

The Roles of Perceived Safety Climate and Innovativeness in the Performance of Sport and Recreation Organizations

Minjung Kim,¹ Han Soo Kim,² Brent D. Oja,³ Jasmine Hill,¹ Claire Zvosec,⁴ and Paul Yuseung Doh¹

¹Texas A&M University, College Station, TX, USA; ²University of Central Arkansas, Conway, AR, USA; ³West Virginia University, Morgantown, WV, USA; ⁴Louisiana State University, Baton Rouge, LA, USA

The recent COVID-19 pandemic created an unpredictable environment regarding the safety operations of sport and recreation organizations. This study was designed to examine how safety climate and organizational innovativeness could promote preferred organizational behavior outcomes in college campus sport and recreation centers. A total of 227 sport and recreation employees were recruited through the National Intramural and Recreational Sports Association. With the collected data, we employed structural equation modeling to assess the research hypotheses. The results indicated that safety climate and innovativeness positively influenced job engagement, therefore leading to enhanced safety compliance and employee innovativeness, which ultimately resulted in higher levels of organizational performance. Peer safety compliance was also found to be a moderator in the relationship between job engagement and safety compliance. In this study, the authors offer new insights into sport organizational performance by emphasizing safety and innovation.

Keywords: performance management, innovation, sport and recreation employees, employee engagement, organizational performance

The ways by which sport and recreation activities are operated have changed significantly, especially amid unpredictable environments such as the COVID-19 pandemic (Parnell et al., 2022). Consequently, sport and recreation organizations have been encouraged to create contemporary safety guidelines. Employees in these organizations have also been required to exert additional efforts with an innovative mindset to minimize risks and develop novel solutions to problems, thereby improving organizational performance. In this surreal era, the skills and competencies of employees of sport and recreation organizations play a crucial role in ensuring organizational survival and superior performance by continuously delivering high-quality services for patrons' well-being. The transformation of employee skills to enhanced organizational performance can be explained through the performance management framework (O'Boyle, 2016; Radnor & Barnes, 2007). Broadly, organizations that cultivate an environment conducive to employee growth and skill development are more likely to see these

proficiencies translate into enhanced organizational performance (Kasale et al., 2018). Two possible avenues for organizations to increase their performance are through providing a safe working environment (Kasale et al., 2018) and promoting innovation among employees (O'Boyle, 2016).

In implementing organizational processes for performance management, one critical facet is organizational climate (Kasale et al., 2018). Safety climate, as a specific aspect of organizational climate, is a relevant construct within performance management as it has been consistently linked to employee engagement and organizational performance (Huang et al., 2016). Perceived safety climate pertains to employees' perceptions of policies, procedures, and practices regarding safety issues in organizational settings (Neal & Griffin, 2002). The literature surrounding perceived safety climate in sport management has been mainly designed and conducted for athletes (Nallavan, 2020), sporting events (Ludvigsen, 2020), fields (Sepehri & Shekhalizadeh, 2020), or safety organizational policies and procedures (e.g., Spengler et al., 2002). Yet, it is unknown how safety climate impacts contemporary sport and recreation employees.

Another key component of performance management and the growth of contemporary sport and recreation organizations is innovativeness (Delshab et al., 2022; O'Boyle, 2016; Radnor & Barnes, 2007), which can be defined as the ability to appropriately utilize problem-solving mechanisms to ensure organizational survival (Hoerber et al., 2015). Predominantly, employee innovation behavior has been considered a critical feature for service quality and customer satisfaction. Within the fields of sport and recreation management, scholars have focused mainly on innovativeness in association with sport and leisure clubs (Hoerber & Hoerber, 2012), nonprofit sport organizations (Wemmer et al., 2016), and sport consumers' perspectives (Yoshida et al., 2013). More recent studies in the domain of sport organizational behavior have centered on how sport employees view organizational innovativeness and their own innovative conduct in the workplace (Barnhill & Smith, 2019).

