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An Exploration of Team Cohesion in Collegiate Esports Contexts

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AN EXPLORATION OF TEAM COHESION IN COLLEGIATE ESPORTS CONTEXTS

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50 Pages

As the esports industry approaches adolescence, research on esports environments is only beginning. Despite the plethora of work done on team cohesion and coaching in traditional sports (e.g. Carron et al., 1985; Gardner et al., 1996, Pescosolido & Saavedra, 2012), current esports coaches are ill-equipped to lead and mentor a team of young adults. The present study aims to lay the groundwork for exploring team dynamics in esports through a team cohesion lens. A qualitative approach featuring semi-structured interviews from individual collegiate esports players across a variety of university-affiliated teams was adopted to explore players' perceptions regarding their team environment experiences. Common themes found included the perceived importance of in-person social interaction, an individual mentality stemming from players' experiences in ranked solo queue, a great deal of team autonomy, the importance of a shared level of effort across the team, and several other external factors. The study verifies the plausible validity of applying the existing team cohesion model for traditional sports (e.g. Carron et al. 1985) to esports contexts, despite differences to traditional sports and the breadth of experiences possible given the current state of collegiate esports.

KEYWORDS: coaching, esports, team cohesion, team dynamics

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K. T. K.

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CHAPTER I: INTRODUCTION

The esports industry is rapidly approaching adolescence as it leaves its infancy behind. As the popularity of video games has continued to grow with younger generations, esports has continued to evolve in the era of the Internet as it is easier to gain a much wider appeal regardless of physical location (Jin, 2020). With an increase in popularity comes college students finding various personal and social benefits in connecting through the medium of video games, despite the potential risks involved (Delello et al., 2021). This has led to the formalization of varsity or university department-sponsored esports programs at over 200 institutions nationwide (Jin, 2021). Given that the concept of institutionalized collegiate esports only appeared as recently as 2014, the volatile space continues to grow and change year after year, now including both student-led club programs to varsity programs offering full-ride scholarships – often competing against one another (Jin, 2021).

Due to the nature of the growth and volatility in the last ten years, there is no "correct" way to build a college esports program. Additionally, very little academic research has explored professional esports, let alone the multitude of unique aspects of collegiate esports programs (Tang, 2018). The present study aims to begin team dynamic research in collegiate esports teams viewed through a team cohesion lens. In the long term, the hope is to further refine conversations regarding the performance and support structure of collegiate esports athletes during formative years in these individuals' lives. Without a clear structure in place, and without identifying what makes a program successful in both the minds of the players and university stakeholders, these programs may be destined to fail, souring the university experience for a generation of students and investment that a university will regret. The ensuing discussion of team cohesion and the consequences of seemingly short-staffed esports programs is but one piece of the puzzle. Yet, the

competitive wing of the program is perhaps the most visible aspect of a program: one that can drastically alter varsity players' perceptions of the institution, one that is possibly the most expensive through scholarships, and one most easily to view the successes and failures of. As will be explored, the discrepancy between a high level of visibility and the relative lack of a support structure is startling. This study will begin to identify core ideas for key factors to consider when building a cohesive team environment within collegiate esports.

CHAPTER II: LITERATURE REVIEW

Because the field of esports is rather young, academic interest in the field has only recently begun. In its infancy, each existing field has begun to lay the foundation for esports research (Riteman et al., 2020; Bányai et al., 2018). However, critical components of this framework are missing that would directly improve players' experiences, especially those surrounding team dynamics.

Team Cohesion in Traditional Sports

When studying group dynamics, it has been generally accepted that team cohesion, or "a dynamic process which is reflected in the tendency for the group to stick together and remain united in the pursuit of its goals and objectives," is the most important small group variable (Carron, 1982; Carron et al., 1985; Golembiewski, 1962; Lott & Lott, 1965). Carron et al. (1985) provide a conceptual framework for team cohesion that consists of (1) group integration and (2) individual attraction to the group. Group integration can be defined as the overall unification of the group, and individual attraction to the group can be summarized by the motivation of an individual to remain a part of that group (Carron et al., 1985). Additionally, each of these categories can be further broken down into (a) social and (b) task aspects, where the social aspect is an orientation towards social belongingness within the group and the task aspect is an orientation towards the desire to achieve the group's goals (Carron et al., 1985). In summary, team cohesion is achieved via a group's task and social unity alongside an individual's willingness to participate in the group's goals and social activities. This allows team cohesion to be studied and evaluated along these four aspects.

To measure team cohesion, the Carron et al. (1985) Group Environment Questionnaire (GEQ) is widely used and accepted. The GEQ assesses individual's perceptions of their

relationship with their group and their perceptions of the collective togetherness of the team. The continuation of research using the GEQ further led to finding a concrete correlation between team cohesion and team success among college basketball and club soccer teams (Carron et al. 2002).

Some research has suggested that the Carron et al. (1985) model of team cohesion is not applicable to all teams and is only most prevalent in sports teams (Pescosolido & Saavedra, 2012). However, the competitive nature of esports can be compared to the need for sports' need of synchronized response in competition, which players need a level of cohesion to understand each other's "skill sets, preferences, moods, and habits" (Pescosolido & Saavedra, 2012). Unique in esports is the use of computer-mediated communication for both in-game and out-of-game uses. Irmer et al. (2000) found that computer-mediated communication groups were found to have significantly lower levels of social cohesion than face-to-face communication, that social cohesion levels of synchronous text-based computer-mediated groups would converge to face-to-face groups over time, and that task cohesion was higher for face-to-face communication when compared to computer-mediated communication. A study conducted by Ahmed et al. (2012) reaffirmed this finding for task cohesion but contradicted previous research on social cohesion. The generalizability of these findings could be hurt by the fact that these studies were done on collaborative project teams and not teams engaged in competition, like esports teams are. Additionally, just as different sports may have different levels of interdependency which impacts the necessity of cohesion, different esports game titles may also experience differing levels of interdependency (Pescosolido & Saavedra, 2012).

To encourage a cohesive team, Pescosolido and Saavedra (2012) discussed a five step process for developing team cohesion as outlined by Thompson (2012), which includes (1) help

team members build a collective identity, (2) make it easy for team members to be close together, (3) focus on similarities among team members, (4) put a positive spin on the team's performance, and (5) challenge the team. Analysis by Pescosolido and Saavedra (2012) concludes that this process is easy to follow for sports teams due to a variety of contextual factors that contribute to the team environment. Differences that may be observed for esports teams and sports teams in these factors include the lack of required colocation, and the extent to which a coach or mentor can place a positive spin on the team's performance. The role of a coach in esports will soon be discussed.

Role of a Coach in Establishing Cohesion

In the traditional sports field, it is generally accepted that the personality and leadership style of a coach have a direct influence on a team's performance (Terry, 1984). From this, the Leadership Scale for Sports (LSS) by Chelladuari and Saleh (1980) gives a measuring tool for this personality on five scales: training & instruction, autocratic behavior, democratic behavior, social support, and positive feedback. Gardner et al. (1996) assert and confirm the link between the leadership style of a coach and team cohesion, highlighting the important role that a coach has in maintaining a group's identity. Thus, the behavior of a coach is fundamental to establishing a team environment.

Despite a very clear and rich exploration of traditional sports coaching, the newness of esports coaching has immense challenges. Before delving into the specifics of esports coaching, it should be noted that there has been a great deal of discourse and comparison between esports and traditional sports (see Jenny et al, 2016; Kane & Spradley, 2017; and Hallman & Giel, 2017). The present study does not wish to equate esports as a traditional sport. Regardless of

opinions on the topic, these studies demonstrate significant value in applying traditional sports models to esports contexts.

Given the limited esports-specific research available, Tang (2018) surmises that there are minimal differences in the group environment presented between a sports team and an esports team, and asserts the importance of team cohesion in both casual and professional settings. Additionally, team leaders are incredibly important in providing a level of social support for players, despite primary responsibilities being focused on organization for the team (Tang, 2018). This is echoed in sentiments shared by interviews of players during a study conducted by Poulus et al. (2021), with a few players mentioning the role their coach plays in providing feedback on a team's communication strategies and the social support they can provide.

