DOI: 10.1111/emre.12643

RESEARCH ARTICLE

EMR European Management Review
The Journal of the European Academy of Management

Exploring the impact of punishments on employee effort and performance in the workplace: Insights from England's premier league

David Gligor Ph.D.[1] | **Ismail Gölgeci Ph.D.**[2,3] | **Vipul Garg**[4] | **Yavuz Idug**[5] | **Uchenna Ekezie**[6] | **Javad Feiz Abadi**[7] | **Ferhat Caliskan**[6]

[1]Florida Gulf Coast University, Fort Myers, Florida, USA

[2]Department of Business Development and Technology, Aarhus University, Herning, Denmark

[3]InnoLab, University of Vaasa, Vaasa, Finland

[4]Department of Management and Marketing, College of Business, Texas A&M University–San Antonio, San Antonio, Texas, USA

[5]Department of Management and Human Resource Management, College of Business, California State University-Long Beach, Long Beach, California, USA

[6]Department of Logistics and Operations Management, G. Brint Ryan College of Business, University of North Texas, Denton, Texas, USA

[7]Asper School of Business, University of Manitoba, Winnipeg, Manitoba, Canada

Correspondence
Ismail Gölgeci, Ph.D., Department of Business Development and Technology, Aarhus University, Birk Centerpark 15, Building 8001, 7400 Herning, Denmark.
Email: i.golgeci@btech.au.dk; igolgeci@uwasa.fi

Abstract

Despite the prevalence of punishment as a method of enforcing organizational policies, management literature provides little guidance on the impact of punishment on individuals' work performance. A sample of 412 professional soccer players in England's Premier League was utilized to collect unobtrusive, longitudinal data to better understand how individuals react to punishments in their workplace. Our findings indicate that individuals deploy significantly more effort (run more kilometers) following a punishment. However, the findings also indicate that individuals do not perform better following the administration of punishment. In fact, their performance is significantly lower than before the punishment. Although individuals work harder, they actually perform weaker. Further, we found that, when punished more than their team members, individuals deploy significantly more effort than individuals who get punished less than their team members but perform significantly weaker than those individuals.

KEYWORDS

effort, performance, punishment, sports data, teams

INTRODUCTION

The concept of punishment has long been of interest to management scholars and practitioners alike (Arvey & Ivancevich, 1980). Although punishment has negative connotations, it is a common phenomenon within organizations. Literature indicates that individuals who experience punishment in their workplace associate it with a non-supportive management attitude and do not consider it to be fair and proportionate given their behavior (Rhee, Dedahanov, & Lee, 2014).

Punishment is typically employed to reduce the manifestation of undesirable behavior, enforce rules, and encourage adherence to organizational policies (Neale et al., 2020). Not only can punishment correct the behavior of individuals who are the subject of the punishment, but it can also promote the learning speed of desirable behaviors of their coworkers who observe the negative experience of the punished individuals (Trevino, 1992). However, punishment is not perceived as a favorable action within organizations as it is deemed to lead to undesirable emotional effects among employees. For

example, punishment was found to lead to aggressive actions towards the punishing individual, anxiety, and decreased job satisfaction (Arvey & Ivancevich, 1980; Challagalla & Shervani, 1996).

Interestingly, despite the prevalence of punishment as a method for enforcing organization policies, management literature provides little guidance on the impact of punishment on individuals' work performance. That is, research indicates that punishment can correct undesirable behaviors, but is silent on the impact on work-related performance criteria. Likewise, most studies exploring punishment in organizations examine it in the context of superiors punishing subordinates (Ball, Trevino, & Sims, 1994; Podsakoff, Todor, & Skov, 1982) but often overlook what happens when third parties (unaffected actors such as referees or arbitrators) trigger punishment. This is an increasingly relevant issue to organizations because third parties can punish or trigger the punishment of individuals for their non-compliant behavior that may eventually hurt their organizations (Fehr & Fischbacher, 2004).

Thus, we ask the following research question: How does punishment triggered by third parties impact individuals' work performance? Specifically, we seek to determine whether punished individuals work harder and/or perform better as a result of the punishment. Importantly, this manuscript is the first in the literature to distinguish between *effort deployment* (i.e., working harder) and *actual performance* when examining the impact of punishments on employee effort and performance. We acknowledge that just because individuals work harder, they are not necessarily performing better for their organizations. In addition, we seek to determine how the fit between the individual's aggregate punishment and the individual's team's aggregate punishment impacts the individual's work-related outcomes (i.e., effort deployed and actual performance). We assess how the average level of punishment in the team modulates individual players' responses to penalties. In other words, do individuals work harder and perform better when they are punished more, less, or the same as the other team members? Addressing these questions allows us to derive important theoretical and managerial implications, which we present in detail in the latter part of the manuscript.

To answer these questions and address the research limitations described, we utilized the setting of professional sports. We collected unobtrusive longitudinal data on the behavior of a sample of professional football (i.e., soccer) players in the Premier League, the top level of England's football league system, which is also one of the most prominent soccer leagues in the world in terms of annual revenues and worldwide viewership (SportyTell, 2020). The practice of utilizing the context of professional sports for testing behavior-related phenomena is well-accepted within the management literature (e.g., Adler & Adler, 1988; Beus & Whitman, 2017; Fonti, Ross, & Aversa, 2023; Grijalva et al., 2020). Moreover, our research is first to employ unobtrusive data to analyze the impact of externally-driven punishment on subsequent employee behaviors and performance outcomes.

The rest of the manuscript is organized as follows. First, we discuss the literature related to punishment. Next, drawing on mental accounting theory and person-environment fit theory, we formulate our hypotheses, where we also distinguish between effort deployment and actual performance. We continue by presenting the methodology and results. We conclude by presenting the theoretical and managerial implications along with opportunities for future research.

THEORETICAL BACKGROUND

Punishment overview

Punishment is the presentation of an aversive event or the removal of a positive event following a behavior with the intention of decreasing the frequency of that behavior (Kazdin, 2012). A key aspect of this definition is the relationship between the response and the aversive consequences. That is, a random administration of undesired stimuli does not constitute punishment (Arvey & Ivancevich, 1980). Instead, punishment is a measure applied for rule and policy adherence, especially in extrinsically oriented command-and-control-driven organizations (Tyler & Blader, 2005). As such, punishment can be deployed to enforce rules and norms, and even the threat of punishment can make individuals conform to rules and norms (Ball, Trevino, & Sims, 1994).

In essence, punishment can be described as the purposeful infliction of a penalty on individuals or groups for their transgressions (Skaggs et al., 2018; Wiltermuth & Flynn, 2013). Nonetheless, some research highlights that backward-looking retributive motives may also drive punishment decisions independently from forward-looking deterrence of future transgressions (Crockett, Özdemir, & Fehr, 2014). In this vein, punishment is a sociopolitical event and is often considered in relation to the social context in which punishment is executed (Niehoff, Paul, & Bunch, 1998).

Likewise, punishment can be distinguished in terms of the forms of punishment (Velloso, 2013). On the one hand, it may mean withholding positive rewards for the punished, including the denial of rewards or opportunities or informal forms of social exclusion. In such circumstances, punishment entails the removal of positive outcomes following an exercise of negative behavior. To illustrate, the punishment could be in the form of privilege denial, promotion denial, or bonus denial (Arvey & Ivancevich, 1980). On the other hand, punishment can be administered as a formalized, punitive practice (Fragale et al., 2009). Under this scenario, punishment occurs by presenting an aversive event following misconduct

(Arvey & Ivancevich, 1980). These two main forms of punishment typically follow different criteria and parameters for punishment and have different implications for the punished.

Conditioned punishments for employee misconduct within organizations can serve two different purposes. First, they can eliminate or decrease behaviors that lead to it. Second, they can raise the punished person's and their colleagues' awareness of impending aversive consequences when a certain behavior is exercised. In this study, we focus our attention on the formalized, punitive form of punishment administered by third parties.

Punishment has received considerable attention in management organization studies (e.g., Baxter, Colledge, & Turner, 2017; Butterfield, Trevino, & Ball, 1996; Wiltermuth & Flynn, 2013). This line of research depicts punishment as a multifaceted phenomenon with broad and far-reaching effects that extend beyond punishing subordinates and simply changing their attitudes and behaviors (Butterfield, Trevino, & Ball, 1996). Hence, there are many different types of punishment. In particular, punishment can be fair or unfair (Trevino, 1992), instrumental (i.e., serving as a means to a specific end), or impressional (i.e., in an interplay with organizational politics) (Butterfield, Trevino, & Ball, 1996). It can be consistent or inconsistent, severe (e.g., job loss) or soft (e.g., monetary fine) (Arvey & Ivancevich, 1980), open or hidden (Crockett, Özdemir, & Fehr, 2014), and direct or indirect (Ule et al., 2009).

Especially concerning direct and indirect punishment, punishment is most often examined in the context of a superior punishing a subordinate for a specific transgression (Arvey & Ivancevich, 1980; Ball, Trevino, & Sims, 1994; Wiltermuth & Flynn, 2013). However, such an assumption predicates that the superior is the only agent that can administer the punishment and has ample time and means to directly monitor subordinate behavior.

