Esports Governance: An Analysis of Rule Enforcement in League of Legends

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Esports, like traditional sports, face governance challenges such as foul play and match fixing. The esports industry has seen various attempts at governance structure but is yet to form a consensus. In this study, we explore esports governance in League of Legends (LoL), a major esports title. Through a two-stage, mixed-methods analysis of rule enforcement that Riot Games, LoL's developer and publisher, has performed against esports participants such as professional players and teams, we qualitatively describe rule breaking behaviors and penalties in LoL esports, and quantitatively measure how contextual factors such as time, perpetrator identity, and region might influence governance outcomes. These findings about rule enforcement allow us to characterize the esports governance of LoL as top-down and paternalistic, and to reflect upon professional players' work and professionalization in the esports context. We conclude by discussing translatable implications for esports governance practice and research.

CCS Concepts: • **Human-centered computing -> Human computer interaction (HCI)** -> Empirical studies in HCI

KEYWORDS: Esports; Esports Governance; League of Legends; Competitive Rulings

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1 INTRODUCTION

Electronic sports (esports) has been growing at a rapid rate in the past few years, evident in such phenomena as projected high growth in revenue and industry size [95], record-setting viewership of esports tournaments [16,59], and universities offering athletic scholarships for professional players [48]. Esports is "competitive (pro and amateur) video gaming that is often coordinated by different leagues, ladders and tournaments, and where players customarily belong to teams or other "sporting" organizations which are sponsored by various business organizations" [31]. The conceptual contour of esports keeps evolving as scholars explore and debate its social, cultural, organizational, and legal implications beyond the interface [22,31,67].

Like traditional sports such as basketball and football, esports faces governance challenges such as foul play, aggressive behaviors on competitive scene, and match fixing [25], and needs to govern its participants such as professional players and teams. Building on Bevir's definition of governance as "all processes of social organization and social coordination" [6], we consider esports governance broadly as all the social processes, practices, and rules through which esports activities are organized and coordinated. Unlike traditional sports that have developed a

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mature mode of governance, esports governance remains a contested topic in both academic research and industrial practice, and is seen as one of the biggest challenges to esports [83]. HCI and CSCW scholars have growing interests in esports with attention to topics such as toxicity in esports [102], emotional wellbeing [66], and gender bias [67]. These topics, to varied extents, reflect esports players' experiences with emerging governance challenges in articulating rules and mechanisms to delineate behavioral boundaries, provide support, and address issues of equity, diversity, and inclusivity. However, relatively less attention has been paid to how esports authorities interpret and enforce rules in their governance ecosystem.

In this paper, we approach the topic of esports governance through a case study of rule enforcement in the esports governance of League of Legends (LoL). Rule enforcement refers to regular monitoring and sanctioning of rules [28], and is achieved in LoL through competitive rulings, in which an esports authority, such as a game publisher, identifies a rule breaking incident of its esports participants, including professional players and teams, and issues penalties. An analysis of competitive rulings can shed light on the mechanisms and scope of esports governance from the publisher's perspective. We chose LoL as our study site because: 1) it is one of the most popular esports titles with annual tournaments taking place worldwide and a large number of viewers. For instance, in 2019, its eSports championship finals attracted more than 100 million viewers [100]. in 2020, LoL gained 580.8 million hours watched [9]. The World Championship was 2020's biggest tournament by live viewership hours on both Twitch and YouTube [76]. 2) Its publisher-sponsored mode of governance is considered among the most successful in developing the esports industry [11,13]. Thus, the case study should also produce translatable insights for other esports contexts.

Our analysis of LoL's esports governance is informed by Elinor Ostrom's institutional analysis and development (IAD) framework [78]. The IAD framework is a general framework to understand "how institutions affect the incentives confronting individuals and their resultant behavior" [80], and has been used in HCI and CSCW research to analyze governance strategies [19] and to conceptualize platform governance [24,89]. For Ostrom, rules carry inherent ambiguities, and thus researchers should articulate rules and subsequently rule breaking behaviors [80]. In addition, given rule ambiguities, rule enforcement is not static but situated in local context [78]. Thus, we are inspired to articulate rule breaking in LoL's esports scene.

Specifically, we ask two research questions:

1) What behavior is considered by the game publisher as rule breaking?

2) How do contextual factors influence rule enforcement?

We collected and analyzed a longitudinal set of competitive rulings in LoL from August 2012 to June 2021. We used a two-stage study to address the two research questions. In the first stage, we performed an inductive qualitative analysis to describe the landscape of rule breaking behaviors that Riot sought to govern. In total, we identified eleven types of rule breaking behaviors, most of which have counterparts in traditional sports. In the second stage, we based on the results from Stage 1 to perform a statistical analysis to investigate factors that might influence Riot's governance decision-making. We found that Riot's rule enforcement practice was situated in its context. Multiple contextual factors such as year, region, and perpetrator identity impacted whether and how the game publisher issued punishments. Riot's rule enforcement was not static. Over the ten years, it grew in its reach and severity. Taken together, findings from these two stages reflect the game publisher's expansive control over its esports participants. We thus characterize rule enforcement at LoL esports as top-down and

paternalistic, and describe multiple traits that a pro player needs to acquire beyond commonly discussed essential gaming expertise in order to carry out work in esports.

Our study makes contributions to HCI and game research in several ways: First, we are among the first to utilize longitudinal data to present an empirical account of rule enforcement, an important aspect of esports governance; Second, we provide conceptual insights to deepen understanding of esports governance from a publisher's perspective, critically engaging with existing esports governance practice; Third, the empirical and conceptual insights allow us to explore opportunities and challenges for esports governance practice and research.

2 RELATED WORK

In this section, we situate our work in the growing interest in esports within the HCI community, and connect it to prior discussions on esports governance, most of which originate from the sport management and legal scholarship.

2.1 Esports Research in HCI

Esports is a multidisciplinary research area benefiting from cross-pollination across such disciplines as media studies [97], sport management [48], business [35], law [83], and computer science [92]. Esports research in HCI tends to be informed by these multidisciplinary perspectives, but also is distinctive with the unique focus on the experiential qualities of esports. According to Madden et al. [67], early esports research in HCI covered topics such as novel input methods, avatar use, and influence of game aesthetics. There were design attempts to augment esports, such as Hamilton et al.'s exploration of a combination of pen and multi-touch to augment real-time strategy esports competition [33,34], Bonner and Woodward's development of criteria to evaluate player evaluation and commentator support systems in StarCraft 2 [7], and Kokkinakis et al.'s design to extract data-driven insights to enhance esports spectators' experience [51].

Besides exploring novel interactions for esports, HCI researchers have studied esports spectatorship from both spectators' and casters' perspectives. Some studies explored esports spectators' motivations, gratifications, and experiences. For instance, Cheung and Huang identified nine personas among StarCraft 2 spectators [14]. Musabirov et al. studied DOTA 2: The International spectators' messages in chatrooms to characterize their communication patterns [75]. Charleer et al. [12] surveyed spectators' experience in watching LOL and Counter Strike: Global offensive and designed information dashboards offering real-time visualizations of game-play metrics accordingly, aiming to enhance spectator experience. Yun et al. [107] designed algorithms to provide automatic motion effects expressing the game characters' movement and gunfire action in a first-person shooter (FPS) game, and found that such efforts could improve spectator experiences of FPS gameplay. Given esports' heavy reliance on streaming platforms like Twitch.tv [98], a key distinction from traditional sports spectatorship, it is fairly common for streaming research to derive insights into esports spectating. Hamilton et al. suggested that esports have co-evolved with streaming platforms [32]. Kow and Young discussed how streaming mediates professional players' acquisition of new knowledge and personal growth [54]. Some studies focused on esports casters' experiences. For example, Kempe-Cook et al. conducted an interview study with esports casters to characterize challenges faced by amateur casters [49]. Li et al.'s interview study with esports commentators described how they developed professionalism and presented themselves in streams [58].

Esports players, who are usually young or even adolescent, face emotional challenges incurred by a highly competitive and stressful environment. Thus, a few recent studies have paid attention to esports players' emotional wellbeing and mental health. Madden and Harteveld's exploratory study showed all of their participants experienced high-level stress, while some experienced either stress of revenue, symptoms of burnout, and negative environmental factors such as toxicity and anger [66]. Freeman and Wohn's interview study with 26 esports players found that their participants benefit from emotional support in the highly competitive esports context [23]. Wu et al.'s survey of 95 esports players focused specifically on their experience with tilt, a negative emotional state, in League of Legends [106].