Challenges in Esports Coaching

Despite a very clear and rich exploration of traditional sports coaching, the newness of esports coaching has immense challenges. Watson et al. (2022) conducted an eye-opening study in which professional esports coaches expressed common themes of (1) uncodified career and education pathways for coaches, (2) the intense short-term pressure to receive results, (3) a complex technological and global environment, and (4) a variety of additional challenges and paradoxes. Now, most coaches are merely former professional players themselves who earn the respect of their peers for their former accomplishments as a player yet have no formal training regarding how to conduct a team environment or have a complete and holistic view of the game (Watson et al., 2022; Poulus et al., 2021). Most alarming, Watson et al. (2022) found that the professional coaches in these interviews "rarely acknowledged the influence of [a player's] well-being on game performance," perceived mistakes as a result of lack of focus and made little to no mention of the long-term development of players as individuals or professionals. The

professional esports ecosystem has significant pressure that has led these coaches to assumptions, but this bleak picture is not a sustainable model for any organization, especially institutions whose mission is to develop the next generation of citizens.

Individual Player Perceptions and Habits

It is worth further exploring individual perceptions and habits of esports players, as these may impact how they view a team environment. Because many players begin their competitive experience playing in ranked queues of their chosen title alone without a formal team setting, they may differ from traditional sports athletes.

In a study done of collegiate esports athletes on scholarship at a particular university, Schaeperkoetter et al. (2017) found common themes including elements of an athlete's identity (notably a competitive background, a strong identity of being considered an athlete, and an interest in continuing esports participation post-graduation) and social capital (notably a strong bond shared within team settings at the university yet a distinct separation from the university's athletic department). While the study demonstrates one particular university's program, we see an example of these esports players forming their community with one another that is not involved with many others on their campus. Kauweloa and Winter (2019) observed that in addition to the program confirming their community, collegiate players on a team made particular note of the differences between attempting to work in a team environment rather than the individual play of solo queue, and some argued that "the institutional (and financial) support from [their university] made a difference in how students saw themselves as players."

Despite many of these positives, many stressors plague the mind of an esports competitor. A systematic review of studies about esports players' well-being found that prolonged play sessions can cause "social, emotional, and mental problems such as depression

and aggression" (Palanichamy et al., 2020). In professional players of the highest level, these stressors include but are not limited to criticism at inopportune times from teammates, a lack of shared goals amongst a team, team communication issues, an overall life balance, and a variety of uncontrollable external factors (Smith et al., 2019; Poulus et al., 2021). As a result of these stressors, many players experience the feeling of burnout, general frustration, and apathy towards a game they are required to continue grinding (Madden & Harteveld, 2021). Additionally, players might experience relationship strain and cultural differences with close friends and family members (Nyström et al. 2022). Lastly, Behnke et al. (2023) found that esports players were significantly less extroverted and conscientious than traditional sports athletes. One might imagine that collegiate esports athletes will have a more difficult time finding a solid life balance given other responsibilities and obligations academically and socially.

To cope with these many stressors, esports athletes of an assortment of levels have cited keeping this life balance away from the game they play, having a solid social support system of both family and friends, and ensuring proper sleep management (Hong & Connelly 2022). Despite many game-related stressors, Hong & Connelly's study did not mention that players would find comfort in practicing for longer hours individually to perfect their craft even more. This appears to be good intuition, as another study found a limited association between a player or team's quantity of practice and their performance in the event (Pluss et al. 2021). The need for a player's overall well-being is at odds with the aforementioned coach's short-term timeline of improvement.

College Esports Coach Demands

As previously stated, varsity esports programs began appearing just 10 years ago at Robert Morris University (Jin, 2021). Esports programs today exist in a variety of facets,

including varsity programs, club teams, and privately formed recreational teams (Baker & Holden, 2018). Collegiate esports can be an appealing offering for many college institutions, justified by increased inclusion, equity, and participation in an emerging industry, among other reasons that could align with an institution's goal (Murray et al., 2021). Despite over 240 institutions supporting a varsity esports program recognized by the National Association of Collegiate Esports, it can be anecdotally observed that most of these programs consist of only one or two full-time employees alongside an assortment of student help (NAC Esports, 2024).

Research Direction

Existing research within esports has explored the motivations for players or comparing esports to sports, rather than making meaningful recommendations for esports program staff. Given the existing research in traditional sports and the complications present in esports, the present study aims to explore the topic of team cohesion in collegiate esports settings.

RQ1: What are current collegiate esports players' perceptions of team cohesion?

RQ1a: What are current collegiate esports players' perceptions regarding the importance of sharing common goals amongst the team?

RQ1b: What are current collegiate esports players' perceptions regarding the importance of an individual's goal alignment to the team goals?

RQ1c: What are current collegiate esports players' perceptions regarding their team's social environment?

RQ1d: What are current collegiate esports players' feelings towards their level of closeness to their team?

RQ2: What are some environmental factors present in collegiate esports settings that might impact a team's ability to find cohesion?

CHAPTER III: METHODS

Due to the exploratory nature of this study, a qualitative methodology was used to probe and find meaningful insights into the current state of collegiate esports coaching. Specifically, semi-structured interviews were conducted to explore the current experiences of collegiate esports players and their perceptions of team cohesion. Semi-structured interviews allow for core theory principles to be asked guiding a conversation's direction, while also allowing for discoveries as a result of probing, allowing for a more complete exploration of the topic (Galleta, 2016; Magaldi & Berler, 2016). Due to the emergence of esports research, qualitative interviews will allow for a richer picture to take shape of perceptions and circumstances surrounding collegiate esports.

Data Collection

The recruitment of participants was done through a social media post via X (formerly Twitter), due to the extensive network within the collegiate space of one of the primary researchers. The intake form was then spread via word of mouth between players and/or from program managers to their players. On the intake form, volunteers were first screened to confirm that they were a collegiate esports player within either a varsity or club program and above the age of 18. After passing the automatic screening, potential participants were then asked for contact information along with basic demographic information about themselves, information about the team they play for, and potential times at which they would be available for an interview. Potential participants were then contacted and given an informed consent form in accordance with IRB protocol, along with a time scheduled to conduct the interview. Interviews were all conducted by the same researcher over Zoom. Online interviews were chosen to capture as many different team circumstances as possible, rather than interviewing all players on one

team or players from multiple teams within the same program, to better get an idea of overarching perceptions towards the research topics that are more broadly applicable.

Participants declared their level of comfort with recording an interview on the informed consent form, and permission was requested at the start of the interview. Of the 13 participants, 12 agreed to have their interview recorded. The interviewer then carried out the semi-structured interview using the 14 questions listed in Appendix A, while also keeping up with the discussion with the interviewee. Questions were designed to target the viewpoint of the player as they pertain to one of the four aspects of team cohesion identified by Carron et al. (1985). These questions included additional contextual and demographic questions along with a discussion of both team and individual goals, the social environment around the team, and the staff support structure around the team. During the interview, the researcher also wrote notes regarding each participant's responses. After participants were given the opportunity to add any other thoughts they had, the recording was stopped, and then participants were asked if they had any questions for the researcher.

Participants

Thirteen interviews were conducted with collegiate esports players. In an effort to keep the participants in this study anonymous, a full table of participants and identifying information will not be provided. Linking identifiers together, in this case including information regarding the race and gender of the player, the game the player competes in, the year rank of the player, the role the player describes themselves as having on the team, the program's nature as a varsity or club program, and how the player describes the goals of their team is likely to make the players identifiable (Moore, 1998). To get a better idea of the participants in this study, the following paragraphs will summarize the participants that were involved, while not linking any

of these identifiers together with any one participant. Additionally, while pseudonyms were used for all participants in the coding process, they will only be used in the presentation of results when it is believed experiences should be linked together for demonstrative purposes. Otherwise, when it is believed that a piece of demographic or contextual information is needed during the presentation of a quote from a player, that information will be presented with the quote.

The participants consisted of 12 male students and 1 nonbinary student. Ethnicities included white (9), Asian (2), Arabic (1), and Hispanic or Latino (1). Participants also covered all university class ranks, with 4 first-year students, 3 second-year students, 1 third-year student, 2 fourth-year students, 2 transfer students who had been at their current institution for one year, and 1 transfer student who had been at their current institution for three years. Among the interviewees were two former professional players in their respective games and one international student. Nearly all players reported being on their current team for all of their time at their current institution or as long as the program had existed. Lastly, 6 players reported considering themselves either an in-game leader (IGL) or shot caller for their team, and 1 player identified themselves as a player-coach. Other than the heavy inclusion of IGLs, this seems relatively consistent with expectations of the population of collegiate esports players, especially in terms of ethnic and gender diversity (Postell et al., 2022).