In reality, punishment can be inflicted upon wrongdoers by affected second parties (such as direct stakeholders) and unaffected third parties (such as referees or arbitrators) (Fehr & Fischbacher, 2004; Leibbrandt & López-Pérez, 2012). These stakeholders typically have the means and power to administer punishment and realize its sanctioning effect even if they are not part of the organization in which an employee works. In particular, punishment by third parties differs from those of first parties (e.g., supervisors/executives), because third parties are unaffected by the consequences of punishment, exert expertise-based power rather than position-based power, and may have a better position to remain objective when initiating punishment (Fehr & Fischbacher, 2004). Punishment decisions are more likely to be seen as trustworthy and impartial in the face of transgression (Jordan et al., 2016). As supervisors and executives have a direct stake in the way an individual is punished and in the nature of punishment, they may be prone to be less partial in punishing the wrongdoer to avoid repercussions and the possible negative consequences of punishment. In fact, as the performance of an individual and their managers/superiors are intertwined (Quade, McLarty, & Bonner, 2020), supervisors may be implicated in the transgression of their employees and bound in their punishment decisions. Due to their bounded rationality and objectivity in punishment processes, their punishment decisions may err either on the side of too light or too severe.

Furthermore, supervisors, senior managers, and directors do not always have sufficient time, means, or expertise to monitor specific employee behaviors, and many employee transgressions are brought to the superior's attention by external sources (Fragale et al., 2009). Instead, third parties often have the means and expertise to audit relevant practices, better identify the transgression that the supervisors and senior managers may have overlooked, and weigh an objective and fair punishment (Jordan et al., 2016). Especially when employee practices are executed outside direct supervisor monitoring, as often is the case, third parties may be more effective in auditing and weighing the punishment for employee transgression. External sources can, therefore, be a grounded, fair, and unbiased source of conveying employee transgressions that may lead to punishment in organizations.

On the other hand, third-party punishment may not always directly impact the punished unless it is followed up and sanctioned by the first-party actors. As such, the downstream consequences of third-party punishment are not necessarily direct or as intended by the third-party punisher (Jordan et al., 2016). For example, organizations may continue to back up and support their employees and either not implement the sanctioning of the punishment or alleviate the impact of third-party punishment if the execution of punishment is not in line with the organization's interests. Consequently, punishment by affected second parties and unaffected third parties represents a markedly different source and type of punishment than punishment from managers/superiors.

Beyond the literature focused solely on punishment within organizational contexts, our understanding benefits from studies across various fields, including sociology, information technology, and criminal policy. These diverse perspectives collectively contribute to unraveling the complex interplay of factors associated with the effects of negative reinforcements. In the realm of iterated dilemmas, the continued interaction within the same group amplifies the efficacy of punishments, underscoring the importance of sustained engagement for their impact (Balliet, Mulder, & Van Lange, 2011). However, this effectiveness is nuanced and tends to be more pronounced in deterring minor transgressions, administrative offenses, and breaches of informal social norms, while its influence wanes when dealing with major transgressions (Dölling et al., 2009). The intriguing revelation that

punishment, rather than monetary rewards, is linked to positive outcomes like creativity adds a layer of complexity, challenging traditional views on the motivational dynamics of punitive measures (Xu & Hamari, 2023). Yet, the application of negative reinforcement, although potentially vital for ensuring cooperation in challenging group tasks, carries inherent risks, as illustrated by the potential for disagreements and conflicts (Oliver, 1980). Moreover, the temporal dimension of punishment introduces a critical consideration, emphasizing that delays can hinder immediate responses and weaken the connection between received punishment and past behavior, thereby influencing its overall impact (Waichman & Stenzel, 2019).

Punishment and performance in organizations

Much of the past research examining the performance outcomes of punishment views punishment as an undesirable yet, at times, a necessary form of practice (Adler & Borys, 1996; Arvey & Ivancevich, 1980; Ball, Trevino, & Sims, 1994; Butterfield, Trevino, & Ball, 1996; Niehoff, Paul, & Bunch, 1998). As such, researchers recognize that it is a widely used managerial influence strategy regardless of conventional negative connotations (Ball, Trevino, & Sims, 1994). In particular, punishment can be considered necessary to sustain performance and maintain the sense of perceived justice in the workplace through the punishment of transgressors (Butterfield, Trevino, & Ball, 1996), because managers' inability to punish low performers is argued to lower organizational performance (Brewer & Walker, 2013).

While some scholars have argued that punishment can yield some positive outcomes, others have presented evidence suggesting the opposite (Bies et al., 2016). For example, Skinner (1969) argued that punishments are ineffective and a source of undesirable side effects, while Podsakoff, Todor, & Skov (1982) found that contingent punishment did not affect subordinate performance or satisfaction. Likewise, Adler & Borys (1996) note that punishment is a hallmark of coercive organizing. Further, other researchers found the association between punishment and positive and/or negative outcomes inconclusive and distinguished between just and unjust punishment when examining its impact (Ball, Trevino, & Sims, 1994). Arvey & Jones (1985) likewise concluded that it was difficult to draw conclusions regarding the impact of punishment on job performance.

Past research examining the link between punishment and performance suggests punishment plays a unique role in employees' subsequent performance, depending on contingencies such as whether a punishment is just or unjust (Ball, Trevino, & Sims, 1994), consistent or inconsistent, and severe or soft (Arvey & Ivancevich, 1980). That said, what is noteworthy about the research on punishment and performance is the lack of use of objective or unobtrusive data to measure both punishment and subsequent performance outcomes and a heavy focus on overall performance outcomes rather than specific behaviors and employee performance following the administration of punishment. In particular, insufficient attention has been made to resolve conflicting results concerning the performance outcomes of punishment, and do so longitudinally and unobtrusively and with specific attention to the punished employee. Next, we address this issue.

HYPOTHESES DEVELOPMENT

Punishment has received disproportionately less attention in the organization and management literature compared to incentive mechanisms (Tyler & Blader, 2005). On the contrary, a significant body of literature indicates that individuals place much greater emphasis on negative impact than positive one (Thaler et al., 1997; Tversky & Kahneman, 1973). A comprehensive multidisciplinary study (e.g., psychology, history, religion) by Rozin & Royzman (2001) reveals that negative phenomena receive more attention than positive phenomena, and negative entities are more salient and contagious than positive ones. Since individuals tend to emphasize avoiding negative outcomes more than striving for positive ones, punishments tend to have a lasting effect on organizational members (Thaler et al., 1997). As such, asymmetrical consideration of negative possibilities vis-à-vis positive possibilities, as well as reacting more strongly to losses than gains (Tversky & Kahneman, 1973), could drive individuals to do their best to avoid punishment and perform better.

Research indicates that punishment can immediately impact individuals' behaviors and lock in those behaviors for an extended period (Skaggs et al., 2018). This is due to the likelihood of a greater reaction to realized punishment than to reward and a higher perceived impact of potential punishment as a negative possibility (Tversky & Kahneman, 1973) that may push individuals to go the extra mile to improve their performance and reduce the possibility of subsequent punishment. In other words, especially in the case of individuals exposed to the possibility of punishment by third parties, the fear of punishment can outweigh the hope of reward and compel them to avoid future punishment by working harder and performing better.

Mental accounting theory demonstrates that individuals are loss-aversive and prone to make an extra effort to compensate for a loss induced by an adverse event. However, in so doing, they are constrained by limited rationality shaped by cognitive mental accounting processes (Barberis & Huang, 2001; Thaler, 1999). It is a relevant theoretical lens for organizational decision-making, and it has been applied in organization studies to examine how employees adapt to the changes in the organizational environment by assessing their realized gains/losses to evaluate prospects relative to the current circumstances (Arkes et al., 2008).

Drawing on mental accounting theory (Barberis & Huang, 2001; Thaler, 1999), we expect that employees see punishment as a loss and subsequently strive to compensate for such loss via greater effort and a pursuit of performance. Accordingly, employees may view their job as a topical account and want to increase the benefit side of their account after a punishment. By this token, once a punishment is administered, individuals are likely to deploy greater effort to compensate for the adverse effects of punishment by third parties and achieve a balance in their mental account of job performance. This aligns with the notion that subsequent investments/efforts can sometimes be framed as opportunities to recover prior losses (Guler, 2007). The overall rather than incident-specific cognitive implications of mental accounting theory (Barberis & Huang, 2001; Thaler, 1999) also lead us to expect that punishment may impact overall work effort and performance and not just the precise work behaviors being punished. Individuals may concentrate on improving different areas of their work as a means of compensation for the punishment administered to them rather than solely avoiding transgressions that had earlier triggered the punishment. They may also attempt to avoid future punishment by refraining from actions that are associated with punishment.

When individuals engage in behaviors that would allow them to avoid future punishment (Rhee, Dedahanov, & Lee, 2014), they can manifest these behaviors in the form of greater effort deployment and increased performance in the aftermath of a punishment. Working harder and performing better can function as a payoff for past punishment and hedge against future punishment possibilities. Similarly, fear has been shown to generate defensive behavior. This means individuals could seek to perform better out of fear of experiencing future punishment (Rhee, Dedahanov, & Lee, 2014).

Consequently, individuals who were the subject of punishment may seek to improve their work performance due to mental accounting processes, feelings of fear, and self-protection from the future possibilities of punishment. To gain better insights into the impact of punishments on employee effort and performance, we evaluate performance implications along two dimensions: *effort deployed* and *actual performance*. Thus, we explore the following:

> **H1a.** When punished for their behavior, individuals will work harder (deploy more effort) for their organizational unit.