Intense emotions such as anxiety and frustration in competitive gaming are often intertwined with toxic behaviors [52,102]. Unsurprisingly, some HCI researchers have turned to investigate toxicity experienced by esports players. For example, Wu et al.'s survey showed that while experiencing toxicity could trigger tilt, some tilted players would respond by carrying out toxic actions themselves [106]. Türkay et al.'s study of a university esports club found that their participants tended to rationalize toxicity as part of the competitive game culture and developed coping strategies [102].

Collectively, the body of esports research in HCI is rich and growing, with a focus on the experiential side of esports from esports participants such as pro players and spectators. These studies have overlapping interests with esports governance. For instance, studies of esports players in the collegiate context would face issues such as players' athletic identity on campus and career development [46] and gender inclusivity [97]. Challenges like toxicity [67,102] and gender bias [67] can be discussed through the governance lens in terms of procedures, mechanisms, and policies. We extend these existing studies by presenting an investigation of governance issues with a focus on the game publisher's perspective.

2.2 Esports Governance

Compared to traditional sports, esports faces numerous governance challenges such as collegiate esports, labor/employment issue, structural discrepancies between different esports titles, intellectual property, immigration, antitrust, and gambling [25,37,38,43,50,83]. For instance, esports players tend to be young and inexperienced in contract negotiation, and thus vulnerable to exploitation and harsh work conditions [39]. As part of the broader "toxic gamer culture" [10,81], esports players could prioritize competition and achievement while pushing aside other values such as cooperation and sportsmanship. The esports culture is decidedly gendered, perpetuating stereotyped associations between gender and professional and competitive gaming [47,98]. Heavily dominated by male participants [88], the esports industry is plagued by gender and sexual harassment [36]. Female players are vulnerable to in-game harassment due to gender stereotypes [67], might choose gender neutral names in game to avoid harassment [102], and tend to experience an increased risk of exposure to harassment, stereotyping, and toxic behavior [67]. Thus, legal scholars consider one of the biggest questions for esports at present as "how best to build a durable governance structure that fits the unique features and circumstances of eSports" [83], and call for necessary regulation if esports are to be recognized alongside traditional sports [38,70].

Successful governance models for traditional sports may not be directly suitable for esports governance. For example, professional sports leagues like the National Basketball Association (NBA) and the National Football League (NFL) often use a joint-venture structure. A joint venture is "a cooperative business agreement or partnership between two or more parties that is

usually limited to a single enterprise and that involves the sharing of resources, control, profits, and losses" [72]. Thus, professional sports leagues can draft and enforce rules which are collectively agreed upon by member teams [11]. However, several reasons could explain why the game publishers would tend to retain a complete control over their esports titles [11]: 1) Game publishers create and hard code the rules of play into their esports titles and use updates and patches to structure strategies and tactics of gameplay; 2) Unlike traditional sports teams which capitalize on regionalism, esports is international in nature; 3) Unlike traditional sports teams which derive income from television broadcasting, esports consumption occurs online and game publishers are financially incentivized to retain the majority of sponsorship and broadcasting revenue; and 4) Game publishers tend towards monopolistic practices such as complete control of contracts with esports participants.

Besides publisher-sponsored models, attempts are made to create governing bodies outside publishers. At the international level, there are such international governing bodies as the International Esports Federation (IeSF) and the World Esports Association (WeSA). However, they have largely failed due to lack of support and clash of interest with various stakeholders such as game publishers [43]. A newer effort, the Electronic Sports Integrity Commission (ESIC), was formed in 2016 to achieve common ground between game publishers, players, technology companies such as Intel [43]. Meanwhile, traditional sports' global organizations like the International Olympics Committee (IOC) and the Federation Internationale de Football Association (FIFA) have started to integrate esports competition into their organizations [70]. Development of esports governance also varies across countries. South Korea is widely considered as the pioneering nation in promoting and governing esports, which formed the Korean eSports Association (KeSPA) in as early as 2000, to integrate esports into its mainstream sports infrastructure [42]. Other countries like the U.K., France, Germany, and the U.S. have their legislative bodies looking into esports regulation [38,70,83].

Taken together, both researchers and practitioners remain inconclusive about the approach to esports governance. This study is intended to contribute to this ongoing conversation by presenting a case study of publisher-led governance actions and deriving conceptual insights.

2.3 An Institutional Analysis of Rule Enforcement

To analyze the esports governance of LOL, we draw from Elinor Ostrom's institutional analysis and development (IAD) framework [78]. The IAD framework is a general framework to understand "how institutions affect the incentives confronting individuals and their resultant behavior" [80]. There are many types of institutions in the LOL community [13], but this work will be focused on the game publisher, Riot Games, which is the dominant institution in charge of making and enforcing rules in the professional esports scene. Rules refer to "shared understandings among those involved that refer to enforced prescriptions about what actions (or states of the world) are required, prohibited, or permitted" [79].

Ostrom further broke rules down into seven types including entry and exit rules, position rules, scope rules, authority rules, aggregation rules, information rules, and payoff rules [80]. Among these types of rules, payoff rules specify external rewards or sanctions to the actions of the governed. Payoff rules are most relevant to this study in describing what penalties are applied to what rule breaking actions. To Ostrom, rules and subsequently rule enforcement are important to IAD because of how rules are used to structure human actions within a social space [80]. Rules contain varied degrees of ambiguities, and constantly evolving, and create inherent difficulties for individuals to follow [79]. Thus, rules are not right there to be find, but

must be articulated by the field researcher [80]. Thus, an institutional analysis needs to identify rules that are used to govern human actions. Towards this purpose, we examine what kinds of behaviors are sanctioned as a way to formulate rules demarcating the boundary between acceptable and unacceptable actions in the esports context. Thus, we ask:

RQ1: What behavior is conceived by the game publisher as rule breaking?

Rule enforcement is important to successful governance practices [28]. The IAD scholarship suggested that, due to the ambiguity of rule, rule enforcement is not static and is under the influence of localized conditions (e.g., biophysical and material conditions, local community, and local culture) [78]. In addition, online communities could hold vastly different rules and norms. Fiesler et al.'s mixed-methods study of 100,000 subreddits identified both rules specific for individual subreddits, and ones common across Reddit [18]. Strimling and Frey showed that communities on different World of Warcraft servers had developed different norms of fairness [96]. Different modes of rule enforcement, in turn, could shape player experiences even within the same player community [53]. Clearly, local context could have a powerful impact on rule and subsequently rule enforcement. Thus, we seek to understand how rule enforcement is related to contextual factors in LoL's esports governance. Specifically, we are concerned with the 'where', 'when', and 'who' questions. We ask:

RQ2: How do contextual factors influence rule enforcement?

RQ2.1: How does the location of rule breaking influence rule enforcement?

RQ2.2: How does the time of rule breaking influence rule enforcement?

RQ2.3: How does the perpetrator identity of rule breaking influence rule enforcement?

3 BACKGROUND: LEAGUE OF LEGENDS AS A MAJOR ESPORTS TITLE

League of Legends (LoL) is one of the most popular video games in the world. In 2020, it had an active monthly player base of about 115 million players [100]. It is a competitive, team-based online game where two teams of five players face off to battle and destroy the other's base (called the Nexus). The team who destroys the enemy's base fist wins the game. LoL has different maps, associated with different game modes and various level of competition. The flagship map Summoner's Rift is where the professional plays such as the tournaments and world championship take place. The recommended team composition includes five positions/roles: a top laner, a mid laner, a jungler who live for the hunt and stalk between lanes to help teammates, a bot laner, and a support champion who focus on protecting the bot laner in early stage [87]. These five players need to tightly coordinate with each other and strategize their teamplay. During the gameplay, players could use in-game text or third-party voice chat tools (e.g., Discord) to chat with their teammates, and use in-game text to chat with opponents.

LoL is also one of the most popular esports. It had over 7,000 professional players and a prize pool of over $79 million in 2020 [100]. Its World Championship, the crowning tournament of LoL esports for each year, is usually held by Riot Games in October and November to determine the best team in the world. In 2020, 24 teams participated in the World Championship. The 2020 World Championship was streamed in 16 languages and on 21 platforms, had viewers watched 160.92 million hours of play, had 45.95 million peak concurrent viewers, and recorded more than 1 billion hours watched, which established esports records [63].