All 13 participants were from different institutions. Of them, 7 players were part of a university-sponsored varsity program, 5 players were part of a club team in which the university did not have a varsity program, and 1 player was a part of a club team that was viewed as the "academy" roster to the varsity team. 11 of these universities were public institutions and 2 were private institutions. 3 were small institutions (student population below 5,000), 4 were medium institutions (student population between 5,000 and 15,000), and 6 were large institutions (student

population above 15,000). Players were from a variety of games, including *Overwatch 2* (4), *Apex Legends* (2), *League of Legends* (2), *Call of Duty* (1), *Rainbow 6 Siege* (1), *Splatoon* 3 (1) *Super Smash Bros. Ultimate* (1), and *VALORANT* (1). In these games, teams consist of 3-5 starting players with a few substitutes. *Super Smash Bros. Ultimate* is the only game where players compete in an individual game and does not require in-game coordination with teammates.

As a disclosure, the primary researcher was familiar with two of the participants interviewed before conducting this study. Of them, the researcher was only familiar with one of their esports programs and did not have knowledge of the inner workings of that team.

Data Analysis

First, tools available via Zoom were used to generate transcripts for each recorded interview. Once this was done, a researcher listened back to the recordings and edited the transcripts for accuracy. Then, the thematic analysis process commenced. Thematic analysis was used to find common trends in perceptions across the wide array of participants. A process was followed akin to the process described in Braun & Clarke (2008), which began with two independent coders: the interviewer, who has endemic knowledge in the collegiate esports ecosystem, and another experienced researcher in the field of traditional sport.

During the coding process, the primary points from each player were accumulated and grouped based on question type: questions pertaining to the group's goals were grouped together, questions pertaining to the group's social activities were grouped together, and questions pertaining to the team's coaching or leadership environment were grouped together. Then, statements made by the players within each group of questions were compared to identify similarities within each question grouping. As the process concluded, common themes were

compared across the question groups and condensed down into overarching themes with various subthemes. The team cohesion model was not explicitly considered while developing these themes, though comparisons later were drawn between the model and how each theme impacts one or multiple of the Carron et al. (1985) aspects of team cohesion. The two researchers found their consistent themes common across the data separately and then came to a consensus on the primary themes of note given the research questions.

CHAPTER IV: RESULTS

A few key themes were identified across all interviews about factors applying to team cohesion in collegiate esports. These themes include a heavy emphasis on in-person social interaction, the struggle between team play and an individual "solo queue" mindset, a great deal of team autonomy, the importance of finding a shared level of effort amongst the team, and a variety of external factors associated with collegiate esports programs.

Importance of In-Person Social Interaction

All players interviewed reported being anywhere from friends, close friends, or best friends with their teammates. Social activities with teammates mentioned included getting food together (8 instances); congregating for a programmatic activity such as a media day, workout, or general club meeting (6 instances); exploring other hobbies together including rock climbing, escape rooms, and billiards (4 instances); meeting up for in-person game nights (3 instances), and playing games with their teammates online that were not the game they compete in (3 instances). Two varsity players explicitly mentioned that some of their teammates lived together, and one club even organized a hot pot for all three of their teams from the same game. Interestingly, when explicitly asked, 5 players reported not socially interacting with their teammates via an online medium at all, saying that any time with teammates online was spent playing the game they play competitively, whether in formal practice or informal queues with teammates. Of these five players, one included a high-performing club team, and another was a new club program with a much more social atmosphere. The high-performing player cited that everyone on the team took playing the game at a high level very seriously with a very dedicated schedule, with very little time for other games while online:

> I think that the problem is with our team is like online, We don't do anything other than [play our competitive game], right? Like one of our players, is a tier 2 player who [represented our country at an international collegiate event], So [they] traveled to Brazil to like last year, or whatever so like. It's a pretty, like, high-level group of players. So…everyone's very serious about winning and improving and being high on the leaderboards. So any free time outside of school is pretty much spent in the server or in game…Any time spent online, like when we're playing a game is like duo queuing right? Like, duo queueing ranked. So yeah… you'd get up at 6 in the morning, [to] go to class. Come back from class at 4 PM. Get on ranked from 4 PM – 6 PM, and you're duo queuing with your teammate, and then you come to practice, and then, after practice, your duo queueing with another teammate until 11 or 12, and then you're going to sleep and waking up and kind of repeating the process. So it's that sort of repetitive process of like, you're at school. You're spending time with your teammate. There. You come home…constantly being surrounded by them. But you know, in a way that you're driven to.

Meanwhile, Jesse, the player from the newer club program mentioned the following as their motivation to see their teammates in person:

> The reason why I tried out for the…team in the first place is because I want to do those in-person [activities]. You know, connections [and] LAN kind of thing. But you can't achieve by having an online team from different parts of the world.

All participants reported individually being content or wanting more social interaction with their teammates. Only one player reported wanting less social interaction with some of their teammates.

Learning More about Teammates

Players reported that these social activities helped them learn more about their teammates. There was specific stress on learning teammates' mannerisms, of which an IGL wished to be more social with their teammates to learn more about them, which could result in making better in-game calls. Another IGL said the following:

> It's viable…to like, get a connection with your teammates to a point where you can be like social with them outside of the space. But you don't have to be insanely close to your teammates. I feel like, if you're good enough to like, hang out from outside and grow [a] connection with them, you'll know, like, more in-game what they're capable of and like, what makes them shut down.

Two other players mentioned that the sheer fact that they knew their teammates face-to-face made it harder to be angry with them, likely because they know that it is coming from a place of understanding.

Additionally, players mentioned that knowing their teammates more closely allowed for them to "joke around with one another [to] decrease tensions," and to have better constructive conversations surrounding gameplay strategies. One player recalled their first few years on the team, saying that they "weren't afraid to voice [their] opinion as much the more we hung out together in person." This sentiment was echoed by two other players.

Trust

Players also reported that the social interactions they had with their teammates, and the bond they developed with one another, allowed them to trust each other more. This sentiment extended to both in-game and out-of-game scenarios, where one IGL said, “after having been around my teammates for so long, I trust my shot-calling ability, and they have the vision that I do.” Additionally, a former professional player mentioned that “having that person that’s comfortable being like ‘hey bro, it’s all good man’ can be invaluable to help have a mental reset in an individual game.” One player even mentioned that this trust extended to the team’s student coach, who was treated like a member of the team just like any other player. Outside of the competitive environment, players also valued feeling as though they could go to their teammates for anything.

Combatting a Solitary “Solo Queue” Mindset

One theme that constantly appeared throughout conversations was topics surrounding the consequences of a specific player not falling in line with the team. While uglier examples of this were given, some hints at a more individualized approach to the team setting were also present in the players’ statements while discussing their goals. When asked to identify their team goals, most players reported that the teams, most players reported having some form of winning, as 4 teams had specific targets (i.e. winning a conference, making it to playoffs), 4 players just said that their team just wanted to win in general, and 1 player who said the goal of his club program was to be recognized on campus and demonstrate the need for a varsity program. However, only 3 of the 13 respondents mentioned a team goal of teamwork or communication, and 3 players reported that the team was aiming across the board for generalized improvement. When discussing their individual goals, a total of 7 players reported attempting to improve personally at

their skill at the game, where 3 of those players reported a personal goal of wanting to be recognized as a better player amongst a higher tier of players (professional players and/or a rank goal). Only 2 players explicitly stated having an individual goal of wanting to learn how to be a better teammate.

Beyond these statements of goals, mentions of hypothetical or previous teammates attempting to play more for their individual objectives rather than a team's overall objectives continued to surface. Even before the goals section, one second-year player described his current team's level of cohesion with a preface:

> [In] esports in particular, players develop way more of a solitary mentality, especially the way ranked develops players, is like, "I need to be the best." Like, you look up any YouTube video on how to improve in [our game] from 5 years ago, or from when the game first came out. It's just "you need to carry, you need to carry, you need to carry." And so, I think that really develops in players' minds. And I - I see that in the like, the new players who come in is like they'll try to make hero plays right? Or stuff like that where it's like. no, it's a team game.