> **H1b.** When punished for their behavior, individuals will perform better for their organizational unit.

Next, we turn our attention to investigating the combined impact of individual aggregate punishment and team aggregate punishment on deployed effort and performance. As noted before, punishment is a social phenomenon that should be considered concerning not only the punished individual but also others in the organizational unit (Butterfield, Trevino, & Ball, 1996; Niehoff, Paul, & Bunch, 1998; Trevino, 1992). The punishment of an employee creates a reaction from others in a team. It is considered a message to other employees in the team both as a warning and that organizational justice is maintained through the punishment of transgressors (Butterfield, Trevino, & Ball, 1996). Likewise, the punishment of individuals compared to their teammates is closely intertwined with distributive and procedural justice perceptions of the punishment that may play a role in subsequent individual performance (Ball, Trevino, & Sims, 1994; Butterfield, Trevino, & Ball, 1996). Thus, the level or frequency of punishment of individuals relative to their teammates may have additional unique influences on their subsequent effort and individual performance.

In the sports context, the administration of punishment is often carried out by impartial third parties, such as referees and sports regulatory bodies, which act as external parties in ensuring fairness (Fehr & Fischbacher, 2004; Leibbrandt & López-Pérez, 2012). The theoretical foundation of procedural justice (Ball, Trevino, & Sims, 1994; Butterfield, Trevino, & Ball, 1996) suggests that individuals are more likely to perceive procedures as fair when implemented by impartial third parties rather than internal parties. This distinction becomes crucial in the sports setting, where punishments are often meted out by governing bodies, ensuring a level of independence and impartiality. Drawing on organizational justice literature (Butterfield, Trevino, & Ball, 1996), we argue that the perceived fairness in the methods of administering punishment is likely to be higher when handled by an external third party. This can mitigate the potential sense of injustice even in scenarios of high individual aggregate punishment and high team aggregate punishment. By emphasizing the external nature of punishment administration in the sports context and applying the insights from person-environment fit (PE fit) theory (Goetz & Wald, 2021; Kim, Lin, & Kim, 2019; Schneider, 2001; Tilcsik, 2014), we aim to highlight the unique organizational justice dynamics at play in this study.

PE fit theory, with its different types of fit (i.e., person-organization, person-group, and person-job fit), has been widely used to explain overall job performance (Goetz & Wald, 2021; Kim, Lin, & Kim, 2019; Schneider, 2001; Tilcsik, 2014). The key tenet of PE fit theory is that individual performance is the function of congruence between a person's characteristics and the environment's demands (Tilcsik, 2014). In particular, person-organization fit can provide individuals with self-confirmatory feedback and positively influence self-verification perception (Kim, Lin, & Kim, 2019). As such, research shows that perceptions of fit between employees and their organizations significantly impact

decisions to join organizations (Cable & Judge, 1996) and behaviors and attitudes while employed (Greguras & Diefendorff, 2009). The theoretical rationale linking fit to performance rests upon the premise that individuals perform better when they work in an organization that corresponds to their values, capabilities, and behaviors. As Arthur et al. (2006: 787) indicate, "Theoretically, the relation between fit and attitudes is predicated on the reasoning that when there is a fit, the environment affords individuals the opportunity to fulfill their needs". That is, when individuals feel like they fit in the environment/organization, they are more likely to exhibit superior performance because they believe the organization can help them satisfy their needs, so they are likely to strive to perform better.

Considering the theoretical arguments presented by PE fit theory, it is interesting to examine if these arguments hold when the fit is examined in terms of undesirable phenomena, such as punishment. While past studies have focused on desirable phenomena when drawing upon the theoretical arguments presented by PE fit theory, we examine whether individuals perform better when the level of punishment they experience is consistent/inconsistent with the level of punishment experienced by other members of their organizational unit. On the one hand, it is plausible that if individuals experience more punishment than their colleagues, they will perceive the environment as unfair and thus underperform (cf. Butterfield, Trevino, & Ball, 1996). On the other hand, if individuals experience less punishment than their colleagues, they could again underperform because of the perception that they are not subject to punishment or are less likely to experience punishment (cf. Thaler et al., 1997). In essence, individuals could believe they could get away with undesirable behavior due to a lack of punishment. Nonetheless, we expect a balanced distribution of punishment incidents (i.e., a greater fit between individuals' aggregate punishments) in an organizational team like a sales team would lead to increased work effort and individual performance.

Similarly, past research outlines the theory of equitable payment, emphasizing the link between work efficiency, individual satisfaction, and the application of the standard payment and progression method (Jaques, 1961). Drawing on Jaques' (1961) work, we underscore the importance of aligning individual work conditions (here represented by aggregate punishments) with team conditions. According to Jaques (1961), a well-fitted payment and progression method contributes to greater work efficiency and satisfaction. Applying this logic to the context of a comparative application of individual punishment, we argue that a better fit between individual and team punishments (reflecting equitable conditions) is likely to lead to increased effort and improved performance, aligning with Jaques' insights on equitable payment theory.

Furthermore, especially in the context of punishment by third parties or punishment triggered by third parties (Leibbrandt & López-Pérez, 2012; Ule et al., 2009), homogenous punishment of team members can foster group identity and trigger a sense of cohesion against perceived adversity and challenges (Tortoriello, Reagans, & McEvily, 2012). Extant research finds that employees tend to unify against challenges and adversities to maintain their welfare, especially when such challenges impact colleagues uniformly and threaten the whole group (Blader, 2007). When a punished individual finds that their colleagues are punished to a similar extent rather than to a dissimilar extent, their group identity can be reinforced. They may feel compelled to act cohesively to perform better and jointly overcome external threats. As such, we empirically examine the following:

> **H2a.** The better the fit between the individual's aggregate punishments and his team's aggregate punishments, the harder the individual will work for the organizational unit.

> **H2b.** The better the fit between the individual's aggregate punishments and his team's aggregate punishments, the better the individual will perform for the organizational unit.

METHOD

Setting and sample

Hypotheses were tested using a sample of professional soccer players in England's Premier League. The sports data, in general, and data on the Premier League, in particular, provided a great setting to conduct the study for several reasons. First, observational sports data offers a "living laboratory" to study individual and group dynamics (Day et al., 2012; Wolfe et al., 2005). Second, it is England's top football league and also holds the status of the best soccer league in the world which allowed us to access the population-level data. Third, penalties are easy to quantify in soccer in the form of yellow and red cards. For this study, we focused on yellow cards because red cards are extremely infrequent and insufficient in number throughout a season to infer statistical significance. Moreover, a player who receives a red card faces an additional consequence in the form of a suspension, ranging from 1 to 3 matches, which makes it quite challenging to compare their effort and performance before and after the disciplinary action. For a similar reason, we did not include goalkeepers in our sample because it would skew the sample, as their effort (miles run) is substantially lower than that of all the other players. Fourth, this setting allowed us to measure and distinguish between *working harder* and *performing better*. Fifth, this setting allowed us to collect unobtrusive longitudinal data and test within-persons performance change as a function of punishment.

Our sample consisted of 412 professional soccer players who played in the Premier League during the

2017–2018 season. The average age of the players included in the sample was 25.69 years ($SD = 1.27$), with an average Premier League tenure of 4.21 years ($SD = 0.34$). We collected data from three different sources: PremierLeague.com (yellow cards), WhoScored.com (performance), and SillySeason.com (player salaries).

Measures

In order to reduce study validity threats, we employed unobtrusive measures to operationalize the variables of interest. Unlike previous studies examining the phenomena of punishment that utilized typical psychological measures (e.g., questionnaires, interviews), we relied on unobtrusive measures that did not require respondents' cooperation. As such, we were able to examine behavioral changes as a naturally occurring workplace phenomenon, which allowed us to reduce threats to internal validity (Shadish, Cook, & Campbell, 2002). Next, we describe the operationalization of the measures utilized in the study.

Punishment is considered to occur when a soccer player is sanctioned by the referee of the match with a yellow card. As mentioned earlier, we focus on yellow cards as opposed to red cards because of the scarce number of red card occurrences. Yellow cards are used in soccer to punish a variety of misconduct, such as foul play, unsporting behavior, dissent by word or action, delaying the start of play, failing to respect the required distance when play is restarted with a corner-kick, free-kick, or throw-in, violent conduct, and leaving or re-entering the field of play without the referee's permission (Spitz et al., 2017).

The consequences of a yellow card vary from league to league. If a player receives a second yellow card during the match, he is automatically sanctioned with a red card and dismissed from the field of play for the duration of the match. The dismissed player cannot be replaced, so his team must play the remainder of the game with one fewer player. The post-match consequences of a yellow card vary from league to league. According to ESPN.com, in England's Premier League, players are given a one-match ban if 5 yellow cards are received before 19 Premier League fixtures (December 26th round), a further two-match ban if 10 yellow cards are received before 32 fixtures (weekend of March 30th), and a further three-match ban if 15 yellow cards are received (no fixture limit) (Johnson, 2018).

While we operationalize punishment as players receiving yellow cards, potential team-level and league-level repercussions of yellow cards serve as an outset for higher-level reverberation and as a ground for enriching the applicability and relevance of our study. The broader organizational context and the extensive financial ramifications for both the team and players find resonance in various organizational settings. Consider a manufacturing company subjected to scrutiny and audits to ensure alignment with environmental, social, and governance regulations. If a third party conducting the audit identifies irregularities, the repercussions extend beyond penalties for non-compliant employees to encompass financial sanctions for the entire firm. Moreover, intangible consequences like harm to the brand image and reputation may ensue. Consequently, elucidating these far-reaching consequences enriches the applicability and relevance of our study.

