.

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Informed Consent

By entering your name below, you agree to participate in this study. You indicate that you understand the risks and benefits of participation, and that you know what you will be

asked to do. You also agree that you have asked any questions you might have, and are clear on how to stop your participation in the study if you choose to do so. If you do not agree to participate in this study you may close this window. Please be sure to retain a copy of this form for your records.

Recruitment Email

Hello,

We are currently conducting a study designed to learn more about leadership in an esports environment. This study will be done as a part of a master's thesis project for Joseph Tucker. We are looking to recruit participants who are involved with esports in various ways here at USU. Participation in this research will involve participating in one-on-one interviews that will last no longer than an hour. Participants in this study must be at least 18 years old.

If you are interested in participating in this research, you can use the following survey to give your consent as well as your contact information here

Alternatively, you may fill out this form and send it with your name and email contact information to joseph.tucker@usu.edu.

After the consent form has been filled out, if you are chosen to participate you will be contacted by a member of the research team to schedule a time for an interview.

The protocol number for this project is IRB: #12206 and the primary investigator for this project is Lisa Lundgren, who can be contacted at lisa.lundgren@usu.edu.

Thanks!