This kind of sentiment was echoed by a few other players, who described an individual sticking out in their own ways. A first-year player on a different team felt a similar situation with a new member of their team not fitting in right away – "it's not entirely [their] fault, [they] just haven't been with us for long enough." A third player, Logan, even lamented that their current environment felt as though they were just playing solo queue, with very little communication or coordination happening across the team. However, this mentality can best be observed by a specific extreme example from a fourth-year player on a club team:

> Like, we had [a player] a few years ago who played, like, he was like top 10 - top 20 most ranked games played in NA that season, like, [a] ridiculous amount of [our game] this guy played, and his goal? I don't know. It was just like, he - he wanted to like get [the highest rank in our game] or something, right, and then he - I mean, like he spent so much time in solo queue that, like it kind of took away from how we would react or interact with him on the team where he would like have these, like, sort of solo queue tendencies, just 'cause he played so much. He was so used to just everybody being, like, off mic and - and whatnot. So, the team cohesion wasn't there that year.

Conflict Resulting from Individualist Mindset

Observations from other players on different teams noted that typically, it would be only one person on a different page from the rest of the team. In one such example, Brooklyn, a fourth-year student on a club team goes into incredible detail from their freshman year:

> [I] was like, still trying to learn the ropes on this JV/Developmental team we had a player. was not listening to other people, was kind of in his own…He wouldn't listen. He kind of [did] his own thing, and he was kind of like a selfish player. We sat down. We tried to talk with him, and he just wouldn't get it…What ended up happening was that one player said, like, "hey, I'm done playing with this guy. I'm not gonna play if he's on the team." And then everybody else on the team was like, "I'm kind of at the exact same boat." So we ended up having to kick him, unfortunately. He's a great guy I - we've had him mended how it's our relationship since then. But it was just like it left a wound, and it was like we spent like several months working on this team, and he just wouldn't work and get it together. So we

> eventually had to pull the trigger and boot him off the team and bring somebody else new in.

Brooklyn continued:

> Anytime that stuff like this has happened, it stems from one person not realizing that something's going on. We've had lesser extents. Nothing is like, [as] severe as that. But it's like, always one person is like not on the same page or is being over dramatic about something that is like minor or something like that…The rest of the team gets kind of fed up with it. And then we have, like an intervention moment.

This player's previous experiences with conflict in the team environment have given them the tools to help prevent conflict like this from arising in the future, which will be discussed in the next section. However, these kinds of conflict and misalignment of goals amongst a team can lead to social fracturing.

Difficulty Connecting to Entire Team

Five players clarified that they had different levels of closeness between different teammates. Logan mentioned that only one of their teammates frequently asked to play ranked outside of practice time. Varying playtimes with different teammates were also experienced by another player:

> I've known [one of my teammates] since July…He plays a lot of games with me like Apex and stuff like outside of team practices and stuff. One of our other teammates, I play hanging with him here and there, in like other Discord servers. and then 2 of them they're our - more or less our subs - don't hang out. I just haven't hung out with them, too often, but I hang out with them a little bit. It just

> kind of depends. I'd say one of the players, [I'm close with], the second one a little bit, and the third and 2 other ones. Not really.

Brooklyn, a fourth year, expressed apathy for getting closer to some of their teammates:

> Some of the players, absolutely. They're great guys, some of them - we don't see eye to eye. And, to be honest, I would be a-okay if I've never…really vibed with them or hanged out with them in person…Just sometimes people butt heads over like silly stuff that doesn't really make sense. And we have a couple of those players that are like that on the team.

Team Autonomy

One striking similarity across both club and varsity programs alike included the extent to which teams were autonomous from the rest of the program, including the programmatic staff that was hired to help support those teams. Interestingly, though, this was not typically described as a problem by the players – rather, just the way things are. This section will be laid out in describing the lack of connection to staff, the resulting less pressure felt from being a part of a varsity program, and how students take it upon themselves to compensate for the vacuum of leadership felt.

Lack of Staff Support

The support structures of these teams varied from program to program. Below is a list of the staffing for each varsity team, as reported by the participants. Students who are a part of the structure will be explicitly listed in the list; other roles should be considered as employed by the program.

- Director of Esports + Assistant Manager + Coach
- Director of Esports + Student Player-Coach + Student Team Manager

- Director of Esports + Assistant Manager + Student Team Captain
- Director of Esports + Assistant Manager + Student Team Captain
- Director of Esports + Student Team Manager
- Director of Esports + Student Team Manager
- Director of Esports

Note that "Director of Esports" here includes any overall program managers – referring to the head of the program, in charge of multiple teams. Most participants mentioned that they referred to their director and/or assistant manager as "coaches," yet upon exploration of their responsibilities, the participants did not feel as though they were directly involved on the team. As it pertains to in-game strategy, program directors or assistant directors were minimally involved, and entirely left the players to figure it out. Dakota mentioned that their director would "be there during matches, but normally isn't there during practices. He's more of just there to run things as kind of like a manager." Dakota later lamented that a previous 'head coach' of the program "was focused more on the business side rather than connecting to the team, like he wouldn't – I don't even think he showed up to the games." Another player mentioned that their director was heavily involved with a team for another game where they were a former professional but was not involved with their game: "[They] just kinda let us do our own thing. And yeah, it's been working out," later remembering that "the only thing I guess [they've] had a direct influence is like over our jerseys." Another player echoed that the director would let the team "take the reins" as it pertained to in-game strategy but would make sure occasionally that no conflict was occurring on the team. One player put it bluntly: "I think I have a coach, Coach [name of the director]. I - to be honest, I've never seen [them] coaching." To be certain, the responsibilities of an esports director might vary from program to program, but from these

interviewed players' perspectives, they receive little to no direct support impacting the team environment from their director.

Some varsity teams also reported adding expectations upon themselves as a team. One player mentioned that they had added an extra VOD review day in addition to their expected practice schedule "just to be able to prepare more."

The club staff structures will now be listed, as described by the participants in the study from club teams. Unless otherwise noted, all these people are students, and none are university employees.

- Team Manager + Team Captain + Volunteer Coach (professional player, non-student) + Student Coach
- Team Manager + Student Coach
- Team Manager + Team Captain
- Team Manager
- Team Captain
- Team Captain

The teams with dedicated coaches had differing levels of commitment, despite working for free as volunteers. The player on the team with two coaches described their relationship with the team:

> [The student coach] does some VOD review stuff, but not really game day coaching or anything, 'cause [they] doesn't have time, so [they don't] really do much. [They] just helps us with VODs, and then our [professional player] coach guy, when he's not in season he'll - he'll watch VODs. Send me stuff back to me, and then he'll sometime[s] show in call before game days and hype us up. And

> then that's pretty much it. It's like we don't have, like, strict coaching or anything. It's more or less just help, I guess.

Meanwhile, a high-performing player from a club program mentioned this about their student coach:

> They interact directly with like player development, especially with the newer players, is spending a lot of time one on one talking about. There's like. Whenever that player is doing their own individual review of their play, the coach will usually join them and sit in with them and talk about how, how our team works, or how the rest of us play, because the coach already knows…The coach is also a friend, right? He's just a member of the club like any one of us, but someone who is willing to step up and say, I'm willing to put in the work and watch the VODs and do the research. And he studied under one of [a professional team's] current coaches. So he was like adamant about joining, but he is one of our friends, we know him right? So he's a friend, but he's also there to aid and teaching about the game.

Reliance on Student Leadership

As explored above, a great number of roles – including those in varsity programs – also belong to student leadership. There are both formal roles carved out for students to give them more authority to make decisions, and there is also a general feeling and desire for mentorship even without formal role titles.

Formalized Student Roles

These student leaders include team managers and team captains. Team managers include both student employees and volunteers of the program who help the team schedule practices,

matches, and even some social activities for the team, ensuring constant communication across all parties involved. Team captains typically serve as the scheduling contact for programs that do not have team managers. One varsity player explored this relationship between the team, team manager, and program director when it came to developing program requirements and expectations:

> I think [the student team manager has] enough control where it's like, or at least as it appears like…I actually don't like have any clue 'cause I haven't really like delved deep into it. But I think it's more or less like a, "This is what you should do. This is what I'm not telling you to do, but this is like what's been set upon me from the director…" It's like an echo of what the director is kind of thing, but it never seems like it's like the director's doing. It's like his idea.