Effort deployed (i.e., how hard individuals work) was objectively measured. Effort deployed was operationalized in terms of the kilometers each player runs during the duration of a match (i.e., kilometers per match). Data on the distance covered by each player for each match were collected from the league's official websites, PremierLeague.com and OptaSports.com.

To measure the change in effort deployed as a result of penalty, we compared the kilometers the players in the sample covered the match before receiving the yellow card (*match 1*) to the kilometers the same players covered the match after the one when the player received the yellow card (*match 3*). That is, *match 2* is the match when the player is booked the yellow card. We compared *match 1* to *match 3* to account for recency effects. Importantly, as we will describe later in this section, we controlled for the number of minutes each player stayed in the match.

Performance was measured based on the comprehensive measure provided by the reputable organization WhoScored.com. Each player's overall performance rating (i.e., score) ranges from 1 to 10, with 10 being the highest rating. WhoScored.com uses real-time information from data provider Opta to provide a performance indicator that is well-respected in the world of soccer and used by media giants, soccer clubs, and bookmakers. The scores are based on a comprehensive algorithm that includes over 200 raw statistics that account for every event of importance that takes place during the match. For example, a successfully attempted dribble in the opposition's final third area will positively impact the player's rating. A comprehensive description of the performance score can be found on the company's official website (i.e., WhoScored.com/Explanations). To illustrate the typical annual average score distribution, for the 2012/2013 Premier League season, 0.03% of the players received a score in the 0–3.9 range (Extremely Poor), 0.31% in the 4.0–4.9 range (Very Poor), 9.92% in the 5.0–5.9 range (Poor), 55.12% in the 6.0–6.9 range (Average), 28.71% in the 7.0–7.9 range, 5.19% in the 8.0–8.9 range (Very Good), and 0.73% in the 9.0–10 range (Excellent) (WhoScored.com/Explanations).

To measure the change in performance as a result of punishment, we compared the score of each player in the match before receiving the yellow card (*match 1*) to the same player's score in the match after the one when the player received the yellow card (*match 3*). As mentioned earlier, *match 2* is the match when the player is booked the yellow card.

Individual-team punishment fit (the fit between the individual's aggregate punishments and his team's aggregate punishments) was measured by comparing the total number of yellow cards the player received during the season with the average number of yellow cards the players' teammates received during the same season. To measure the latter, we divided the total number of yellow cards the players' team members received during the season by the total number of players utilized by the club during that season. To mitigate the concerns associated with the use of difference scores in testing congruence effects, we employed polynomial regression and surface plot analysis (Edwards & Parry, 1993) to test the impact of individual-team punishment fit on the individual's performance.

When examining hypotheses 2a and 2b, we are measuring aggregate punishment for the season, and we also evaluate aggregate player effort deployed and player performance for the season. Aggregate player effort deployed (ED) is measured as the average kilometers the player covered per match during the season (i.e., the number of kilometers the player covered the entire season, divided by the number of matches played). Aggregate player performance (PP) is measured as the average player performance score per match during the season (i.e., the sum of all performance scores divided by the number of matches played).

Control variables were also included in the tested model. Considering that effort deployed is measured in terms of the kilometers each player runs during the duration of a match (i.e., kilometers per match), we only included matches where individuals played the full 90 minutes in our analyses. In addition, we controlled for player salary. Salary has been shown to motivate employees and lead to superior task performance (Shah, Irani, & Sharif, 2017). Salary was measured as the contract monetary compensation for the respective season (logarithmized).

We also controlled for other variables recommended in the literature when evaluating player performance, such as player age, tenure with the team, Premier League tenure, team performance, and team effort deployed (Beus & Whitman, 2017). Team performance was measured as the sum of the ratings of all the players in the team, excluding the subject players included in the sample. Team effort deployed as measured as the distance covered during respective matches (i.e., kilometers per match) by all the players in the team, excluding the subject players included in the sample.

Hypothesis testing

Descriptive statistics and intercorrelations for the variables of interest are presented in Table 1.

For hypothesis 1a, results of the paired-samples *t*-test indicate that players deploy significantly more effort following a punishment ($M = 11.21$, $SD = 0.79$) than before the punishment ($M = 10.05$, $SD = 0.63$), $t(411) = 12.140$, $p < .01$, $d = 0.73$. As such, hypothesis 1a is supported. Results indicate that, on average, players run an additional 1.17 km during the match following the punishment.

Next, we examined the difference in performance before and after the punishment. Contrary to our hypothesis, results indicate that players perform significantly worse following a punishment ($M = 6.17$, $SD = 1.13$) than before the punishment ($M = 7.30$, $SD = 1.06$), $t(411) = -12.124$, $p < .01$, $d = 0.71$. Thus, hypothesis 1b is not supported. Interestingly, although individuals deploy more effort (i.e., work harder) following a punishment, they perform worse.

Polynomial regression and surface plot analysis

To evaluate whether the fit between the individual's aggregate punishments (IP) and his team's aggregate punishments (TP) impacts how hard the individual will work for his organizational unit (i.e., H2a) or how well the individual will perform for his organizational unit (H2b), we employed polynomial regression analysis and three-dimensional response surface plot analysis (Cronbach & Furby, 1970; Edwards & Parry, 1993). Such regressions contain higher-order terms of the two components (e.g., IP and TP), such as the squares of the two components and their product. The higher terms allow us to evaluate the impact of the fit between IP and TP on effort deployed and performance, respectively (Edwards, 2001).

First, to assess the impact of the fit between the individual's punishments and his team members' punishment on how hard the individual will work for his team, we regressed effort deployed (ED) on the control variables and five polynomial terms: IP, TP, IP*TP, IP^2, and TP^2 (Table 2). We centered IP and TP before calculating the interaction and second-order terms.

According to Edwards & Parry (1993), when the higher-order terms (i.e., IP*TP, IP^2, and TP^2) are not significant, IP and TP can only have a linear additive relationship with the dependent variable (i.e., ED). When any of the higher-order terms are significant, response surface plots can be utilized to portray the impact of the fit between IP and TP on ED in a three-dimensional graph. If a downward curvature along the line of misfit (IP = -TP line) is presented in the three-dimensional graph, then the effect of fit is considered to be present and significant (Edwards & Cable, 2009). Specifically, the level of ED should be higher when there is a fit between IP and TP than when there is a misfit. A summary of these results is presented in Table 2. The first model depicts the effects of the control variables on ED. The second model presents the effects of IP and TP, while the third model presents the main effects of IP*TP, IP^2, and

TABLE 1 Descriptive statistics and variable intercorrelations.

Variable	Mean	*SD*	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1) Player Performance *Match 1*	7.30	1.06	1														
(2) Player Effort Deployed *Match 1*	10.05	0.63	.19*	1													
(3) Player Performance *Match 3*	6.17	1.13	.20*	.17	1												
(4) Player Effort Deployed *Match 3*	11.21	0.79	.18*	.14	.15	1											
(5) Player Aggregate/Season Punishment	2.07	0.51	.19*	.18*	.20*	.23*	1										
(6) Team Aggregate/Season Punishment	1.19	0.63	.15	.05	.11	.13	.14	1									
(7) Player Salary	15.05	2.33	.20*	.21*	.23*	.25*	.07	.02	1								
(8) Player Age	25.69	1.27	.11	.08	.13	.10	.07	.01	.11	1							
(9) Tenure with the Team	3.48	0.98	.26*	.23*	.20*	.24*	.10	.07	.16	.19*	1						
(10) Premier League Tenure	4.21	0.34	.12	.11	.15	.16	.08	.04	.14	.22*	.18*	1					
(11) Aggregate Team Performance *Match 1*	72.17	5.02	.20*	.18*	.16	.14	.03	.09	.11	.10	.14	.11	1				
(12) Team Effort Deployed *Match 1*	101.46	9.24	.18*	.19*	.15	.16	.11	.05	.15	.12	.11	.06	.23*	1			
(13) Aggregate Team Performance *Match 3*	71.98	5.96	.15	.17*	.19*	.18*	.14	.03	.11	.11	.12	.03	.19*	.18*	1		
(14) Team Effort Deployed *Match 3*	101.51	8.38	.13	.11	.18*	.15	.10	.04	.13	.14	.07	.02	.20*	.27*	.32*	1	
(15) Player Aggregate Season Performance per Match	6.87	.86	.22*	.18*	19*	.26*	.22*	.24	.31*	.07	.03	.02	.04	.05	.08	.03	1
(16) Player Aggregate Season Effort Deployed per Match	10.29	1.15	.23*	.21*	.22*	.25*	.23*	.25	.29*	.14	.08	.09	.02	.12	.03	.07	.28*

*Significant at $p < 0.05$.

TABLE 2 Polynomial regression results (ED).

	Model 1	Model 2	Model 3
(Constant)	0.36	0.33	0.34
Player Age	0.07	0.05	0.02
Player Salary	0.26	0.24	0.23
Team Tenure	0.22*	0.22*	0.21*
PL Tenure	0.19*	0.16	0.15
Team Performance	0.28*	0.26*	0.25*
Team Effort Deployed	0.25*	0.24*	0.22*
IP		0.23*	0.20*
TP		0.20*	0.19*
IP*TP			0.24*
IP^2			−0.19*
TP^2			−0.22*
R^2	0.15	0.19	0.25
ΔR^2		0.04	0.06

*Significant at $p < 0.05$.
Note: Sample size is 412; Player Aggregate Effort Deployed Per Match (ED) is the dependent variable.