LoL esports scene is divided into multiple Tier 1 professional leagues representing different regions and servers. For instance, the North American server and region have the League Championship Series (NA LCS) league, where the best teams from North American play; Europe's league is called League of Legends European Championship (EU LCS); and China has

the League of Legends Pro League (LPL). As of 2021, there are 12 professional leagues around the world. Each individual league has a number of teams. For instance, at the time of writing, the NA LCS has 10 teams, and LPL has 17 teams. All these leagues participate in the annual Mid-Season Invitation (MSI) tournament, which determines the spots for the World Championship. LOL 2021 World Championship will host 24 teams from 12 regional leagues [68]. In addition to the Tier 1 regional Leagues, there are diverse tier 2 and lower leagues, collegiate leagues (e.g., CSL Junior Varsity), and campus series conferences (e.g., Big Ten, uLOL Campus Series North).

The success of LoL as an esports title could be largely attributed to Riot assuming all the organizing costs [93], where Riot defines and maintains professional leagues across several regions, annual championships, and tournaments [11]. The esports governance system of LoL is described as "a power hierarchy in which Riot (Tencent) defines the rules of the game both literally and figuratively" [13], and has multiple types of institutions. Chee and Karhulahti [13] provides an informative classification of institutions surrounding Riot Games: nonprofit player institutions such as consumers and fans, for-profit player institutions such as teams and clubs, other nonprofit institutions such as regional and global organizations, as well as other for-profit institutions such as collaborators and sponsors. In this regard, this study focuses primarily on the governance relationship between Riot Games and for-profit player institutions.

4 METHODS

This section describes the data collection and preparation process of this study. We also introduce our mixed-methods analyses including content analysis and statistical tests.

4.1 Data Collection and Preparation

We ran a systematic data collection effort in three steps to collect competitive ruling cases in the LoL ecosystem. First, on June 27, 2021, we used Excel 2016's Data > From Web to import the data from the 'List of Competitive Ruling' [61], an online sheet recording competitive ruling cases released by Riot. The ruling case data in this site is gathered by Gamepedia, the largest video game wiki platform owned by Fandom.com. We acquired a dataset that contained 342 ruling cases with 566 rows of data points. As shown in the 'List of Competitive Rulings' page, it includes multiple variables: (1) ruling date, (2) Riot server, (3) official news link, (4) subject (e.g., pro player, coach, etc.), (5) rules violated in specific rulebooks, (6) violation description, (7) Fine amount (if not fined, it will be null), and (8) additional penalties (punishment descriptions for a specific subject). These competitive rulings served as our initial dataset, which we would refine and expand in later processes.

Two researchers randomly read 50 ruling cases, in a total of 134 rows of data, to both obtain an initial understanding of the dataset and prepare a further searching plan in case of missing ruling cases were not collected by Gamepedia. They extracted a list of keywords from collected ruling cases and discussed the search plan in weekly meetings. This list of keywords included competitive ruling, ruling, League of Legends, Riot, disqualified, penalty, banned, suspended, illegible, and esports. The purpose of this keyword list was to iteratively search for potentially missing data points online, ensuring the completeness of our dataset. The iterative searching strategy unfolded in three steps. First, the researchers used Google Advanced Search using the keywords we generated and their combinations, while specifying the 'site or domain' condition as everywhere (i.e., no specific site), gamepedia.com, or LoLesports.com. They screened and compared the searching results with the initial dataset to identify any new data points. In this

step, they found three new data points from the 1969 searching results. Second, they searched through Riot's official Facebook and Twitter to look for any official ruling reports that might be presented in social media posts. 41 data points were found in social media accounts, containing no ones. Finally, researchers used the keywords in Google News. This time, they found two new data points from a total 2069 results. Finally, the searching processes produced a dataset of 347 ruling cases with 571 rows of data points for further analysis.

4.2 First Stage: Qualitative Analysis

At the first stage of this study, we employed a content analysis [55] to answer the first research question. This process aimed to understand the rule-breaking behaviors and penalties. Two researchers participated in the process.

Specifically, two researchers developed a codebook from a random 50 ruling cases. They read all eight variables in the dataset and separately assigned codes for two new variables, including ruling breaking behavior and penalty. The codes of Ruling-breaking behaviors described what actions violated what rules in what context (e.g., social media, everyday game). Everyday game refers to the situation where a professional LoL player logs onto the game client and plays LoL with other nonprofessional players. The codes of penalties explained what penalties were applied in what severity (e.g., period, amount, times) and context (e.g., team, LoL ecosystem). This coding process relied upon sufficient information about any given case, which the initial dataset did not provide. Thus, the researchers turned to online resources such as related media reports to develop a full understanding of each case and its context. After several weeks of coding, the two researchers compared and discussed initial codes as well as resolved disagreements in the weekly meetings. They discussed the codes and sorted them into initial categories, which developed into a codebook for further analysis. There were 16 categories in total, including 71 codes for rule breaking behaviors and eight categories involving 81 codes for penalties.

The two researchers then applied this codebook to the rest of the dataset, and meanwhile, they were open to new codes and categories in the analysis process. They conducted two more rounds of coding processes on the dataset. The first round generated codes and categories, and the second was to cluster or combine relevant codes and categories, respectively. In these coding processes, the researchers also did data cleaning for the dataset. They deleted 12 rows of data that were not related to the ruling penalty. Those data points were ruling updates for the former cases or already identified 'N/A' by Riot.

We identified four primary categories of penalties, as described in Table 1, including warning, fine, community service, and competition ban. Knowledge accumulated in the content analysis processes informed us of the presence of severity of penalty in Riot's rule enforcement decisions. That is, the penalties issued by Riot have varied degrees of severity. For instance, fine is severer than warning because the former involves financial loss. Competition ban is the severest type, given that a pro player/team derives all their financial income from their participation in LoL. Thus, the researchers deemed that it was appropriate to code the severities of penalties into ordinal categories. Through rounds of discussion for the actual impacts of those penalties, the researchers were able to develop a punishment hierarchy consisting of eight levels. For example, for subjects receiving more than one penalty, such as both being fined and banned for competition, they would be categorized into competition ban, because competition ban was severer. Meanwhile, two variables, if fined and penalty # (quantity), were added into the dataset, with 1 being fined (i.e., 0 for not fined) and 2 for receiving two types of penalties

(e.g., both fine and competition ban). Also, they discussed the internal severity of the competition ban and hierarchized it into four levels by the different lengths of the penalties. This procedure developed the category of competition ban into competition ban in (0, 1 month), competition ban in [1 month, one year), competition ban in [1 year, two years), competition ban in [2 years, + ∞). The content analysis led to 11 categories of ruling-breaking behaviors and an eight-level punishment hierarchy (see Table 1 for details).

4.3 Second Stage: Quantitative Analysis

The second stage of this study aimed to answer the second research question, how contextual factors influence rule enforcement. We completed several data preprocessing steps and developed a dataset for quantitative analysis, as shown in Table 1. We ran both Cramer's V (Φc) and Pearson's correlation on the dataset to uncover the relationship between contextual factors and governance outcomes. The quantitative analysis ended by running the Kruskal-Wallis H test to examine how perpetrator identity, time, and region in the rule-breaking cases affect governance outcomes.

Table 1. Dataset Description.