However, for most teams, in-game strategy, the highest ranked player was most often reported to be generating strategy and tactics – not any of the program staff. Multiple players mentioned that their team captain was the highest-ranked player on their team, and therefore made most decisions about team compositions or strategies, often asking a few other players for their input before solidifying it. One varsity player was on a team for a game that the director used to play yet reported no involvement from the director to the team, instead also reporting that the team captain developed most of their strategy. Mack, a varsity player for *League of Legends*, also mentioned that their student team manager assisted in the process of deciding and developing a strategy for the in-game character draft. Additionally, they mentioned that the team manager was the one who helped console the team after losses:

> So like, if we like lost, and we like, feel depressed. He usually says like, "Oh, it's fine. We can win another game like that." Yeah. So [our] team manager usually

does that. When like, we're fighting, he usually like managed to like, [get us to] not fight.

Mentorship

Both with and without a formal role, many players expressed a want to help mentor or teach their teammates in a variety of ways. This motivation was shared by a player-coach, a former professional player entering university for the first year, and even a few club team upperclassmen. A former pro said that his goals changed within the first few weeks of his arrival on the team:

> I kind of have this aspect of their college kids. I came from a, like, a pro world. This is what I - I should be performing very well. I think I'm - not overestimating, but like I need to sit myself down and like kind of reel myself back and understand that people aren't gonna have the same experience that I do and what I do. So for me, I wanna kind of get to a point where I'm comfortable with teaching. so much so that I don't have to, like, go over things over and over and over again, and they just click. But I want to figure out that teaching style that works best for I mean, really, anyone I play with.

A club player provided a similar personal motivation for continuing to improve in the game:

> I would say, I have a ranked goal, and my, my ranked goal is to hit [the second highest rank available in the game]….By, like, reaching [this rank], I would be able to, you know, prove that I'm a - they already kind of know and like are accepting of the fact that I'm an IGL. But once you hit that rank it's kinda like "Yo. This guy's a [high-level player], like, he's pretty cool." We - he's like,

> obviously has a lot more clout, I guess… If I'm able to learn a lot more at that rank and apply it. And like, help my team learn more, you know.

In some instances, participants expressed not only a desire to help players learn more about the game but also to help them as people. A player-coach described wanting to not only teach his teammates about the game, but also teach them how to learn and improve. Brooklyn observed their personal goals changed throughout their college career, to "help our new blood take the reigns over from me and make sure that we're still – like the team doesn't fall apart once I'm gone." Brooklyn went on to talk about how they have forced the team to have conversations to resolve instances of conflict as soon as they arise, to ensure the team gets on the same page.

Less Pressure on Varsity Program

Interestingly, a few participants of varsity programs mentioned a level of comfort associated with participating in their varsity programs. One first-year player mentioned the social structure associated with playing on a varsity esports team was helping their transition to college:

> I've lived in the same place my whole life. and I feel like going - and because I live on campus now, I don't live at my house anymore. So, I think at the beginning I was definitely stressed, and I think being able to have a team and a consistent group to play games with has definitely been a big stress reliever, I think, and just a good social outlet for sure.

Another player, along similar lines, mentioned that the college esports environment was a general "de-stressor" noting that they wanted to participate on their team rather than be excited to leave and go on a vacation. This player observed that they did not view their role as a collegiate esports varsity player as a "job," but as a fun activity that they were also getting benefits in the form of a scholarship. On the note of those benefits, a former professional player

also mentioned that in comparison to his days as a pro, his collegiate team offered him a level of stability financially too.

> [In professional] esports, it's like, you get your - whatever your stipend salary may be for the month. Sometimes - like mine was around $2,500 - $3,000. And like once you get cut, there's like. No, you don't get, like, a 401k, There's no benefits out on this. So once you're cut, you're cut, so there's always pressure to perform every single time. I think, with college, since it's not so much on the line and like so much money behind it. Besides, obviously, like, the scholarships. it's just a lot. It's completely different world.

These kinds of statements give credence to other interviewees, who expressed general gratitude for the opportunities presented to them. A player of a new program was grateful for the club members who brought the team together:

> I'm just really happy, that… because the – our team captain, he wanted a Splatoon team at [our university], And basically him and [the team manager] made it happen, and I'm glad that they made it happen, because I always wanted to do like, [our game] in college. But we didn't have [a team]. So, the fact that they went through the effort to make it happen, so people like me can participate in that. I'm very grateful for that, and I'm very happy that I went for it. Went for the tryouts. Got in. I'm just, you know, going along the – riding along the waves.

An upperclassman varsity player also expressed a desire to do it all over again:

> Participant: “I wish I was younger, man. (laughs) It's been, It's been a great time. I wish I could do it more than the – the 3 years that I've been here.”
>
> Interviewer: “Why is that, you just don't want to go to the real world?

Participant: “I guess, I mean, I'm definitely ready for it. But just the idea of just playing video games, and – I don’t want to say getting paid to do it, but definitely, scholarship. Having an incentive to play video games is nice. Yeah, I’m gonna lose that.”

As a sidebar, two club programs reported the opposite effect of wanting to be recognized by their institution, adding to their pressure to perform.

Shared Level of Effort

Many participants stressed a shared level of effort was important within an esports team. Some examples are included below of players discussing this concept, as it pertains to working towards the same goal:

- “People aren't going to put in the same effort to get to that goal. and if that doesn't happen. Then things will break down and team chemistry will go down.”
- “If you have players that are half in, half out it can be very difficult to buy into the culture…”
- “When teammates all don't want the same thing…the team environment can clearly become toxic, right, when one person, all they want to do is win. It can become really taxing on that person to see other people not care as much as they care, right? And then the people who don't care as much will obviously see that person who cares too much is trying too hard, or, or obsessive, or whatever. So I think it's really important that every player is on the same page about what they want, out of how the team is going to play, what they expect from their teammates, about the effort that's going to be put into the game.”

One player even lamented that they wished their teammates would put in more effort:

> We don't have like enough time to talk [after scrims] about it where we're like expressing it. So I think, [one of my teammates is] the guy who wants to talk, just talk and - and like [the others] just listen without a reason. And like they just kind of don't wanna try, like, something new in the scrim. I think, like, that's a big part for me, like for a scrim, I think. Like, if you try to do it. even if it fails or like success, I think like that can make a huge like step. But right now…my teammates… kinda don't think like that.

On this note of the importance of goal-setting, Jesse, a member of a lower-performing social club, came up with an analogy to compare the team environment to something they experienced in the past:

> The best way to describe it is like marching band. If you're all passionate about the piece you're playing, you're all gonna do well. If some person hates the music piece, they're not gonna do well and it messes up everyone else.

Some players didn't entirely agree with the idea that all members of the team had to have the same level of effort across the board. Avery, for example, noted that one player was ranked significantly lower than the rest of the team, and might not have the same motivation to play as the rest of the team. However, Avery thought, "As long as we're respectful [and] we understand each other, then it goes well." Another player thought that it would be okay if one player's goals included being recognized professionally, but also thought that at their level, "everyone recognizes that it's not going to be a solo thing," and that the player would know the best way to stand out would be to work with the team and put on the best performance possible together.

Goals Motivating Team Effort

Some participants recounted past and present examples of the goals the team set for themselves bringing the team together. One player discussed the intensity of their current team:

> Even though we're not a Varsity program, we're one of those teams that's really, really -we want to live up to the ranking that we were able to hold on to last year. And so I think that really influences our work ethic into the game, where I think almost to the extremes of, like, other teams might call it too much. Where, like, it's like 10-hour practices of like, optional, right? It's not scheduled. We're not forcing it on anyone, but everyone just does it. and then I think other teams might call that a little too much. But I think when their team wants that, and like when the drivers there. I think it's a really good thing, and I - I love the environment of everybody wanting that.

Another player recalled a story they experienced while playing on their high-performing high school esports team, discussing how the shared goal of winning in playoffs allowed the team to set aside their differences in a rough team environment where teammates did not want to talk to one another:

> We couldn't practice because - we couldn't get through a whole practice without people being upset and wanting to leave. And eventually we all kind of came to the conclusion around playoffs like, “Hey, this is the time when we really can't lose. If - we want to be champions, so can we all suck it up and just win and understand that all of us are coming from a different place.” And so, we didn't have the same, you know, we still despise, like everyone just despised each other.