TABLE 3 Polynomial regression results (PP).

	Model 1	Model 2	Model 3
(Constant)	0.21	0.22	0.20
Player Age	0.03	0.02	0.03
Player Salary	0.32	0.30	0.27
Team Tenure	0.20*	0.20*	0.19*
PL Tenure	0.26*	0.24	0.23
Team Performance	0.32*	0.31*	0.30*
Team Effort Deployed	0.28*	0.29*	0.26*
IP		0.20*	0.20*
TP		0.19*	0.18*
IP*TP			0.20*
IP^2			−0.23*
TP^2			−0.25*
R^2	0.17	0.22	0.29
ΔR^2		0.05	0.07

*Significant at $p < 0.05$.
Note: Sample size is 412; Player Aggregate Performance Per Match (PP) is the dependent variable.

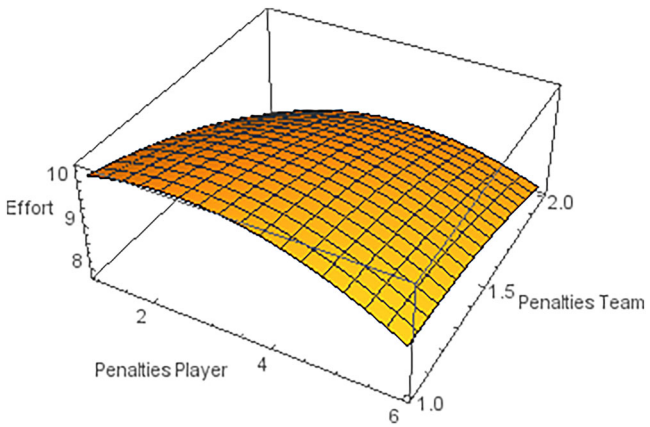

FIGURE 1 Response surface graph effort.

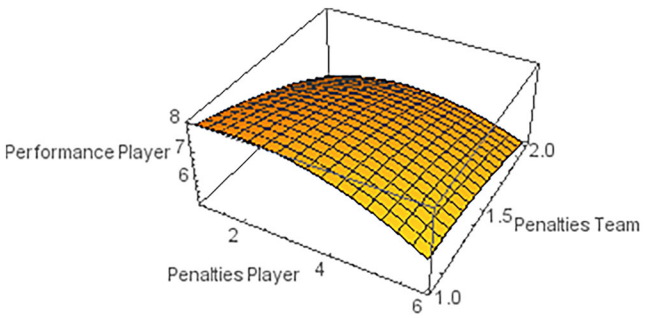

FIGURE 2 Response surface graph performance.

TP^2, respectively. As presented in Table 2, the three higher-order terms IP*TP ($b = 0.24$, $p < 0.05$), IP^2 ($b = -0.19$, $p < 0.05$), and TP^2 ($b = -0.22$, $p < 0.05$) are significant providing support for hypothesis 2a. That is, the better the fit between the individual's aggregate punishments and his team's aggregate punishments, the harder the individual will work for the organizational unit.

We continued our analysis by plotting the relationship between IP, TP, and EP in a three-dimensional graph. The response surface in Figure 1 reveals that the effort deployed by players is highest along the line of perfect fit (IP = TP line). The convex curvature along the line of misfit shows that the fit between IP and TP is associated with a higher level of EP than misfit (Edwards & Parry, 1993). Figure 1 indicates that EP decreases as the IP and TP scores deviate from the line of perfect fit. This provides further evidence that the fit between the player's punishment and his team's punishment directly and positively impacts how hard the player works for the team.

We followed the same steps to evaluate hypothesis 2b. The results presented in Table 3 indicate that when regressing player performance (PP) on the control variables and IP, TP, IP*TP, IP^2, and TP^2, the higher-order terms IP*TP ($b = 0.20$, $p < 0.05$), IP^2 ($b = -0.23$, $p < 0.05$), and TP^2 ($b = -0.25$, $p < 0.05$) are significant providing support for hypothesis 2b. That is, the better the fit between the individual's aggregate punishments and his team's aggregate punishments, the better the individual will perform for the organizational unit.

Similarly, we plotted the relationship between IP, TP, and PP in a three-dimensional graph. The response surface in Figure 2 indicates that player performance is highest along the line of perfect fit and decreases as the IP and TP scores deviate from the line of perfect fit. The surface plot analysis provides further evidence that the fit between the player's punishment and his team's punishment directly and positively impacts the player's performance.

Post hoc analysis

Considering the above results, that individuals work their hardest and perform their best when there is a *fit* between their level of punishment and their colleagues' level of punishment, we investigate the impact of *misfit*. Specifically, we examine the impact on effort deployed and performance in the case of *negative misfit* (i.e., individuals are punished more than their colleagues) and *positive misfit* (i.e., individuals are punished less than their colleagues). Determining which type of misfit has a stronger negative impact on individuals' effort deployed and performance has important practical implications as it can help managers better understand the impact of punishing some individuals more or less as compared to the individuals' colleagues.

Out of 412 players in the sample, 28 exhibited fit and have received the same number of yellow cards per season as their respective teams' averages. For this group of players, the aggregate effort deployed (ED) was $M = 11.05$, and the aggregate player performance (PP) was $M = 7.16$.

Of 412 players, 259 exhibited negative misfits and received more yellow cards per season than their respective teams' averages. For this group of players, the aggregate effort deployed (ED) was $M = 10.41$, and the aggregate player performance (PP) was $M = 6.03$.

Of 412 players, 125 exhibited positive misfits and received fewer yellow cards per season than their respective teams' averages. For this group of players, the aggregate effort deployed (ED) was $M = 9.43$, and the aggregate player performance (PP) was $M = 6.78$.

T-tests for the difference in beta weights between two independent samples indicate that the average effort deployed ($t = 4.21$, $p < 0.05$) and average player performance ($t = 2.01$, $p < 0.05$) are significantly different across situations of negative and positive misfit. Specifically, on average, when punished more than their teammates, players deploy significantly more effort than players who get punished less than their teammates ($\Delta = 0.98$) but perform significantly worse than those players ($\Delta = 0.75$). That is, players experiencing positive misfits perform better than players experiencing negative misfits, but players experiencing negative misfits deploy more effort than players experiencing positive misfits.

DISCUSSION AND IMPLICATIONS

Various forms of punishment are an integral part of the management of firms. This study examined the various outcomes in sports to infer insights for the work setting. A sample of 412 professional soccer players in England's Premier League was utilized to collect unobtrusive, longitudinal data to better understand how individuals react to punishments in their workplace. In the process, we make several theoretical and managerial contributions.

Theoretical implications

Despite the prevalence of punishment as a method for enforcing organization policies, management literature provides little guidance on the impact of punishment on individuals' work performance. Our study is the first to utilize actual data collected in a sport setting to examine this phenomenon. Prior studies have employed surveys or experiments to gain insights into the outcomes of punishment (e.g., Ball, Trevino, & Sims, 1994; Wiltermuth & Flynn, 2013). Our approach allows us to utilize unobtrusive measures for both punishment and its outcomes. The current study complements extant literature by presenting results characterized by a high degree of realism (McGrath, Martin, & Kulka, 1982). This study makes several theoretical contributions to research.

First, our research distinctively examines the effect of punishment by third parties on athletes' effort deployment and actual performance in a sports setting that could offer notable insights into the work setting by mitigating the "streetlight effect" (Shaw, Bansal, & Gruber, 2017). Punishment by internal superiors has been extensively examined in the extant theory (Arvey & Ivancevich, 1980; Ball, Trevino, & Sims, 1994; Butterfield, Trevino, & Ball, 1996; Skaggs et al., 2018). However, less attention has been paid to punishment by third parties and how it affects employee behavior and performance. Our research offers notable insights from sports settings for the role of punishment by third parties in employees' ensuing work behavior and performance. Our research findings hold significant relevance in organizational contexts where external entities, such as environmental agencies, scrutinize internal processes through audits, subsequently impacting specific employees. This situation is becoming more prevalent in organizational dynamics, particularly with the increasing scrutiny of firms' adherence to established standards in environmental and social performance. Although we recognize the potential for creative and innovative responses in such scenarios, we also acknowledge the difficulty of capturing and quantifying these responses within our setting. However, it is crucial to emphasize that a quantifiable reaction, such as an increase in effort, constitutes a tangible outcome that can furnish valuable insights for managers.

Second, the current study is the first to distinguish between effort deployed (i.e., how hard individuals work) and actual performance. As such, we offer a more comprehensive and precise perspective on the performance outcomes associated with punishment and provide some noteworthy insights. Our findings indicate that soccer players deploy significantly more effort (run more kilometers) following a punishment. Thus, punishment results in individuals working harder for their organizational unit than before the punishment was administered. Individuals will engage in actions that allow them to avoid future punishment, as the punishment can ignite feelings of fear and self-protection (Zoghbi-Manrique-de-

Lara, 2006). Likewise, mental accounting theory indicates that individuals will make extra effort to perform better following punishment to compensate for the actual or expected loss from the application of punishment (Thaler, 1999). Thus, individuals probably work harder to avoid the negative impact of future punishments (e.g., financial penalties and job loss).