	Nominal			*Ordinal*
Variables	Region	Identity	Rule-breaking behavior	Penalty
Categories/Groups in each variable	Southeast Asia Europe China Russia Brazil Oceania North America South Korea Latin America Japan International Turkey	Player Team Manager/Owner Coach	Unsportsmanlike behavior in competition Betting in the competition Cheating in competition Cheating in everyday game Procedural failure Improper disclosure Toxicity in public venue Toxicity in the competition Toxicity in everyday game Unsportsmanlike behavior in everyday game Illegal activities	No punishment Warning Community services Primarily fined Competition ban in (0, 1 month) Competition ban in [1 month, 1 year) Competition ban in [1 year, 2 years) Competition ban in [2 years, + ∞)

	Ordinal			*Ratio*	*Nominal*
Variables:	Year	Penalty hierarchy	Penalty quantity per subject	Fine-USD	If fined
Mean	2017.52	4.31	1.12	1860.12	0.30
S.D.	2.27	1.61	0.35	21383.15	0.46
Range	9	7	2	462213	1

In detail, we conducted a series of data preprocessing actions. Besides the two variables (if fined and penalty quantity), we developed four additional variables from the original dataset. We added the variable, punishment hierarchy, by using ordinal encoding to code eight categories of Penalty from 0 to 7. We generated the variable, Year, from each ruling date, which ranged from 2012 to 2021. The Fine-USD variable was also added by converting the original fine amount to USD dollars by the currency of each country or area, which we retrieved on July 8th, 2021 (e.g., we considered 1146.93 South Korean Won as $ 1 US dollar for all years). Noticeably, we assumed daily currency movement was not a considerable factor in this study. Forth, we used binary encoding to represent ruling cases with or without a fine between 1 and 0. Finally, we added the region variable by combining relevant game servers in Riot's institutional structure, resulting in 12 regions, as shown in Table 1.

We conducted three parts of statistical analysis to answer the second research question. First, we used Cramer's V (Φc) by running 'cramers_corrected_stat' in Python to test the strength of association between variables, producing each pair of variables' Cramer's V statistics with bias correction [5]. This step aimed to generate an initial understanding of how all contextual factors were related to governance outcome (i.e., penalty severity) by treating them as nominal or ordinal variables. This method is based on and different from the Pearson's chi-square test, allowing us to understand substantive significance between two variables. Second, through SPSS, we conducted Pearson's correlation on the dataset to further uncover the relationship between all ratio and ordinal variables and Punishment hierarchy. This analysis ended with a two-tailed test of significance for each coefficient of correlation. Third, we stepped in the analysis of how perpetrator identity and region affected the distribution of penalty hierarchy. We analyzed the variable, punishment hierarchy, by quantile-quantile plots and Shapiro-Wilk's method through SPSS. We acquired a p-value < 0.05 from this exploration, which implied that the distribution of Punishment hierarchy was significantly different from the normal distribution, so the general parametric tests (e.g., one-way ANOVA) cannot be used. We conducted a nonparametric test, independent-samples Kruskal-Wallis (K-W) H test [17] through SPSS. This method can be used to compare the medians of different groups/samples and be a test of dominance comparing different groups. We met a series of assumptions of running KW test that the dependent variable, Punishment hierarchy, has more than two levels and was on an ordinal scale. We assume our dataset is independently observed because no subject belonging to one area or identity has a ruling case in another area or identity. Also, K-W test can be applied to unequal sizes of each sample [64]. We thus ran the K-W test between (1) Punishment hierarchy and Region; (2) Punishment hierarchy and Identity.

5 RULE BREAKING BEHAVIORS

We identified eleven types of rule breaking behaviors that Riot's rule enforcement practice targeted. First, we provide a close read of each behavioral type in order to situate it in the context of LoL esports. Second, we describe frequencies and trajectories of these rule breaking behaviors from August 2012 to June 2021. Competition in the rest of the paper refers specifically to professional competition in esports events such as a tournament.

5.1 Betting in competition

Betting in competition (12.52% of all competitive rulings) describes a situation that pro players/teams are involved in gambling money on the outcome of an esports event that they compete in. Although esports betting has a long tradition among esports fans and is an acceptable behavior [65], pro players are strictly forbidden from participating in this activity.

Several types of behaviors could be viewed as contributing to betting in competition. The most common one is match fixing, where one or more players seek to fix match results instead of engaging in genuine competition in order to win a bet. In our analysis, all the match fixing instances served the purpose of betting in competition. Betting in competition is not always illegal, and varies across national contexts. At present, such behavior is mostly governed by esports authorities. Besides match fixing, pro players might also be convicted if they were reported to have the intent or history to bet. For example, in 2020, Riot found four players guilty of match manipulation and betting, and those players have been permanently suspended from Riot-sponsored esports events in the future [103]. Riot has treated such violation using the most

severe levels of penalties such as permanent suspension or months of competition ban. Only on a few occasions has Riot fined the rule breakers. In parallel, traditional sports also take athletes' betting behaviors seriously. For instance, in 2019, the NFL suspended one of its players for betting on NFL games for the whole 2020 season [94].

5.2 Cheating in competition

Cheating in competition (4.65% of all competitive rulings) is a phenomenon that pro players/teams perform deceptive actions in order to gain unfair advantage in the professional scene. While both betting and cheating in competition seek to manipulate match results, their end purposes are different. The former is for monetary gains, while the latter seeks to win competitions in esports events.

In this rule breaking category, the most common type is to use a ringer in professional competition. That is, a pro player asks an impostor to use their account and compete on their behalf. Pro players/teams could be incentivized to use a ringer in low-profile or online esports events when the risk of being caught is lower. Riot is explicitly against such behavior and issues most severe penalties such as competition ban and disqualification from esports events (see [20]).

Another behavioral type that has become much less common nowadays is ghosting in competition. Ghosting refers to using the game spectator mode to obtain an opponent's in-game movements and strategies. LoL's game client used to allow real-time spectating accessible and thus left the opportunity open for ghosting. Thus, pro players could compete while spectating their opponents' movements in game.

Compared to physical sports, ringing and ghosting are quite unique to the esports context. Esports' remote competition has lowered the risk of being caught for pro players/teams to engage in such cheating behavior.

5.3 Toxicity in competition

Toxicity in competition (4.65% of all competitive rulings) denotes a set of aggressive or uncooperative behaviors that take place in professional scenes, online and offline. There are a considerable number of instances where pro players engaged in toxic behaviors in front of esports authorities as well as a massive esports audience. On-the-scene cameras could record pro players' aggressive behaviors, physical or verbal, such as making an obscene gesture towards an opponent, a referee, or the public. Such behavior is similarly sanctioned in physical sports (e.g., [71]).

Pro players may also grief in competition by intentionally obstructing teamwork or making obvious mistakes to let the opponent team win. In one example, Team Dark lost matches on purpose to their opponent team Samsung Galaxy Ozone in 2013. As a result, they were disqualified from the tournament [86].

5.4 Unauthorized action in competition

Unauthorized action in competition (3.76% of all competitive rulings) describes behaviors that violate rules made specifically for the professional esports context. They may or may not be intentional but their impacts are deemed to disrupt esports events. For instance, pro players were punished for pausing an ongoing match. Riot's tournament rule states that "The game pause is an option available in tournaments to handle major difficulties that cannot be resolved

during the game" [73]. In other words, only under specific circumstances could pro players pause an ongoing match. Without those conditions, unauthorized pause would be considered a rule violation. Pro players have also been punished for disconnection during esports events. In one instance, a player was punished because he disconnected and destroyed his equipment before a match started [26].

In the early days of LoL esports, pro players were also sanctioned for inappropriate postures. A pertinent example is in 2012 where several players were punished for looking at the stage screens when competing offline. Riot claimed to have "evaluated these cases based on intent, severity, and tangible impact to the course of the game" [30], and issued varied penalties to several teams. What is less mentioned in these cases, however, is how the design of the stage layout enabled people on stage to easily or accidentally glance at the screens.

5.5 Cheating in everyday game

Cheating in everyday game (16.28% of all competitive rulings) is to gain unfair advantages in everyday game, where pro players play with other nonprofessional players on the game server. In everyday game context, pro players are oftentimes recognizable through their in-game account name, their streams, or their highly skillful gameplay. Thus, nonprofessional players could report pro players using the game client's report function when they spot inappropriate behaviors of pro players. When pro players are reported for their cheating behavior in everyday game, Riot might open a corresponding investigation case.

Elo boosting was the most common type of cheating in everyday game, where pro players play on others' accounts to increase the latter's in-game ranks, oftentimes for monetary compensations. In one competitive ruling case, a pro player even ran an elo boosting business in their local region. Elo boosting is endemic to multiplayer online games [57], and is forbidden in Riot's games. Riot has tended to issue high-profile punishments against pro players committing this violation.

Those competitive rulings also revealed how some pro players used a multiplicity of technical means to cheat in everyday game. For instance, they have used DDoS (short for distributed denial of service) activities to force other players to disconnect from the game server. They have used bots to level up their in-game accounts. They have also exploited loopholes in the game client. Lastly, they have used scripts to automate sequences of actions in game. Cheating in everyday game is tied to the virtuality of digital games, and thus unique to the context of esports governance. It would be rare for physical sports like basketball to identify cheating in an everyday game (e.g., pickup basketball) as a serious violation.