> But it was - we all had the understanding that we needed to get past that if we want to win.

External Factors Impacting Team Experience

Participants noted a wide range of external factors to the team environment that impacted their team experiences. These factors included a limited number of available players that constantly rotated every year, changing individual priorities over the college career, standard scrimmage times shared across the game's community, the requirements and resources placed upon varsity players, and a possible difference in international culture.

Different People Every Year

The cycling of talent in college esports programs came up numerous times as a factor in establishing a level of cohesion. Some players expressed hesitation about knowing how well the team would work together in the long run due to how early it was in the semester. A player discussed this frustration with the relationships with their teammates, saying that they had known some players on their team for one semester and others for over four years since high school. A good overview of players entering and leaving the team environment can be observed from the account of a player-coach regarding the new changes for the program in their second semester:

> I think our team is pretty cohesive. We just, well…I will say it's very early on our second semester. First semester, we only had a[n] Academy team. That's just [a few] players, and they were very cohesive. Everything was great… This semester, we have a whole – [doubled the amount of players] to our team. So, a few new players in the mix, one player stepped away from university for a semester, so we lost one, but we gained a few. Hard to say so far, I mean, no problem so far, but hard to say how well like, I really believe that chemistry truly is, and how well

> they're willing to work with each other. That'll just kinda have to be seen over time.

Both the loss of players from graduation and the entering of new first-year players were on the minds of participants, depending on the program's circumstances. Additionally, Avery expressed a specific anxiety associated with their team in a general lack of available talent when discussing just how aligned teammates' goals need to be on a team.

> If we expected our [lower-ranked] player to have the same goals as "give it the best you got," he might - might get burnt out. He might not want to play on the team anymore. And then we don't have a team - we can't compete.

A lack of available players for the team at their university could be a problem, and therefore ensuring the comfort of each player is paramount.

Changing Individual Priorities

Many players expressed that their academic lives often took precedence over continuing to work with - or be social with - their team. Often, these sentiments were shared by upperclassmen, who felt as though their teammates "already know a lot about [them] – all that [they're] willing to share." Additionally, some of these players discussed simply not having as much free time as they used to, as seen by one player:

> I actually just don't have that much free time anymore. And when I do have free time expense looking at job boards just further educating myself, I guess. 'Cause I don't know. I'm about to go into the real world, so I'm trying to learn, I guess, as much as I can.

Some upperclassmen contrasted their goals on the team from their first few semesters to now, often taking up the mantle of those mentorship roles discussed earlier.

Standardized Practice Times Across Ecosystem

Some players cited that scrimmages between teams were often scheduled during consistent hours of the day every week. This was particularly stressed by the two *Apex Legends* players, who noted that scrim blocks would run twice a week due to the challenge of needing 20 teams to play for one practice session. One higher performing team in a different game also noted that the expectation of what days of the week they were practicing was largely decided based upon the common times of available teams at their level for practice, including some amateur, non-collegiate teams.

Varsity Program Requirements and Resources

Many of the varsity players discussed having requirements on in-person play utilizing the campus facility and/or a specific hours per week requirement on practice that needed to be met, which dictated practice scheduling and expectations. On the note of playing in person, one player recognized that the team's perspective changed slightly after doing it for a while:

> So I think originally [playing in person] was an idea from the management, but I think our team definitely likes it more. It's a lot easier to, you know. Put a name to a face rather than just somebody behind the screen being able to see them in person.

In addition to having some of these requirements, the player on a team with a dedicated employed coach discussed how the coach holds the team more accountable:

> One of the other things that coach does especially contribute to is keeping the, like, half the there's part of the team environment…But then there's another part that's discipline. And keeping… all of our players honest…and driven for that win. Coach does a lot – puts a lot of time into… influencing our our players to

> stay on task to…win always… [to] do the best we can and show that we're the best around. It's really hard to play…5 hours a day, 5 days a week, and then it end up, not even having a day off. And so, then it ends up being 7 days a week, and…it can really add up. And so, having that discipline and keeping your mind on the goal, and all of that coming through coach is really important. I know even last – last semester, when we were just a rebuild team, it still was really helpful to have that drive. Even when…we had no goals as a team; we had no expectation[s]. We weren't supposed to win anything. We were supposed to just, be there for our requirement and then head home, you know. Clock in, clock out… So I think that's another part of the [team culture, that] it's something that Coach instills into all of us. And then we just hold everyone accountable to that… to keep working out, to keep making sure we're sleeping well, to keep attending practice on time to keep trying our best to keep winning.

Differences in Culture

The international student who was interviewed mentioned observing differences in the culture of a team environment between Korean teams against Western teams. The participant surmised that while watching professional esports players' post-game interviews, they felt that it could be true that professional Korean teams discuss the aftermath of scrimmages and practice sessions much more than European or North American professional teams might, which could impact how the team works as a unit. These differences could stem from nationwide cultural differences between these regions of the world and also could help explain why the player felt generally unfulfilled when coming to the U.S. to play on a collegiate esports team.

CHAPTER V: DISCUSSION

The present study aimed to explore collegiate esports players' perceptions of team cohesion in their current environments. Specifically, this study looked to verify that applying the team cohesion model presented in Carron et al. (1985) would be reasonable for collegiate esports contexts. 13 participants from various collegiate esports programs, either formally supported by their universities or participating on student-led club teams, were interviewed to gain their perceptions. From these interviews, repeating themes included the importance of in-person social interaction, cohesion struggles given a preconditioned individualist mindset, teams being effectively autonomous as a unit led by students, the importance of a shared level of effort, and a variety of external factors impacting a team's ability to be cohesive. While not directly identified by the players, many of the dynamics in the esports team environment may be a result of a much smaller team size, where all teammates are expected to be in voice communication with one another in a coordinated team environment. Additionally, the breadth of experiences encountered in this study is a testament to the differences in experiences competing in collegiate esports dependent upon the game, level of institutional support, and the previous experience of student leaders within the program. The following chapter will discuss the findings of the study in terms of the research questions presented in Chapter II, followed by some implications and limitations of the study.

RQ1: Generalized Perceptions Regarding Team Cohesion

Participants in this study generally reported positive perceptions toward their current team's level of cohesion. On occasion, participants reported problems from previous teams, such as Brooklyn's account, the player who was assessed to play too much solo queue, and the player who discussed their high school team. One participant in particular reported discontent and

disappointment regarding their team's current ability to work together. The aspects identified by Carron et al. (1985) will be discussed as they pertain to the results of the study.

RQ1a: Group Integration – Task Aspect

The consistent theme of the stress on a shared level of effort across the team is consistent with the group's integration to the task aspect of team cohesion. Collegiate esports players tended to value a consistent environment across the team. No players reported issues with getting teammates to practice more, and the team environment seemed to be suited for most participants' situations. The majority of players were able to identify concrete goals for their team, indicating that there might be a shared perception across their team. Examples of common goals bringing the team together to motivate a shared level of effort were also observed. Despite some players arguing that it may be acceptable for some individuals on the team to have a higher dedication, it appears as though some minimum level of effort is expected within the team environment.

RQ1b: Individual Attractions to Group – Task Aspect

While many interviewees agreed that it was important for an individual's goals to align with their team's goals, many also said that slightly different individual motivations could exist within an esports environment, such as the desire for individual recognition. It appears as though many esports players may enter a team environment (including many first-time team competitors in the collegiate esports context) with a preconceived notion of self-improvement and the necessity to "carry," or have an exceptional individual performance due to their experiences in ranked solo queue. This preconception may cause conflict to occur on a team, due to a lack of alignment with a team's shared level of effort, depending on the goals of the individual player. Many reports of discord across a team are resultant of a single individual encapsulating this mindset, including Brooklyn's account of the "selfish" player "[doing] his own thing." At this

point, a team must rely on its student leadership to rectify the situation, whether they be a team captain, student team manager, or upperclassman with more experience, to speak up on the matter. Despite this, the level of autonomy that a team had seemed to be appreciated by some players, one mentioning that it had worked quite well for their team.