Interestingly, the findings indicate that individuals do not perform better following the administration of punishment. In fact, their performance is significantly worse than before the punishment. Although individuals work harder, they actually perform worse. This finding supports extant literature arguing that punishment can cause individuals feelings of fear (Zoghbi-Manrique-de-Lara, 2006). It is plausible that, despite working harder, individuals perform worse because feelings of fear are not necessarily a positive force toward greater achievement. Fear of future punishment and its ensuing consequences could negatively impact individuals' ability to perform to the best of their abilities. Accordingly, our findings highlight that the fear of future punishment is a two-sided mechanism in explaining employee behavior and performance, and the nature of effort deployed rather than the sheer amount of effort deployed matters. While the fear of future punishment stimulates further effort to avoid the negative impact, the very same fear leads individuals to perform worse, because it is not a nourishing mechanism but stokes defensive and potentially infective actions that curb the effectiveness of the effort deployed.

The study's results further contribute to the literature addressing the outcomes of punishment by investigating how the fit between the individual's aggregate punishments and his team's aggregate punishments impacts how hard the individual works and his performance. Our findings reveal how teams' punishment climate (i.e., the average level of punishment) modulates individual players' responses to punishment. Our findings indicate that the better the fit between the individual's aggregate punishments and his team's aggregate punishments, the harder the individual will work for the organizational unit and the better he will perform. In contrast, individuals who experience more or less stringent punishment than the team average, exhibit fewer post-punishment improvements. That is, employees will perform best when the level of punishment they experience is similar to the level of punishment experienced by individuals in their organizational unit. This finding constitutes a contribution to research on PE fit (Goetz & Wald, 2021; Kim, Lin, & Kim, 2019; Schneider, 2001) and cohesion (Tortoriello, Reagans, & McEvily, 2012) as it highlights that relatively homogenous punishment by third parties may enhance individuals' work effort and performance.

Practical implications

This study offers several practical implications. Managers should be aware that punishment can make individuals work harder but not necessarily perform better. In fact, our findings indicate that individuals perform worse following the punishment than before the punishment. However, individuals do work harder following punishment. This indicates that punishment can be effective when the nature of the work performed is rather effort-focused, and there is little room for the employees to make mistakes. As such, punishment could be employed to enhance productivity for low-skilled individuals and jobs. However, when the individuals subject to punishment perform complex tasks that require a high level of skill and concentration, punishment will likely negatively impact their performance. This was evident in the case of professional soccer players, where the distinction between effort and actual performance can be easily established. In sum, we advise managers that punishment will make individuals work harder, but their actual performance will decrease.

Second, our findings have implications for third parties that may administer punishment to individuals. Whether they are affected second-party stakeholders (i.e., customers) or unaffected third-party stakeholders (i.e., ombudsman or regulatory bodies), third parties should be cognizant that while their punishment of individuals leads to greater effort deployment, it eventually hurts their performance. Thus, these stakeholders are advised to consider that individuals may perform poorly following the administration of punishment. This notion potentially entails greater coordination between third parties and individuals' superiors following the punishment events to account for a potential decline in performance.

We further caution managers to carefully consider the punishment administered to one individual in the context of the punishment administered to the remainder of the individuals in the organizational unit. That is, our results indicate that employees will perform best when the level of punishment they experience is similar to the level of punishment experienced by individuals in their organizational unit. In addition, we advise managers that when punished more than their teammates, players deploy significantly more effort than players who get punished less than their teammates but perform significantly worse than those players. This is not to say that managers should punish employees when they do not deserve it simply because other employees in the organizational unit have been punished, nor do we say that managers should fail to punish an employee when those employees deserve punishment, but others in the organizational unit have not experienced similar punishments. Rather, we caution managers that individuals react better to punishment if they perceive their punishment to be consistent with what others are experiencing in the organizational unit.

Limitations and future directions

The study's limitations present several opportunities for further research. First, we focused on two possible

outcomes of punishment: effort deployed and performance. Future research should investigate additional potential outcomes, such as job satisfaction or loyalty. Second, we based our arguments leading up to hypotheses 1a and b on mental accounting theory and arguments leading up to hypotheses 2a and b on PE fit theory. That said, social identity theory (e.g., Varma et al., 2021) may also offer viable alternative explanation mechanisms for relationships observed in our findings. For example, one reason why organizational unit members work harder after punishment could be because people want to be seen as "good" team members, and punishees may feel they have "let the team down" by engaging in punishable offense and are therefore even more motivated to contribute to the organizational unit. Thus, alternative theoretical mechanisms can be applied to explain punishment and its outcomes in organizations. Third, we collected longitudinal data to examine the hypotheses of interest. However, future research should attempt to investigate the temporal effects of punishment. That is, how long does the effect of punishment last? Fourth, it is worth noting that our data collection focused solely on yellow cards. Future research endeavors may consider extending the longitudinal data horizon to encompass more severe penalties, such as red cards, and explore their ex-post impact. Finally, other methods, such as experimental design or simulation, could help provide additional insights into the outcomes of punishment.

Beyond research opportunities invoked by our limitations, we suggest that there are further promising future research avenues. First, although we draw on mental accounting theory to offer possible reasons why individuals perform worse despite making more effort after being punished, we believe future research should try to explain these rather surprising findings. There may be important unexplored mediating mechanisms that can explain why employees perform worse despite working harder in such situations. Qualitative studies can help identify such mechanisms and answer the 'why' question concerning these relationships. Thus, we suggest future research delve deeper into this issue and advance our knowledge on the potential strengths and pitfalls of punishment in the workplace.

Furthermore, the question of when punishment is more effective can yield interesting insights into the boundary conditions of the link between punishment and its consequences. In particular, contextual, cultural, behavioral, and cognitive factors can be examined as moderating factors that may shape how punishment influences individual and organizational performance outcomes. Likewise, exploration of when and why some individuals are more prone to marketplace transgressions can shed some light on the application and impact of punishment in response to such transgressions.

Moreover, while the primary emphasis of our study is the effect of punishment on effort and performance, Jaques' (1961) work equity theory serves as a helpful reminder of the need to consider people's subjective assessments of justice. Thus, future iterations of our research could incorporate a more explicit examination of employees' perceptions of fairness in the punishment process, aligning with Jaques' (1961) emphasis on the psychological aspects of equity theory. This would contribute to a more comprehensive understanding of the interplay between punishment, perceived fairness, and its subsequent effects on work-related outcomes.

Finally, future research can dig deeper into the potential interplay between individuals and their organizational unit in relation to punishment. Scholars can explore the role of group dynamics and identity factors in punishment and its impact. Our findings also provoke the question of how punishment administered by unaffected third parties is perceived vis-à-vis punishment administered by employees' superiors. We suspect they might be different and may be perceived differently, leading to different outcomes. This also spurs the question of what happens when a superior's ensuing punishment is seen as more or less severe than the punishment driven by third parties. Punishment is a prevalent and interesting phenomenon, and our findings provoke fruitful future research possibilities to understand punishment better than we do now.

AUTHOR CONTRIBUTION STATEMENT

David Gligor: Conceptualization, Methodology, Writing—Original draft preparation, Writing—Review & Editing; **Ismail Gölgeci:** Writing—Original draft preparation, Project administration, Writing—Review & Editing; **Vipul Garg:** Writing—Original draft preparation, Writing—Review & Editing; **Yavuz Idug:** Writing–Original draft preparation, Writing—Review & Editing; **Uchenna Ekezie:** Writing—Original draft preparation, Writing—Review & Editing; **Javad Feiz Abadi:** Conceptualization, Writing—Review & Editing; **Ferhat Caliskan:** Writing—Review & Editing.

CONFLICT OF INTEREST STATEMENT

There is no conflict of interest.

DATA AVAILABILITY STATEMENT

Data used in this study is publicly available archival data.

FUNDING IF ANY

There is no funding associated with this study.

ORCID

Ismail Gölgeci https://orcid.org/0000-0002-6853-3255
Vipul Garg https://orcid.org/0000-0003-4896-6130

REFERENCES

Adler, P.A. & Adler, P. (1988) Intense loyalty in organizations: a case study of college athletics. *Administrative Science Quarterly*, 33(3), 401–417. Available from: https://doi.org/10.2307/2392716

Adler, P.S. & Borys, B. (1996) Two types of bureaucracy: enabling and coercive. *Administrative Science Quarterly*, 41(1), 61–89. Available from: https://doi.org/10.2307/2393986

Arkes, H.R., Hirshleifer, D., Jiang, D. & Lim, S. (2008) Reference point adaptation: tests in the domain of security trading. *Organizational Behavior and Human Decision Processes*, 105(1), 67–81. Available from: https://doi.org/10.1016/j.obhdp.2007.04.005

Arthur, W., Bell, S.T., Villado, A.J. & Doverspike, D. (2006) The use of person-organization fit in employment decision making: an assessment of its criterion-related validity. *Journal of Applied Psychology*, 91(4), 786–801. Available from: https://doi.org/10.1037/0021-9010.91.4.786

Arvey, R.D. & Ivancevich, J.M. (1980) Punishment in organizations: a review, propositions, and research suggestions. *Academy of Management Review*, 5(1), 123–132. Available from: https://doi.org/10.2307/257812

Arvey, R.D. & Jones, A.P. (1985) The use of discipline in organizational settings: a framework for future research. *Research in Organizational Behavior*, 7, 367–408.