5.6 Toxicity in everyday game

Pro players commit toxicity in their everyday game experience (31.84% of all competitive rulings), in behavioral categories similar to average LoL players [52]. This constitutes the most common type of behavioral violation. Typical toxic behaviors include using abusive language in game, as well as griefing in game. Prior scholarship has documented various types of toxicity in LoL [1,29,52,106]. However, what is different here is that Riot's punishments against pro players' toxicity in everyday game were usually severer. Riot publicized punishments against pro players for toxicity in everyday game, perhaps due to the fact that pro players are employees of Riot and represent the image of LoL esports. In comparison, traditional sports organizations tend to have clauses prohibiting their athletes from bringing them into disrepute

[40]. Thus, traditional athletes' inappropriate behaviors off the sporting field could also be sanctioned by sports authorities.

5.7 Unprofessional behavior in everyday game

Unprofessional behavior in everyday game (1.79% of all competitive rulings) describes behaviors that were not necessarily disruptive to other LoL players but viewed by authorities as lacking professionalism. The behavior happens in the everyday game context. Pro players are expected to uphold work ethics when they play games. As such, it is considered as unprofessional if they do not try their best in everyday games. For instance, in 2019, a pro player was fined for having a passive attitude when playing everyday games. Again, this shows how pro players are seen as part of LoL esports' image and responsible for maintaining it even outside their work context.

5.8 Improper Disclosure

Improper disclosure (1.43% of all competitive rulings) denotes various ways pro players/teams spread information or misinformation in noncompliant ways. Information rules govern what information should be released or kept in secret, and in which ways [78]. While an institution like Riot sets expectations for pro players/teams' information behaviors, punishments ensue when they break these information rules.

A common behavior is when pro teams release information that should be kept in secret. For example, TSM, a famous North American (NA) pro team, was fined in 2014 for announcing a new team member prior to Riot's official announcement [27]. In another competitive ruling case, a team manager was punished for spreading false information about an ongoing Riot investigation.

5.9 Procedural failure

Procedural failure (16.99% of all competitive rulings) denotes a diverse range of behaviors that fail to follow standard procedures in management-related aspects such as hiring, payment, and organization. Both pro players and teams could fail to follow procedures. Team-level procedural failures often involve poor team management. In LoL, Riot has rules specifying a set of procedures through which a team can sign a new pro player and form a contract. However, the records show several instances where teams and players did not follow the procedures. For instance, in 2015, the then owner of TDK, an NA team, tampered with a player in SSG, a Korean team, with the help with a TDK player. The act violated Riot's then policy against interregional poaching and tampering, all the three individuals received punishments. In addition, TDK was also fined $10,000 USD [62].

Pro teams could engage in exploitative labor practices, as discussed by prior literature [43]. There are several instances where a team withheld their players' residence cards in order to make threats to them, or a team withheld salary or prize money from the players.

Lastly, pro teams/players have also been punished for noncompliance with expectations of physical appearances. Specifically, several pro players or teams were punished for lack of appropriate jersey, or inappropriately displaying sponsor names on their clothes.

Procedural failure is also common in physical sports, where teams and clubs fail to follow standard procedures for recruitment, payment, communication, etc. For instance, in 2017, the NBA punished the Los Angeles Lakers with a $500,000 fine for reaching out to star forward Paul George, who was still under contract with another team [8].

5.10 Toxicity in public venue

Riot's governance apparatus also concerns how pro players behave in public spaces such as social media and offline social events, where they are associated with the image of LoL esports. Toxicity in public revenue constitutes 5.01% of the competitive rulings. For example, several pro players were punished because they used offensive language in their streaming channels. Riot has been strict about its players' public image. In one case, Riot even issued a permanent suspension against one pro player upon learning about the player's extreme comments prior to being enlisted (see [44]). Similarly, physical sports also punish players for cursing in press conferences (e.g., [45]).

5.11 Illegal activities

Pro players might commit illegal activities (1.07% of all competitive rulings) and be punished by legal authorities. In these situations, Riot would also follow on to issue its own penalties against those players. In one example, a team manager sought to manipulate a pro player via intimidation and legal threats. Later following Riot's investigation, the team was fined, and the manager was fired. In another example, a player was reported to have exercised domestic violence, and was immediately punished by permanent suspension since then.

5.12 Summary

By presenting the eleven types of rule-breaking behaviors, we were able to describe the scope of rule enforcement that Riot has sought to articulate and solidify through the past decade. Clearly, the scope of rule breaking behaviors in the context of esports governance is more expansive than that of toxic behaviors, in terms of both behavioral type and behavioral context. The behavioral contexts that Riot seeks to govern include professional competition, everyday game, business conduct, as well as real world behaviors with legal implications. A telling example of this expansiveness is that a pro player's behaviors in their streaming channel after work hours would still fall into Riot's jurisdiction.

We use Figure 1 to describe the frequencies of these rule breaking behavior types over the ten-year period. In Figure 1, five types of rule breaking behaviors present a growing tendency compared with them in earlier years (e.g., < 2017). Behaviors, including unprofessional behavior in everyday game, toxicity in public venue, cheating in competition, betting in competition, toxicity in everyday game, sequentially took place proportionally more after 2017 (i.e., >= 2017). Especially, 83% of ruling cases regarding toxicity in everyday game were distributed after 2017, and all cases of betting in competition were distributed after the year 2016 with an increasing trend. The other six rule breaking behaviors presents a generally curvilinear trend (i.e., down at the beginning, rise at the middle, and decrease at the end). Behaviors, including unauthorized action in competition, toxicity in competition, procedural failure, improper disclosure, illegal activities, and cheating in everyday game, were all majorly distributed between 2015 and 2018 (i.e., > 2015 and < 2018). Especially, more cases regarding procedural failure and cheating in everyday game took place around 2017.

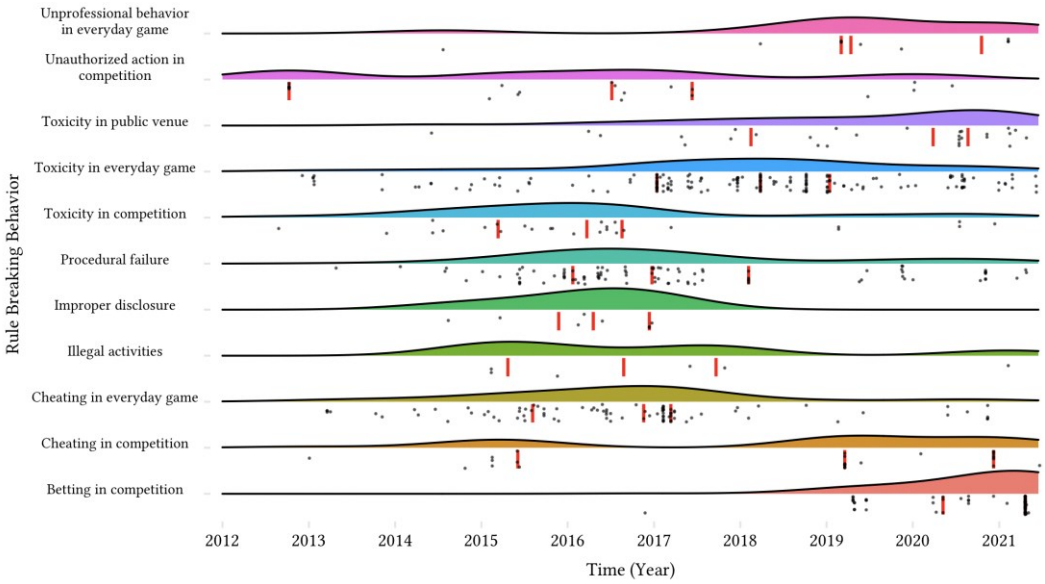

Fig. 1. Frequencies of Rule Breaking Behaviors from August 2012 to June 2021. We treated each date of ruling cases as numeric data and thus visualized how rule breaking behaviors distributed over time. The vertical red lines sequentially represent the first, second (i.e., median), and third quantile of ruling date.