Little literature explores the impact that an uncooperative player has on the competitive team environment. It has been identified that in some games such as *League of Legends*, there are very few alternative practice tools available other than the game's solo queue (Abbott et al., 2023). Additional anecdotes have been observed of players having "hot-headed" mentalities and otherwise being a nuisance to coach in professional esports due to their pride of being self-made (Sabtan, 2022). Further research should be conducted to determine the extent to which this mentality may be present in a more average esports player, which may be of note as lower ranked players were found to overestimate their own skill level in *League of Legends* (Aeschbach et al., 2023).

RQ1c: Group Integration – Social Aspect

Many of the participants interviewed viewed the social environment as generally enjoyable and saw the importance of knowing their teammates, consistent with expectations. Perhaps most surprisingly, many collegiate esports players appeared to desire more in-person social activities rather than online social activities. Players who were unconfident in their team's level of cohesion cited limited or no in-person social activities. These in-person social activities included getting food together, programmatic activities, participating in other hobbies, meeting up for in-person game nights, and even living together. Participants cited that these activities helped them learn about their teammates' mannerisms and allowed them to build trust in one another. Some players also cited that they were closer to some teammates over others, which

could be a problem for overall team cohesion and unification in strategy development. This matches with previous research indicating face-to-face communication would help a group reach higher levels of social cohesion (Irmer et al., 2000; Ahmed et al., 2012).

RQ1d: Individual Attraction to Group – Social Aspect

Nearly all participants reported either being content or wishing for more social interaction with their teammates. It appears as though collegiate esports players have a desire and enjoy getting closer to their teammates, and some even cited a level of stability in having a dedicated activity built into their schedule with like-minded individuals, further sharing in a sense of community as previously found (Kauweloa & Winter, 2019). As years progress, there may be less desire for an individual to be social with their teammates, as they feel as though they have gotten as close as they will be to their teammates and have external pressures including graduation and a real-world job hunt. Regardless, this aspect seems consistent with expectations.

RQ2: Environmental Factors Impacting Cohesion

This study identified a great deal of factors surrounding collegiate esports that impact team cohesion. Internally to the team, the prevalence of a "solo queue" individualist mentality along with team autonomy leads the team to set expectations themselves, regardless of club or varsity status. Even when coaches were consulted for club programs, often the team still managed their expectations and scheduling for each other.

The program or organization in which the team competes under might also have an impact on some variables that affect team cohesion. These include program requirements, staff oversight, the level of student mentorship available, and a perceived level of social & financial stability. Requirements or expectations set on whether the team should attend in-person practices

or meetings might contribute to the extent to which it is easy for players to interact with each other socially (Thompson, 2012; Pescosolido & Saavedra, 2012)

External factors of the environment found include players coming in and leaving the university, changing individual priorities, standardized scrimmage times across the game's competitive ecosystem, and the differences in culture between members of a team. These factors would be difficult to completely control from a team perspective.

Implications

This study summarized the current team environment across a variety of teams. The study found a great deal of support for the Carron et al. (1985) model of team cohesion to be applied to esports contexts, implying it is plausible that their instrument developed – the Group Environment Questionnaire (GEQ) – might be a reliable tool in measuring team cohesion in a collegiate esports context. Observations by the research team suggest that where teams are less strong in the four elements of cohesion described in Carron et al. (1985) were less cohesive, though quantitative research should be conducted to establish this connection. However, this study provides a basis to interpret potential results from a player's GEQ in a collegiate esports context, where it may be unsurprising to see lower individual attractions to the group within the task aspect due to a solitary "solo queue" mindset. Additionally, lower social scores might be a result of not enough in-person social interaction in comparison to online social interaction amongst a team.

Future research on this subject could go a variety of different ways after a pilot of the GEQ as applied in esports. First, comparing GEQ scores across aspects between esports and traditional sports teams could provide insights on some of the key differences that should be accounted for. Further exploring how a breakdown of team cohesion occurs on a collegiate

esports team by getting a fuller qualitative account of all the players on one specific team. Lastly, observing cultural differences could share further insights into creating a more inclusive and attractive team environment to students with diverse experiences.

Practically, this study suggests a few ideas for collegiate esports staff. First, it suggests that encouraging a team to participate in activities together in person will help the team environment as the team bonds with one another. Exploring the environmental factors that programs and/or teams can control may also lead to an evaluation in current philosophies and ideologies of the overall program that may be more conducive to establishing social connections and contribute to a more cohesive environment. Secondly, it also suggests that there is a heavy reliance on student leadership to guide the team, whether that be players with professional experience, a formally employed student team manager, or an upperclassman with more experience. In the last case, the pressures of mentorship coupled with their looming graduation may put a great deal of pressure on upperclassmen in a collegiate esports team environment. Ensuring that players and/or staff have training in conflict resolution strategies and methods for improving the team environment should be critical, as many students may not have the necessary experience to deal with issues before they arise.

Coaching has previously been proven to have a great deal of impact on team cohesion (Gardner et al., 1996). Yet, this study found teams that reported being largely autonomous amongst themselves, with very few having a real "coach" overseeing them. While more attention towards guiding these teams should be encouraged, players appreciate a level of autonomy and independence in establishing their expectations of the team, perhaps attributable to this "solo queue" mentality that they may enter the program with. Programmatic staff should likely work with players to help them achieve the team's overall goals and be in discussion with players

regarding these to earn their trust. As the esports field develops, even further research could include a replication of the Gardner et al. (1996) study, linking a coach and/or student mentor's leadership qualities to aspects of team cohesion.

Limitations

As a qualitative study, it is difficult to draw decisive conclusions on the topic provided. Additionally, as the study was led by an inexperienced researcher, a great deal of personal confirmation bias may be contained within the results (Galleta, 2016). While this was attempted to be minimized through constant input by another party, it is natural that some conclusions and themes could be due to the researcher's preconceptions regarding collegiate esports team environments. The small participant pool covered multiple games but also did not capture participants from every collegiate esports title and emphasized IGLs – players who often are the team captain and constantly make decisions about the team environment. Due to the volunteer nature of the study, likely contained students who were eager to share their experiences on their collegiate teams and might have individually had the bias of painting their program in a positive light, looking for social desirability, despite the promise of anonymity and confidentiality (Collins et al., 2005). A more transparent group of collegiate esports players should include more players who do not necessarily wish to share their experiences. Lastly, it is worth noting that this study was not intended to look for differences amongst gender or ethnic backgrounds, and there is limited diversity within collegiate esports. More research could be conducted exploring cultural differences, and how these impact players' mentalities towards team cohesion.

Conclusion

This exploratory study laid the foundation for team cohesion research within collegiate esports contexts. The findings of this study provide valuable information on players' perceptions of their team environments.

In an analysis of team cohesion in esports, Tang (2018) asserted that "A team composed of avatars of gamers in the virtual gaming environment is just like a team of athletes on the football field in the sense that both groups are in a combat zone facing the enemies together." By continuing to conduct research in esports by applying affirmed traditional sports models, more information can be provided to collegiate esports program staff to better the college experiences of students within their programs alongside the broader esports industry.

REFERENCES

Abbott, C., Watson, M., & Birch, P. (2023). Perceptions of Effective Training Practices in League of Legends: A Qualitative Exploration. *Journal of Electronic Gaming and Esports*, *1*(1), 1-11. https://doi.org/10.1123/jege.2022-0011

Aeschbach, L. F., Kayser, D., De Castro Hüsler, A. B., Opwis, K., & Brühlmann, F. (2023). The psychology of esports players' *ELO Hell*: Motivated bias in *League of Legends* and its iompact on players' overestimation of skill. *Computers in Human Behavior*, *147*. https://doi.org/10.1016/j.chb.2023.107828

Ahmed, N., Amaya, C., Kunene, T., Thompson, J. (2012). Communication and Cohesion in Undergraduate Teams.

Baker, T. A., & Holden, J. T. (2018). College Esports: A Model for NCAA Reform. *South Carolina Law Review, 70*(1), 55-84.