Ball, G.A., Trevino, L.K. & Sims, H.P. (1994) Just and unjust punishment: influences on subordinate performance and citizenship. *Academy of Management Journal*, 37(2), 299–322. Available from: https://doi.org/10.2307/256831

Balliet, D., Mulder, L.B. & Van Lange, P.A. (2011) Reward, punishment, and cooperation: a meta-analysis. *Psychological Bulletin*, 137(4), 594–615. Available from: https://doi.org/10.1037/a0023489

Barberis, N. & Huang, M. (2001) Mental accounting, loss aversion, and individual stock returns. *The Journal of Finance (New York)*, 56(4), 1247–1292.

Baxter, D., Colledge, T. & Turner, N. (2017) A study of accountability in two organizational learning frameworks: why accountability for learning is critical. *European Management Review*, 14(3), 319–332. Available from: https://doi.org/10.1111/emre.12112

Beus, J.M. & Whitman, D.S. (2017) Almighty dollar or root of all evil? Testing the effects of money on workplace behavior. *Journal of Management*, 43(7), 2147–2167. Available from: https://doi.org/10.1177/0149206314565241

Bies, R.J., Barclay, L.J., Tripp, T.M. & Aquino, K. (2016) A systems perspective on forgiveness in organizations. *Academy of Management Annals*, 10(1), 245–318. Available from: https://doi.org/10.5465/19416520.2016.1120956

Blader, S.L. (2007) What leads organizational members to collectivize? Injustice and identification as precursors of union certification. *Organization Science*, 18(1), 108–126. Available from: https://doi.org/10.1287/orsc.1060.0217

Brewer, G.A. & Walker, R.M. (2013) Personnel constraints in public organizations: the impact of reward and punishment on organizational performance. *Public Administration Review*, 73(1), 121–131. Available from: https://doi.org/10.1111/j.1540-6210.2012.02681.x

Butterfield, K.D., Trevino, L.K. & Ball, G.A. (1996) Punishment from the manager's perspective: a grounded investigation and inductive model. *Academy of Management Journal*, 39(6), 1479–1512. Available from: https://doi.org/10.2307/257066

Cable, D.M. & Judge, T.A. (1996) Person–organization fit, job choice decisions, and organizational entry. *Organizational Behavior and Human Decision Processes*, 67(3), 294–311. Available from: https://doi.org/10.1006/obhd.1996.0081

Challagalla, G.N. & Shervani, T.A. (1996) Dimensions and types of supervisory control: effects on salesperson performance and satisfaction. *Journal of Marketing*, 60(1), 89–105. Available from: https://doi.org/10.1177/002224299606000108

Crockett, M.J., Özdemir, Y. & Fehr, E. (2014) The value of vengeance and the demand for deterrence. *Journal of Experimental Psychology: General*, 143(6), 2279–2286. Available from: https://doi.org/10.1037/xge0000018

Cronbach, L.J. & Furby, L. (1970) How we should measure "change": or should we? *Psychological Bulletin*, 74(1), 68–80. Available from: https://doi.org/10.1037/h0029382

Day, D.V., Gordon, S. & Fink, C. (2012) The sporting life: exploring organizations through the lens of sport. *Academy of Management Annals*, 6(1), 397–433. Available from: https://doi.org/10.5465/19416520.2012.678697

Dölling, D., Entorf, H., Hermann, D. & Rupp, T. (2009) Is deterrence effective? Results of a meta-analysis of punishment. *European Journal on Criminal Policy and Research*, 15(1-2), 201–224. Available from: https://doi.org/10.1007/s10610-008-9097-0

Edwards, J.R. (2001) Ten difference score myths. *Organizational Research Methods*, 4(3), 265–287. Available from: https://doi.org/10.1177/109442810143005

Edwards, J.R. & Cable, D.M. (2009) The value of value congruence. *Journal of Applied Psychology*, 94(3), 654–677. Available from: https://doi.org/10.1037/a0014891

Edwards, J.R. & Parry, M.E. (1993) On the use of polynomial regression equations as an alternative to difference scores in organizational research. *Academy of Management Journal*, 36(6), 1577–1613. Available from: https://doi.org/10.2307/256822

Fehr, E. & Fischbacher, U. (2004) Third-party punishment and social norms. *Evolution and Human Behavior*, 25(2), 63–87. Available from: https://doi.org/10.1016/S1090-5138(04)00005-4

Fonti, F., Ross, J.-M. & Aversa, P. (2023) Using sports data to advance management research: a review and a guide for future studies. *Journal of Management*, 49(1), 325–362. Available from: https://doi.org/10.1177/01492063221117525

Fragale, A.R., Rosen, B., Xu, C. & Merideth, I. (2009) The higher they are, the harder they fall: the effects of wrongdoer status on observer punishment recommendations and intentionality attributions. *Organizational Behavior and Human Decision Processes*, 108(1), 53–65. Available from: https://doi.org/10.1016/j.obhdp.2008.05.002

Goetz, N. & Wald, A. (2021) Employee performance in temporary organizations: the effects of person-environment fit and temporariness on task performance and innovative performance. *European Management Review*, 18(2), 25–41. Available from: https://doi.org/10.1111/emre.12438

Greguras, G.J. & Diefendorff, J.M. (2009) Different fits satisfy different needs: linking person-environment fit to employee commitment and performance using self-determination theory. *Journal of Applied Psychology*, 94(2), 465–477. Available from: https://doi.org/10.1037/a0014068

Grijalva, E., Maynes, T.D., Badura, K.L. & Whiting, S.W. (2020) Examining the "I" in team: a longitudinal investigation of the influence of team narcissism composition on team outcomes in the NBA. *Academy of Management Journal*, 63(1), 7–33. Available from: https://doi.org/10.5465/amj.2017.0218

Guler, I. (2007) Throwing good money after bad? Political and institutional influences on sequential decision making in the venture capital industry. *Administrative Science Quarterly*, 52(2), 248–285. Available from: https://doi.org/10.2189/asqu.52.2.248

Jaques, E. (1961) *Equitable payment: a general theory of work, differential payment, and individual progress*. Oxford, England: Wiley.

Johnson, D. (2018) *Premier league rule changes: yellow-card bans, managerial misconduct*. ESPN. Retrieved from https://www.espn.com/soccer/english-premier-league/story/3591150/premier-league-rule-changes-yellow-card-bans-and-managerial-misconduct

Jordan, J.J., Hoffman, M., Bloom, P. & Rand, D.G. (2016) Third-party punishment as a costly signal of trustworthiness. *Nature*, 530(7591), 473–476. Available from: https://doi.org/10.1038/nature16981

Kazdin, A.E. (2012) *Behavior modification in applied settings*. Long Grove, Illinois: Waveland Press.

Kim, T.-Y., Lin, X. & Kim, S.-P. (2019) Person–organization fit and friendship from coworkers: effects on feeling self-verified and employee outcomes. *Group & Organization Management*, 44(4), 777–806. Available from: https://doi.org/10.1177/1059601117726632

Leibbrandt, A. & López-Pérez, R. (2012) An exploration of third and second party punishment in ten simple games. *Journal of Economic*

Behavior & Organization, 84(3), 753–766. Available from: https://doi.org/10.1016/j.jebo.2012.09.018

McGrath, J.E., Martin, J.M. & Kulka, R.A. (1982) *Judgment calls in research*, Vol. 2. Newbury Park, CA: SAGE Publications, Incorporated.

Neale, N.R., Butterfield, K.D., Goodstein, J. & Tripp, T.M. (2020) Managers' restorative versus punitive responses to employee wrongdoing: a qualitative investigation. *Journal of Business Ethics*, 161(3), 603–625. Available from: https://doi.org/10.1007/s10551-018-3935-x

Niehoff, B.P., Paul, R.J. & Bunch, J.F. (1998) The social effects of punishment events: the influence of violator past performance record and severity of the punishment on observers' justice perceptions and attitudes. *Journal of Organizational Behavior*, 19(6), 589–602. Available from: https://doi.org/10.1002/(SICI)1099-1379(199811019:6<589::AID-JOB862>3.0.CO;2-N

Oliver, P. (1980) Rewards and punishments as selective incentives for collective action: theoretical investigations. *American Journal of Sociology*, 85(6), 1356–1375. Available from: https://doi.org/10.1086/227168

Podsakoff, P.M., Todor, W.M. & Skov, R. (1982) Effects of leader contingent and noncontingent reward and punishment behaviors on subordinate performance and satisfaction. *Academy of Management Journal*, 25(4), 810–821. Available from: https://doi.org/10.2307/256100

Quade, M.J., McLarty, B.D. & Bonner, J.M. (2020) The influence of supervisor bottom-line mentality and employee bottom-line mentality on leader-member exchange and subsequent employee performance. *Human Relations*, 73(8), 1157–1181. Available from: https://doi.org/10.1177/0018726719858394

Rhee, J., Dedahanov, A. & Lee, D. (2014) Relationships among power distance, collectivism, punishment, and acquiescent, defensive, or prosocial silence. *Social Behavior and Personality*, 42(5), 705–720. Available from: https://doi.org/10.2224/sbp.2014.42.5.705

Rozin, P. & Royzman, E.B. (2001) Negativity bias, negativity dominance, and contagion. *Personality and Social Psychology Review*, 5(4), 296–320. Available from: https://doi.org/10.1207/S15327957PSPR0504_2

Schneider, B. (2001) Fits about fit. *Applied Psychology*, 50(1), 141–152. Available from: https://doi.org/10.1111/1464-0597.00051

Shadish, W.R., Cook, T.D. & Campbell, D.T. (2002) *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Houghton Mifflin.