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H.S. Kim  <https://orcid.org/0000-0002-9371-2191>

Oja  <https://orcid.org/0000-0002-2848-0486>

Hill  <https://orcid.org/0000-0001-9520-1726>

Zvosec  <https://orcid.org/0000-0003-4019-886X>

Doh  <https://orcid.org/0000-0002-1958-4697>

M. Kim (m.kim@tamu.edu) is corresponding author,  <https://orcid.org/0000-0002-5086-3010>

However, the relationship between employee-led innovation in sport and recreation organizations and organizational performance remains unclear. This gap in the literature is especially pertinent when considering the need to confront changing realities concerning employee and consumer safety in sport and recreation organizations in a post-COVID-19 world.

This research is designed to expand our knowledge of how employees' proficiencies impact overall organizational performance. This is accomplished through the performance management theoretical framework, which has seen significant utilization in sport (e.g., Chelladurai, 1987; Kasale et al., 2018; O'Boyle, 2016; O'Boyle & Hassan, 2014; Winand et al., 2014). This study uniquely contributes to performance management in sport by applying the framework to collegiate sport and recreation organizations, incorporating engagement theory to explain its underlying mechanisms, and emphasizing the micro or individual level of analysis, which is a notable weakness in the current sport performance management literature (Kasale et al., 2018). To do so, we examine the importance of employees' perceptions of safety climate and their ability to produce innovations and the resulting associations with organizational performance. In the U.S. collegiate systems, sport and recreation centers are multifunctional facilities constructed to promote physical fitness and well-being among students, faculty, staff members, and occasionally the local community (Dalgarn, 2001). These centers provide diverse services and activities for varying interests and fitness levels, including general fitness classes, personal/group training, intramural leagues, and outdoor adventure programs. Within campus sport and recreation centers, employees are assigned distinct roles and responsibilities, with positions such as directors, managers, and student employees (Kampf & Teske, 2013).

After the COVID-19 pandemic, employees in sport and recreation systems face unprecedented work challenges and uncertainty, which necessitates altered levels of employee engagement, resilience, and innovation. It is crucial to consider employees' and peers' safety compliance as these behaviors directly relate to core safety tasks and are closely associated with organizational performance (Griffin & Neal, 2000). Given the importance of the welfare of employees and patrons in collegiate sport and recreation centers, the purpose of this study is to empirically examine the relationships among safety climate, organizational innovativeness, job engagement, safety compliance, peer safety compliance, employee innovation, and organizational performance within the framework of performance management.

Theoretical Framework and Literature Review

Performance Management

Performance management is an overarching framework that details the processes that organizations employ to improve their overall functionality (Chelladurai, 1987; Kasale et al., 2018; O'Boyle, 2016; O'Boyle & Hassan, 2014; Winand et al., 2014). It describes the activities, processes, and resources that organizations can identify and then actively utilize to enhance the performance of the organization (O'Boyle, 2016). Although formulating a singular definition of performance management has proven difficult, the framework can be described as "a holistic approach to performance that spans numerous performance dimensions that may be fundamental to the effective delivery of an organisation's [sic] mission" (O'Boyle & Hassan, 2014, p. 301). Sport performance management is a relevant framework in sport as it has been applied within

nonprofit sport organizations (e.g., Winand et al., 2014). For example, Kasale et al. (2018) developed a sport-specific performance management model that detailed the forces and resources that dictate how a sport organization can manage their operations' performance at macro, meso, and micro levels.

Although the scope of performance management is wide, this study focuses on Kasale et al.'s (2018) microlevel analysis, which describes how individual employees contribute to organizational performance by examining the safety compliance, engagement, and innovation capabilities of sport and recreation employees. To explain the underlying mechanisms of performance management, we turn to two theories: organizational climate (Forehand & Gilmer, 1964) and engagement theory (Kahn, 1990). First, when discussing how internal environments can impact the implementation of performance management, Kasale et al. (2018) emphasized the significance of organizational climate for all members' performance. Organizational climate theory encompasses shared values, norms, and collective behaviors within organizations (Borucki & Burke, 1999; James & Jones, 1974). In the context of this research, the *safety* climate of an organization is particularly noteworthy as it provides employees and patrons the confidence that the organization is well prepared to keep them safe, which strengthens the overall performance of the organization. Second, engagement theory has yet to be utilized within sport performance management studies. This is surprising given its emphasis on achieving improved performance through engaged employees (Rich et al., 2010). We seek to provide a novel contribution to performance management framework by incorporating engagement theory.