Next, we delve into the other side of the rule enforcement equation, to examine how penalties were determined.

6 Contextual Factors Influencing Rule Enforcement

This section unpacks the relationship between contextual factors and rule enforcement in Riot's competitive rulings. In each competitive ruling, Riot determined the type of rule breaking behavior, and then issued a penalty. Next, we uncover how contextual factors are associated with penalty severity and then probe the internal relationship of penalty severity. Finally, we verify the impact of region and perpetrator identity on the distribution of penalty severity.

6.1 Region matters in rule enforcement decisions.

Running Cramer's V, we uncovered the association between all contextual factors and penalty severity, as shown in Table 2. The fine amount had a moderate association with penalty quantity per subject (Φc =0.42), implying that when one perpetrator received multiple penalties, fine was more likely to be included in the ruling case. In addition, there was high association between the issuance of a fine and two variables, penalty hierarchy (Φc = 0.8) and fine amount (Φc = 0.84). This implies that many penalties were possibly released with a fine. Also, no fine corresponded more to a zero-dollar fine amount, and fine issuance was more likely to appear with a specific amount. This reflects the internality of penalty severity from different angles. Thus, we decided to run a Pearson's correlation to understand whether a linear relationship existed in penalty severity.

We found a moderate/medium association between region and three variables, including year, punishment hierarchy, and if fined (Cramer's V coefficient, $0.3 < \Phi c < 0.5$). This result

suggests that each region might proportionally have its different dominated punishment hierarchy score and adjudication of fine, released by the game publisher in a specific year.

Table 2. Cramer's V results. Cramer's V > 0.3 indicates medium association and > 0.5 indicates strong association [15].

#	Variables	1	2	3	4	5	6	7	8
1	Year	-							
2	Region	**0.35**	-						
3	Identity	0.13	0.19	-					
4	Rule-breaking behavior	**0.31**	0.3	**0.33**	-				
5	Penalty hierarchy	0.26	**0.34**	0.2	0.25	-			
6	Penalty # per subject	0.1	0.27	0.039	0	0.075	-		
7	Fine-USD	0.23	0.3	0.26	0.27	0.067	**0.42**	-	
8	If fined	0.21	**0.35**	0.19	0.29	**0.8**	0.21	**0.84**	-

To probe the second research question deeper, we ran an independent-samples Kruskal-Wallis (K-W) H test to uncover how region affects the distribution of penalty hierarchy. We found that at least one region's penalty hierarchy distribution was significantly different from other regions with the K-W test result, $H(11) = 103.82$, p-value < 0.001. However, this result did not inform us of where the difference between regions' penalty distributions appeared. We thus conducted the post-hoc test, i.e., the Dunn-Bonferroni method, to generate a pairwise comparison between regions and penalty hierarchy scores, as shown in Table 3. To maintain a lower type-I error, the multiple p-values of each pair of regions' penalty hierarchy have been adjusted to be adjusted coefficients through Bonferroni error correction.

Pairwise comparison results present the difference of each pair of region's penalty severity distribution. We found that pro competitions in the international region had the lowest median of penalty hierarchy score. Here, the international region refers to international tournaments where teams from all regions compete together. The international region was in a significantly different distribution than the other eight regions, including Brazil, China, Europe, Japan, North America, Oceania, Southeast Asia, and Turkey, with p-values < 0.05. The largest difference of the mean of penalty hierarchy between the international region and others was 4. This suggests that the context of international tournament is distinct from other regions defined by their geographical locations.

Riot tends to perform lenient rule enforcement in international tournaments for several possible reasons: First, several severe violation types tend to appear in local regions, such as betting and cheating in competition and procedural failure. Also, pro players/teams who have committed severe rule breakings are naturally filtered out from and have a much harder time reaching to the international competitive scene.

We also found that the penalty distribution of South Korea was significantly different than six regions, including China, Europe, North America, Oceania, Southeast Asia, and Turkey, with all p-values < 0.05, implying that Riot in South Korea was more likely to release a fourth level penalty (i.e., coded as 3), compared with other regions. This is understandable, given that South Korea has the most developed esports industry and governmental regulation across the globe [42], and that Riot could coordinate with South Korea's esports agency, KeSPA, to issue penalties to rule breakers.

The Latin America League had the mean of penalty hierarchy score equal to 3, and was in significantly different distribution than several other regions, including China, Europe, Southeast Asia, and Turkey. This is perhaps due to the fact that the Latin America league was

founded several years later than other regions, and was thus yet to develop a complete rule enforcement apparatus. Therefore, Latin American pro players could be in the early stage of understanding and complying with behavioral rules.

Table 3. Pairwise comparison of penalty hierarchy distribution in regions after post-hoc test. (*) indicates statistical significance level of 2-sided test, P-value < 0.05, which has been adjusted by Bonferroni correction. The degree of freedom was 11, and T-statistic was 99.84. We reported in each cell with the deduction of each two region's means of penalty hierarchy.

#	Regions	Median (Mean)	1	2	3	4	5	6	7	8	9	10	11	12
1	Brazil	4 (3.96)	0											
2	China	5 (4.81)	-1	0										
3	Europe	5 (4.65)	-1	0	0									
4	International	1 (1.89)	3*	4*	4*	0								
5	Japan	5 (4.21)	-1	0	0	-4*	0							
6	Latin America	3 (3.75)	1	2*	2*	-2	2	0						
7	North America	5 (4.49)	-1	0	0	-4*	0	-2	0					
8	Oceania	4 (4.56)	0	1	1	-3*	1	-1	1	0				
9	Russia	4 (3.78)	0	1	1	-3	1	-1	1	0	0			
10	South Korea	3 (3.52)	1	2*	2*	-2	2	0	2*	1*	1	0		
11	Southeast Asia	5 (5.15)	-1*	0	0	-4*	0	-2*	0	-1	-1	-2*	0	
12	Turkey	5 (4.87)	-1	0	0	-4*	0	-2*	0	-1	-1	-2*	0	0

6.2 Penalties are progressively harsher on a yearly basis.

The results from Table 4 show a moderate association between year and ruling-breaking behaviors (Φc = 0.31), implying that each year might proportionally have its corresponding rule-breaking behaviors compared with other years. We further ran the Pearson's correlation on the dataset to uncover the linear relationship inside penalty severity and year, as shown in Table 4. We found a weak positive correlation between year and punishment hierarchy (Pearson r = 0.15, p-value < 0.01), implying that Riot has progressively released severer penalties over the years. Also, we found that inside of penalty severity, the issuance of a fine had weak positive correlation with penalty hierarchy (r = -0.38, p-value < 0.01), penalty quantity per perpetrator (r = 0.21, p-value < 0.01), and fine amount (r = 0.13, p-value = 0.002). This finding suggests that when a game publisher issued a lower level of penalty, it was more likely to appear with a fine. Also, when a perpetrator received a fine adjudication with a specific fine amount, they are more likely to have more than one penalty. This suggests that fine more likely acted as a joint penalty with other heavier ones. Collectively, these findings suggest the increasing severity of penalty over the ten-year period.

Because of the positive correlation between year and penalty hierarchy, we visualized how it changed over time, as shown in Figure 2. The moving average of penalty hierarchy score started slightly below the fifth level (i.e., coded as 4) before 2013. After a small raise, it decreased to be lower than the fifth level of penalty between 2017 and 2018. After that, the moving mean of penalty score steadily rose to over the sixth penalty level until 2021.

Table 4. Pearson's Correlation results. (**) indicates statistical significance level, P-value < 0.01. 0.1 < Pearson r < 0.4 indicates a weak correlation [90].