Shah, N., Irani, Z. & Sharif, A.M. (2017) Big data in an HR context: exploring organizational change readiness, employee attitudes and behaviors. *Journal of Business Research*, 70, 366–378. Available from: https://doi.org/10.1016/j.jbusres.2016.08.010

Shaw, J.D., Bansal, P.(T. & Gruber, M. (2017) New ways of seeing: elaboration on a theme [editorial]. *Academy of Management Journal*, 60(2), 397–401. Available from: https://doi.org/10.5465/amj.2017.4002

Skaggs, B.C., Manz, C.C., Lyle, M.C. & Pearce, C.L. (2018) On the folly of punishing a while hoping for a: exploring punishment in organizations. *Journal of Organizational Behavior*, 39(6), 812–815. Available from: https://doi.org/10.1002/job.2287

Skinner, B.F. (1969) *Walden two*. London: Collier-Macmillan, Ltd.

Spitz, J., Put, K., Wagemans, J., Williams, A.M. & Helsen, W.F. (2017) Does slow motion impact on the perception of foul play in football? *European Journal of Sport Science*, 17(6), 748–756. Available from: https://doi.org/10.1080/17461391.2017.1304580

SportyTell. (2020) *Top-10 best soccer leagues in the world 2020*. Retrieved from https://sportytell.com/soccer/top-10-bst-football-leagues-world

Thaler, R.H. (1999) Mental accounting matters. *Journal of Behavioral Decision Making*, 12(3), 183–206. Available from: https://doi.org/10.1002/(SICI)1099-0771(199909)12:3<183::AID-BDM318>3.0.CO;2-F

Thaler, R.H., Tversky, A., Kahneman, D. & Schwartz, A. (1997) The effect of myopia and loss aversion on risk taking: an experimental test. *The Quarterly Journal of Economics*, 112(2), 647–661. Available from: https://doi.org/10.1162/003355397555226

Tilcsik, A. (2014) Imprint–environment fit and performance: how organizational munificence at the time of hire affects subsequent job performance. *Administrative Science Quarterly*, 59(4), 639–668. Available from: https://doi.org/10.1177/0001839214549042

Tortoriello, M., Reagans, R. & McEvily, B. (2012) Bridging the knowledge gap: the influence of strong ties, network cohesion, and network range on the transfer of knowledge between organizational units. *Organization Science*, 23(4), 1024–1039. Available from: https://doi.org/10.1287/orsc.1110.0688

Trevino, L.K. (1992) The social effects of punishment in organizations: a justice perspective. *Academy of Management Review*, 17(4), 647–676. Available from: https://doi.org/10.2307/258803

Tversky, A. & Kahneman, D. (1973) Availability: a heuristic for judging frequency and probability. *Cognitive Psychology*, 5(2), 207–232. Available from: https://doi.org/10.1016/0010-0285(73)90033-9

Tyler, T.R. & Blader, S.L. (2005) Can businesses effectively regulate employee conduct? The antecedents of rule following in work settings. *Academy of Management Journal*, 48(6), 1143–1158. Available from: https://doi.org/10.5465/amj.2005.19573114

Ule, A., Schram, A., Riedl, A. & Cason, T.N. (2009) Indirect punishment and generosity toward strangers. *Science*, 326(5960), 1701–1704. Available from: https://doi.org/10.1126/science.1178883

Varma, A., Mathew, J., Wang, C.H., Budhwar, P. & Katou, A. (2021) Indian nurses in the United Kingdom: a two-phase study of the expatriate-host country national relationship. *European Management Review*, 18(3), 329–341. Available from: https://doi.org/10.1111/emre.12436

Velloso, J.G.V. (2013) Beyond criminocentric dogmatism: mapping institutional forms of punishment in contemporary societies. *Punishment & Society*, 15(2), 166–186. Available from: https://doi.org/10.1177/1462474513477979

Waichman, I. & Stenzel, L. (2019) When punishment strikes late: the effect of a delay in punishment and punishment feedback on cooperation and efficiency. *Journal of Neuroscience, Psychology, and Economics*, 12(1), 1–17. Available from: https://doi.org/10.1037/npe0000099

Wiltermuth, S.S. & Flynn, F.J. (2013) Power, moral clarity, and punishment in the workplace. *Academy of Management Journal*, 56(4), 1002–1023. Available from: https://doi.org/10.5465/amj.2010.0960

Wolfe, R.A., Weick, K.E., Usher, J.M., Terborg, J.R., Poppo, L., Murrell, A.J., et al. (2005) Sport and organizational studies exploring synergy. *Journal of Management Inquiry*, 14, 182–210.

Xu, H. & Hamari, J. (2023) How to improve creativity: a study of gamification, money, and punishment. *Behaviour & Information Technology*, 42(15), 2545–2559. Available from: https://doi.org/10.1080/0144929X.2022.2133634

Zoghbi-Manrique-de-Lara, P. (2006) Fear in organizations: does intimidation by formal punishment mediate the relationship between interactional justice and workplace internet deviance? *Journal of Managerial Psychology*, 21(6), 580–592. Available from: https://doi.org/10.1108/02683940610684418

AUTHOR BIOGRAPHIES

Dr. David Gligor has earned his PhD at the University of Tennessee. He is the Alico Chair in Supply Chain Management, Eminent Scholar, and a Professor at Florida Gulf Coast University. Prof. Gligor has published over 90 peer-reviewed academic articles, and his work has appeared in journals, such as the Journal

of Operations Management, Strategic Management Journal, Journal of the Academy of Marketing Science, Journal of International Business Studies, Decision Sciences, Journal of Business Logistics, and Journal of Supply Chain Management, to name a few. He is a senior associate editor of the International Journal of Physical Distribution & Logistics Management.

Ismail Gölgeci, D.Sc. (Econ. & Bus. Adm.) is an Associate Professor at Aarhus University, Herning, Denmark, and Affiliate, InnoLab, University of Vaasa, Finland. Dr. Gölgeci's research interests range from global and sustainable supply chain management to business-to-business marketing. His research has been published in over 70 peer-reviewed academic articles and appeared in journals such as the Journal of International Business Studies, Human Relations, International Journal of Operations & Production Management, Industrial Marketing Management, Supply Chain Management: An International Journal, Journal of Business Research, International Business Review, and amongst others. He is the associate editor of the Journal of Business Research and International Marketing Review and senior associate editor of the International Journal of Physical Distribution & Logistics Management.

Vipul Garg is an Assistant Professor of Supply Chain Management at the Texas A&M University-San Antonio in the College of Business. His research interests include service operations, sustainable practices, and decision-making using emerging technologies. He is also part of grants received from the National Science Foundation (NSF) and NASA (National Aeronautics and Space Administration) for research on air mobility and distracted driving. His research has appeared in journals that include Transportation Research Part D, Journal of Enterprise Information Management, Journal of Business Research, and Journal of Business & Industrial Marketing.

Yavuz Idug is an Assistant Professor of SCM at California State University Long Beach. His research interests include the sharing economy, last-mile delivery, blockchain in SCM, SC Sustainability, and contracting. His research has appeared in Supply Chain Management: An International Journal, International Journal of Operations and Production Management, Transport Policy, Journal of Business and Industrial Marketing, and other journals.

Uchenna Ekezie is a seasoned supply chain professional with over a dozen years of senior managerial industry experience. Uche completed his Doctor of Philosophy in Business Administration with the Ryan College of Business, University of North Texas, in May 2023. He majored in supply chain management. He has publications on defensive pessimism and the practical relevance of SCM scholarship. His three-part dissertation, which examines the impact of AI adoption on supply chain employees – boundary-spanning employees in particular – is at various stages of review in journals. Uche has also made several conference presentations.

Dr. Javad Feiz Abadi is an assistant professor of supply chain management at the Asper School of Business. Before joining the Asper School, he had worked as a faculty member at MIT Global SCALE Network. His scholarly work has appeared in journals such as Strategic Management Journal, Journal of Business Logistics, and International Journal of Production Economics among others. Dr. Feiz Adadi's primary research focuses on strategic decisions in the supply chains and, more specifically, interdependencies among the elements in the supply chain design and strategy.

Ferhat Caliskan is a PhD student in the Logistics & Operations Management Department within the G. Brint Ryan College of Business at the University of North Texas. He received his BS in system engineering with a minor in industrial engineering at the Turkish Military Academy, his first MA in National Security Affairs at the Naval Postgraduate School in Monterey, California, and his second MA in International Security Strategy Management and Leadership at Turkish Army War College. His research interests include supply chain transparency, buyer–supplier relationships, microenterprises, and blockchain in SCM.

How to cite this article: Gligor, D., Gölgeci, I., Garg, V., Idug, Y., Ekezie, U., Feiz Abadi, J. et al. (2024) Exploring the impact of punishments on employee effort and performance in the workplace: Insights from England's premier league. *European Management Review*, 1–16. https://doi.org/10.1111/emre.12643