Bányai, F., Griffiths, M.D., Király, O., & Demetrovics, M. (2019). The Psychology of Esports: A Systematic Literature Review. *Journal of Gambling Studies*, (35), 351–365. https://doi.org/10.1007/s10899-018-9763-1

Behnke, M., Stefanczyk, M. M., Zurek, G., & Sorokowski, P. (2023). Esports Players Are Less Extroverted and Conscientious than Athletes. *Cyberpsychology, Behavior, and Social Networking, 26*(1), 50-56. https://doi.org/10.1089/cyber.2022.0067

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Carron, A.V. (1982). Cohesiveness in sport groups: Interpretations and considerations. *Journal of Sport Psychology, 4*, 123-138

Carron, A.V., Widmeyer, W.N., & Brawley, L.R. (1985). The Development of an Instrument to Assess Cohesion in Sport Teams: The Group Environment Questionnaire. *Journal of Sport Psychology, 7*(3), 244-266. https://doi.org/10.1123/jsp.7.3.244

Carron, A. V., Bray, S. R., & Eys, M. A. (2002). Team cohesion and team success in sport. *Journal of Sports Sciences, 20*(2). 119-126. https://doi.org/10.1080/026404102317200828

Chelladuari, P., & Saleh, S. (1980). Dimensions of leader behavior in sports: Development of a leadership scale. *Journal of Sport Psychology, 2*, 34-45.

Collins, M., Shattell, M., & Thomas, S. P. (2005). Problematic Interviewee Behaviors in Qualitative Research. *Western Journal of Nursing Research, 27*(2), 188-199. https://doi.org/10.1177/0193945904268068

Delello, J. A., McWhorter, R. R., Roberts, P., Dockery, H. S., De Giuseppe, T., & Corona, F. (2021). The Rise of eSports: Insights Into the Perceived Benefits and Risks for College Students. International Journal of eSports Research (IJER), *1*(1), 1-19. http://doi.org/10.4018/IJER.20210101.oa5

Galletta, A. (2016). Mastering the semi-structured interview and beyond: from research design to analysis and publication. New York University Press. https://doi.org/10.18574/nyu/9780814732939.001.0001

Gardner, Shields, D. L. L., Bredemeier, B. J. L., & Bostrom, A. (1996). The Relationship between Perceived Coaching Behaviors and Team Cohesion among Baseball and Softball Players. *The Sport Psychologist, 10*(4), 367–381. https://doi.org/10.1123/tsp.10.4.367

Golembiewski, R. (1962). *The small group*. Chicago: University of Chicago Press.

Hallmann, K., & Giel, T. (2018). eSports – Competitive sports or recreational activity? *Sport Management Review*, *21*(1), 14–20. https://doi.org/10.1016/j.smr.2017.07.011

Jin, D. Y. (2020). Historiography of Korean Esports: Perspectives on Spectatorship. *International Journal of Communication (Online)*, *14*. 3727-.

Jin, D.Y. (2021). *Global esports: Transformation of cultural perceptions of competitive gaming.* Bloomsbury.

Jenny, S. E., Manning, R. D., Keiper, M. C., & Olrich, T. W. (2017). Virtual(ly) Athletes: Where eSports Fit Within the Definition of "Sport." *Quest, 69*(1), 1-18. https://doi.org/10.1080/00336297.2016.1144517

Kane, D., & Spradley, B. D. (2017). Recognizing ESports as a Sport. *The Sport Journal*.

Kauweloa, N. S., & Winter, J. S. (2019). Taking College Esports Seriously. *Loading, 12*(20), 35-50. https://doi.org/10.7202/1065896ar

Lott, A.J., & Lott, B.E. (1965). Group cohesiveness as interpersonal attraction: A review of relationships with antecedent and consequent variables. *Psychological Bulletin, 64*, 259-309.

NAC Esports (2024). About NAC Esports. Retrieved March 10, 2024, from https://nacesports.org/about/

Nyström, A., Mccauley, B., Macey, J., Scholz, T. M., Besombes, N., Cestino, J., Hiltscher, J., Orme, S., Rumble, R., & Törhönen, M. (2022). Current issues of sustainability in esports. *International Journal of Esports*. https://hal.science/hal-03731255

Madden, D. & Harteveld, C. (2021). “Constant Pressure of Having to Perform”: Exploring Player Health Concerns in Esports. In Y. Kitamura & A. Quigley (Eds.), *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems (CHI ’21)* (pp. 1-14). Association for Computing Machinery. https://doi.org/10.1145/3411764.3445733

Magaldi, D., Berler, M. (2020). Semi-structured Interviews. In: Zeigler-Hill, V., Shackelford, T.K. (eds) Encyclopedia of Personality and Individual Differences. Springer, Cham. https://doi.org/10.1007/978-3-319-24612-3_857

Morse, J. M. (1998). The Contracted Relationship: Ensuring Protection of Anonymity and Confidentiality. *Qualitative Health Research, 8*(3), 301–303. https://doi.org/10.1177/104973239800800301

Palanichamy, T., Sharma, M., Sahu, M., & Kanchana, D. (2020). Influence of Esports on stress: A systematic review. *Industrial Psychiatry Journal, 29*(2), 191–199. https://doi.org/10.4103/ipj.ipj_195_20

Pescosolido, A. T., & Saavedra, R. (2012). Cohesion and Sports Teams: A Review. *Small Group Research, 43*(6), 744-758. https://doi.ord/10.1177/1046496412465020

Pluss, M. A., Novak, A. R., Bennett, K. J., Panchuk, D., Coutts, A. J., & Fransen, J. (2021). The relationship between the quantity of practice and in-game performance during practice with tournament performance in esports: An eight-week study. *The Journal of Sport and Exercise Science, 5*(1), 69-76.

Postell, C. (2022). Trends in Collegiate Esports: 2022 Report. Esports Foundry.

Poulus, D. R., Coulter, T. J., Trotter, M. G., & Polman, R. (2022) A Qualitative Analysis of the Perceived Determinants of Success in Elite Esports Athletes. *Journal of sports sciences, 40*(7). 742–753. Web. https://doi.org/10.1080/02640414.2021.2015916

Reitman, J. G., Anderson-Coto, M. J., Wu, M., Lee, J. S., & Steinkuehler, C. (2020). Esports Research: A Literature Review. *Games and Culture, 15*(1), 32–50. https://doi.org/10.1177/1555412019840892

Sabtan, B. (2022). *Human Factors in Esports: Investigating performance measures, coaching practices, and stress training in League of Legends* [Doctoral thesis, University of Waterloo]. UWSpace. http://hdl.handle.net/10012/18877

Smith, M. J., Birch, P., & Bright, D. (2019). Identifying Stressors and Coping Strategies of Elite Esports Competitors. *International Journal of Gaming and Computer-Mediated Simulations, 11*(2), 22-39. http://doi.org/10.4018/IJGCMS.2019040102

Tang, W. (2018). Understanding Esports from the Perspective of Team Dynamics. *The Sport Journal, 24*. https://thesportjournal.org/article/understanding-esports-from-the-perspective-of-team-dynamics/

Terry, P. (1984). The coaching preferences of elite athletes competing at Universiade '83. *Canadian Journal of Applied Sport Sciences, 9*, 201-208.

Thompson, L. L. (2012). *Making the team: A guide for managers.* Upper Saddle River, NJ: Prentice Hall.

Watson, M., Smith, D., Fenton, J., Pedraza-Ramirez, I., Laborde, S., & Cronin, C. (2022). Introducing esports coaching to sport coaching (not as sport coaching). *Sports Coaching Review*. https://doi.org/10.1080/21640629.2022.2123960

APPENDIX A: INTERVIEW QUESTIONS

1. Verify information:
    i. Club/Varsity Status
    ii. Game Title
    iii. Year in School
    iv. Amount of time spent on the team
    v. Support staff structure
2. Role in own words, in and out of game.
2. If you had to assign percentages to the amount of time that your team plays practices or matches from their dorms or apartments remotely versus from an in-person facility, what would that be?
3. Describe a typical practice day for your team. How many days per week does that take place?
    i. Follow up: How does the coach set the schedule or routine?
4. How well do you believe your team works together?
5. Can you describe your team's goals?
6. Are your personal goals as a player aligned with your team's goals?
7. Do you believe that it is important that each player's goals should be aligned with the team's goals? Why or why not?
8. Would you consider yourself close with your teammates? Why or why not?
9. What kinds of social activities do you do as a team, if any? Are they online or in person?
10. Do you find these social activities valuable? Why or why not?
11. Do you find yourself wanting to engage socially with the team? Why or why not?
12. How does the coach interact with the team?
13. In what ways does the coach influence or guide team discussion and strategy?
14. Is there anything else about your experience that you would like to add?