#	Variables	1	2	3	4	5
1	Year	-				
2	Penalty Hierarchy	0.15**	-			

3	Penalty # per subject	0.00	0.04	-		
4	Fine-USD	0.05	-0.07	-0.01	-	
5	If fined	0.04	-0.38**	0.21**	0.13**	-

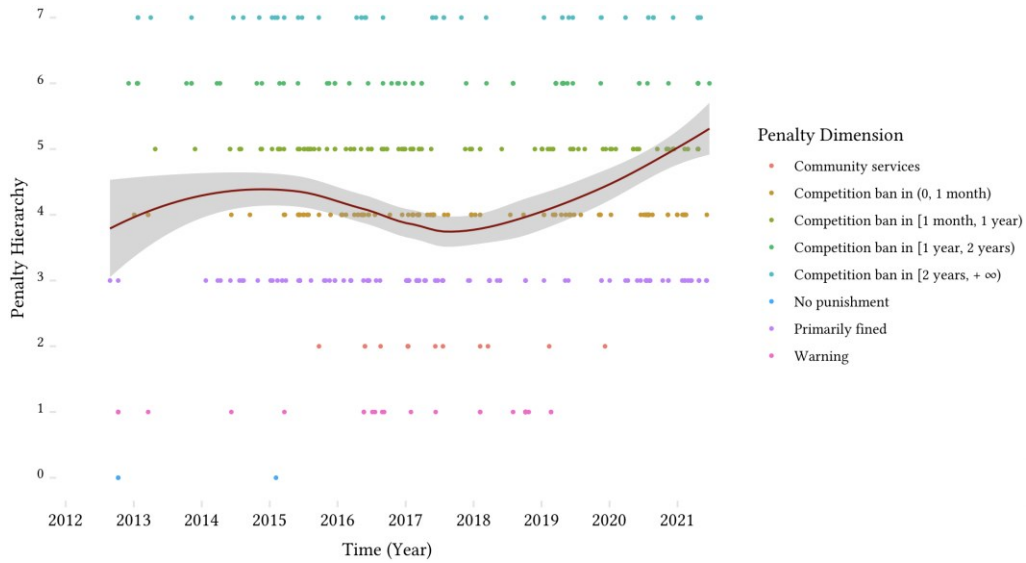

Fig. 2. Scatter Plot (time series) of Penalty Hierarchy

6.3 Perpetrator identity affects penalty severity

Lastly, the competitive ruling cases documented four types of perpetrator identities, namely coach, manager/owner, player, and team. Table 5 shows that we found a moderate association between rule-breaking behavior and perpetrator identity (Φc = 0.33), suggesting that the coach perpetrator was more likely to perform a specific rule-breaking behavior than other identities, such as pro player.

Table 5. Pairwise Comparison of Penalty hierarchy distribution in Identities after post-hoc test. (*) indicates statistical significance level of 2-sided test, P-value < 0.05, which has been adjusted by Bonferroni correction. The degree of freedom was 3, and T-statistic was 21.80. Each cell indicates the deduction of two region's means of perpetrator Identity.

#	Identity	Median (Mean)	1	2	3	4
1	Coach	4 (4.29)	0			
2	Manager/Owner	5.5 (5.19)	-1.5	0		
3	Player	5 (4.34)	-1	0.5*	0	
4	Team	3 (3.86)	1	2.5*	2*	0

Another set of Kruskal-Wallis (K-W) H test uncovered how perpetrator identity affected the distribution of penalty hierarchy. We found that the penalty hierarchy score distribution differed across perpetrator identities with H (3) = 21.796, p-value < 0.001. Through Dunn-Bonferroni test, pairwise comparison between different identities was shown in Table 4. We found the median of professional team's penalty score was 2 points fewer than pro player (p-value < 0.001). Similarly, manager or owner's median of penalty hierarchy was 2.5 points greater than team (p-value = 0.05). Both implied that the game publisher was more likely to

impose harsher penalties on pro players and manager/owner, where the latter experienced this more likely (p-value = 0.033). For instance, if a player commited certain rule breaking, Riot was likely to hold both the player and their team accountable. Riot could issue a permanent suspension to the player, but was less likely to suspend the whole team for one single team member's rule violation. When a pro team failed procedurally, Riot tended to hold the team's manager responsible. There were instances where Riot forced the manager to transfer ownership of their team to another person, through which the team remained legitimate. Coach also received less severe penalty, perhaps due to the fact that their involvement in esports is rather limited, compared to pro players.

6.4 Summary

In this section, we showed that rule enforcement in LoL esports in the one decade was not static but highly contextualized. The severity of penalty correlated with several contextual factors such as year, region, and perpetrator identity. These findings align with the IAD literature regarding the contextual nature of rule and rule enforcement [78]. On the one hand, the contextual nature of rule enforcement reflects complex encounters between oftentimes simplistic rules and nuanced local conditions. The contextuality is deepened by the fact that there is a lack of standard practice on esports governance and the game publisher itself is still navigating the murky space. On the other hand, differential penalties could invoke questions about fairness and consistency in governance decision-making, and should not be taken lightly.

7 DISCUSSION

HCI and CSCW researchers have explored themes aligning with the topic of esports governance such as toxicity [102] and gender bias [67]. However, little attention has been paid to how esports authorities govern their participants, partly due to the challenge for outsider researchers to gain access to the internal workings of esports governance. Riot's multiple years of competitive rulings and their associated media coverage provide a unique window into a game publisher's perspective. Specifically, our findings described rule enforcement in the esports governance of LoL. By surveying rule breaking behaviors that Riot targeted and the ways Riot made punishment decisions, we start to generate empirical insights into esports governance from a publisher's perspective, and to identify opportunities and challenges for the growing research interest in esports.

7.1 A Paternalistic Mode of Esports Governance

Although rule enforcement does not represent the full picture of esports governance in LoL, it helps delineate Riot's jurisdiction and illuminate the relationship between the game publisher and the esports participants. Prior work has considered pro players as employers from a legal perspective [4], or as promotional actors [13]. Differently, our study has a focus on Riot's governance style, and characterizes its relationship with esports participants as a paternalistic one.

A paternalistic leadership has strong behavioral patterns in terms of not separating professional from personal lives, expecting loyalty, and maintaining authority/status [3]. In a similar vein, Riot has not set a clear boundary between pro players' professional and personal lives. As long as a pro player logs onto Riot's game client, they are considered to be working and expected to comply with all the professional rules. A pro player could be punished for

cursing in game using professional rules even if they play in their spare time. Prior scholarship has discussed how the boundary blurs between work and play for pro players [99]. Here in this study, we observed how Riot's own rule enforcement erases such boundary in an institutional manner. Riot expects loyalty from its pro players, too. For instance, Riot expects certain attitude from pro players, an aspect that is arguably difficult to assess. Pro players were punished for negative attitude in their everyday game. In the early years of LoL esports, Riot also required that LoL gameplay should be the only content on pro players' streaming channels [2]. Lastly, Riot also strengthens and solidifies its authority through not only continuous strengthened rule enforcement, but also its arbitrariness in ambiguous cases. A case in point is the 2012 case where several players were punished for seeing the stage screen, but there was no acknowledgement of the design flaw in the stage layout.

The paternalistic governance style represents a natural development from the publisher-sponsored governance mode where game publishers play a dominant role [13,82]. Riot, like traditional sports authorities, has established a monopoly on rule enforcement. All the rule enforcement cases are framed as a unidirectional action where Riot assessed the severity of rule breaking and issued penalties accordingly. Any competitive ruling narrative on LoL esports' official website is structured in a simple yet forceful way to detail first why a behavior constituted a violation and second list penalties applied. Those competitive ruling cases are announcements and have no mention of an appeal process or disagreement between Riot and the esports participants.

The extent to which Riot seeks to govern are far-reaching and, to a certain extent, unconstrained. Esports governance could draw inspirations from traditional sports governance in similar problematic behaviors such as betting, toxicity in competition, and procedural failure, but also seeks to govern new types of disruptive behaviors, such as cheating in competition, cheating in everyday game, toxicity in everyday game, and unprofessional behavior in everyday game. Context-wise, Riot has managed to exercise authority over professional contexts such as esports tournament as well as nonprofessional contexts, such as pro players' streaming channels and everyday gameplay. Different from physical sports, the fact that esports is digitally mediated has facilitated expansive surveillance over pro players behaviors: in the offline competition context, there are numerous cameras watching not only the whole physical stage but also each player's facial expression and even keyboard. In gameplay, all actions and communications are automatically recorded. Even when pro players are off the professional context, as long as they log onto the game client or open their streaming channel, their behaviors are recorded and monitored. Such expansive surveillance, in turn, feeds back into more possibilities of rule enforcement.

Riot's unchallenged authority in governing its esports title also allows itself much flexibility in rule interpretation, rendering rule enforcement highly situated. Riot's rules only describe what constitutes inappropriate behaviors, but do not specify penalties that should be applied. Thus, much interpretive flexibility is left to authorities. We showed many circumstances such as year and region that could impact the severity and the amount of penalties that Riot applied. Even within a single case involving multiple rule breakers, penalties might vary depending on the rulebreaker identity and degree of involvement. On the flip side, such contextual nature of rule enforcement has served to exacerbate the power imbalance between game publishers and esports participants [11,13], as the game publisher could further strengthen its domination in its relationship with esports participants. Chee and Karhulahti's detailed analysis of several conspicuous rule enforcement cases in LoL esports [13] showed conflicts and negotiations

between Riot and esports participants and subsequent policy changes. Echoing this analysis, our observation of the one-decade horizon suggested that rule enforcement in LoL esports have trended in the past decade towards a broader behavioral scope, severer penalties, and more penal types.

The paternalistic governance style has its roots in the rapidly developing esports industry where government regulations and support are largely missing in the U.S. and esports stakeholders like game publishers must take initiatives to develop the industry. In this regard, Riot should be recognized for its constructive and visionary role in guiding the development of esports. In many competitive ruling cases across the world, the intervention from Riot as a central governing body seemed to have played a key role in mitigating local conflicts and protecting the rights of pro players, a population that is vulnerable to labor exploitation [35].

However, such governance style has clear limitations. For instance, it casts a shadow over issues of fairness and equity in governance decision-making. One key principle of procedural fairness is to allow stakeholders to have a voice in the decision-making process [60]. However, the competitive rulings have largely shown the game publisher's absolute authority and lack of accountability. One example in point is a competitive ruling that finally banned Team Impulse from the LCS due to its failure to have contracts with its players [56]. The controversy here lies in the fact that in the year of 2016, without proper oversight, Riot was criticized for playing a part in allowing the procedural failure to persist for multiple months. On the bright side, Figure 1 shows that incidents of procedural failure peaked around 2016, but gradually reduced in the following years, suggesting an improvement of this situation. Ostrom champions the idea of polycentricity in her institutional analysis [77], and CSCW researchers have adopted the idea to propose multiple centers of power for online platform governance [41,89]. Esports governance presents a more complicated case involving not just online platforms, but an ecosystem of online and offline entities. But this should be precisely why polycentricity could be considered and promoted, so that governing power is not concentrated on one body.

7.2 Work and Professionalization of Professional Players in the Esports Context

The process of becoming a professional, or professionalization, is a longstanding theme in CSCW. CSCW researchers are interested in understanding work and professionalization in emerging or technology-related occupations such as graphic design [69], beauty work [84], and indie game development [21]. We extend this CSCW concern by considering the work and professionalization of professional player in light of institutional governance. Specifically, in line with Wilensky's conception of profession in terms of expertise and moral norms [104], our study showed that the work of pro players in the esports context requires not only high gaming expertise [85], but also compliance with a variety of moral norms prescribed by the esports authority. Compared to an ordinary player, pro players are held to higher normative standards: 1) an average player is allowed to participate in esports betting, while pro players cannot; 2) pro players are closely monitored for a wide range of behaviors; and 3) pro players receive harsher penalties for rule breaking behaviors.

The moral norms also include expectations of proper impression management. Pro players are managed under Riot's marketing department [4] and have promotional values for Riot [13]. The competitive rulings Riot made against pro players' behaviors in everyday game suggest that Riot is concerned with pro players' public image. Thus, pro players are expected to attend to their behavior and engage in impression management whenever they appear in semi-public venues such as their everyday game as well as public venues such as their streaming channels

or interviews. Witkowski and Manning see expert players as content creators who engage in complex networked practices [105]. In this view, whenever pro players appear in digitally mediated environments, they are expected to carefully craft their performances in front of the audience.

To learn about these distinct moral norms, pro players also need certain organizational knowledge to navigate procedural and coordination issues. Organizational knowledge, briefly, refers to practical knowledge that individuals need to work in an organization [101]. Pro players work in a complex organizational network consisting of various organizational actors such as their team, game publishers, sponsors, tournament organizations, and, in some regions, governmental agencies. Thus, they need to navigate complex organizational procedures involving contracts, transfer, and, sometimes, visa issues. This resonates with Taylor's observation of career and institutional savvy that top pro players must possess [99]. Some of Riot's competitive rulings reflected the importance of having such organizational knowledge for pro players to pursue a successful career. For instance, there are cases where pro players wore inappropriate jerseys in competitive scenes. Some pro players also encountered labor disputes with their team management and eventually turned to Riot for resolution. Some pro players did not receive payment from their team for multiple months but kept working.

7.3 Implications for Esports Governance Practice and Research

A publisher-led governance mode like what we covered in this study has limits, where the publisher values esports participants primarily for marketing purposes and shows limited considerations for power balance, procedural fairness, and accountability in esports governance. Scholz noted that, due to the lack of governmental regulation and legal possibilities of nonprofit approaches, many esports governance models follow the business narrative [91]. Thus, moving forward, it would be beneficial if esports governance is not dominated by a single entity. Instead, esports governance practice could involve participation from various stakeholders. For instance, pro players can benefit from organizing and having a collective bargaining power. Necessary intervention from related governmental agencies or external oversight forces could also help improve the transparency and accountability of governance decision-making.

An open question is the work/play boundary for pro players. Pro players are inescapable from work surveillance so long as they are logged in. However, when they play everyday game with other nonprofessional players, these two parties abide by different behavioral standards and rule enforcement regimes. This creates problems. For example, there have been incidents where nonprofessional players deliberately troll professional players [74]. The former deemed that the gratification of committing toxicity against pro players outweighed the risk of being punished. In this regard, more consideration should be given to whether and how rule enforcement should be applied to everyday game context.

Within existing frameworks of esports governance, support resources could be provided to pro players for them to acquire necessary knowledge in order to navigate their esports career. HCI researchers have started to identify the importance to help esports players address health concerns [66]. Our study further necessitates ways to help esports players navigate the complex professional terrain. For example, educational programs could be provided to teach professional ethics related to behaviors in the public and semi-public contexts, organizational knowledge about how esports governance works, as well as impression management skills to preserve the repute of esports.

Our study highlights the benefits of paying attention to the publisher's perspective on esports governance. By the publisher's perspective, we mean that our dataset is composed of actions and language authored by the game publisher. Our analysis does not necessarily take the publisher's values and judgments for granted. Take toxicity as an example, while studies using interview and survey have documented how esports players experience and cope with toxic behaviors [102,106], our study showed that from a publisher's perspective, esports players themselves are a source of toxicity in both competition and everyday game. This in fact has been the most common rule breaking behavior that Riot has sanctioned in the past ten years. Combining these two somewhat opposite sides provides us a more comprehensive picture over how toxicity and intense competition are intertwined in the esports scene. Thus, future esports research could consider ways to utilize public records, such as game publishers' policies and announcements, media coverage, and interviews with pro players, to explore perspectives from multiple esports stakeholders.

7.4 Limitations

The study is focused on exploring a publisher's perspective, because the dataset reflects primarily the game publisher's perspectives and governance actions. When analyzing the data, we did not automatically assume that such a publisher's perspective is either sound or just. Rather, we ground our analysis in the larger context that while approaches to esports governance are still in hot debate, game publishers already play a dominant role in esports governance of the esports titles they own [13,82]. Thus, game publishers' existing governance actions should be engaged with and studied, and in a critical way, to inform future esports governance research and practice.

Since our data reflect primarily the publisher perspective in terms of governing the esports participants and its perceptions of rule breaking and enforcement. Thus, the study does not intend to lay claims on other important governance issues such as labor condition [43], corruption [38], and the interplay of ethics and politics [13]. However, the dataset is still highly valuable given its uniqueness in documenting rule enforcement practices in LoL esports. Future research could consider interviews or surveys with esports participants to triangulate with these public records so as to construct a fuller picture of esports governance.

8 CONCLUSION

In this study, we turned to a unique set of data to understand rule enforcement practice in LoL esports. We were able to characterize esports governance, and, specifically, the governance relationship between esports authority and esports participants as top-down and paternalistic. We further depicted the developmental trajectory of rule enforcement in LoL esports for the past ten years. We explored how rule enforcement in LoL esports has become progressively expansive and severe as the game publisher explored the murky terrain of esports governance. Moving forward, much research could be done to explore how esports governance is implemented from the perspectives of various stakeholders including esports authorities, esports participants, audience, and governmental agencies.

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