Safety Climate

Individuals' perceptions of the work environment have been defined as a psychological climate (James & James, 1989). Psychological climate transforms into the multidimensional construct of organizational climate, which is when an individual's perceptions are shared (James & James, 1989). Safety climate derives from organizational climate and emphasizes the shared perception of the value of safety (i.e., policies, procedures, practices) in the workplace (Griffin & Curcuruto, 2016; Griffin & Neal, 2000). Employees' perceptions regarding their organization's climate reflect their values of safety. For example, if an employee feels that the organization has open communication, this will lead the employee to perceive that communication regarding safety is valued. However, upper level management has discretion regarding certain elements of information, which results in various perceptions of safety climate (Zohar, 2000). Safety climate predicts positive behaviors at the individual (i.e., safety behaviors, well-being) and organizational levels (i.e., productivity, innovation; Griffin & Curcuruto, 2016). During the COVID-19 pandemic, professionals were forced to shift their focus to the importance of safety climate. As the sport management field possesses similar characteristics (e.g., high volume of patrons, close physical contact, exposure to travelers, large staff) to sectors (e.g., hospitality) that are vulnerable to safety concerns, additional research is needed regarding safety.

Safety Compliance

Safety compliance allows organizations to minimize the risks that they face on a daily basis. Griffin and Neal (2000) defined safety compliance as behaviors that allow individuals to engage in core safety tasks, such as complying with the organization's safety rules and regulations and following safety procedures. Scholars have

demonstrated a relationship between safety compliance and safety climate (Petitta et al., 2017), safety motivation, and supervisor safety support (Hu et al., 2016). Petitta et al. (2017) found that safety climate was a predictor of safety compliance in the workplace. In addition, Neal and Griffin (2002) found that safety motivation also had a positive impact on safety compliance.

Much of the research in sport management concerning safety compliance relates to sport safety procedures and protocols on the field. Baugh et al. (2015) explored sport employees' compliance with their concussion management plan. Although employees were aware of their school's concussion management plan, there were issues within specific areas of the plan that caused problems with noncompliance. According to organizational climate theory (Forehand & Gilmer, 1964), when employees are favorable toward the organizational climate, they are more inclined to align themselves with the shared values and norms (Borucki & Burke, 1999). In sport and recreation organizations, placing a strong emphasis on safety as a top priority by management helps employees perceive their work environment as safe. In turn, this perception encourages employees to respond by dedicating the necessary effort to carry out safety-related activities (Brondino et al., 2012).

Hypothesis 1: Safety climate is positively associated with safety compliance.

Job Engagement

Employee engagement is an emerging construct in sport and recreation given its propensity to engender positive outcomes for organizations and employees (Svensson et al., 2021). An informative definition of employee engagement is "a positive, active, work-related psychological state operationalized by the maintenance, intensity, and direction of cognitive, emotional, and behavioral energy" (Shuck et al., 2017, p. 2). For the purposes of this study, we are especially concerned with sport/recreation employees' job engagement, which is "a multidimensional motivational concept reflecting the simultaneous investment of an individual's physical, cognitive, and emotional energy in active, full work performance" (Rich et al., 2010, p. 619). Importantly, employee engagement is not a behavior or a physical act but, rather, reflects a psychological state of engagement. Engaged employees are invested in their work because it represents a meaningful endeavor that produces opportunities for employees to grow (Shuck et al., 2017). Examining the engagement of sport and recreation employees expands the reach of organizational behavior within the current context as engagement is more descriptive of psychological states than commonly used variables. These qualities make employee engagement a useful tool to examine workplace dynamics in sport and recreation settings.

Job engagement's utility in sport settings has been demonstrated with past scholarship. Svensson et al. (2021) found that employee job engagement was a critical factor in developing psychological well-being, innovative work behaviors, and organizational performance within sport for development organizations. Svensson et al. also examined motivational antecedents of employee engagement. Paek et al. (2022) showed how job engagement explained the relationship between sport employee emotional intelligence and their creative behaviors. Job engagement has also been found to support sport employee flourishing (Schuetz et al., 2021) and sport volunteers' satisfaction (Otto et al., 2021). Finally, Wu et al. (2022) examined how job engagement supports sport employees' job performance. These studies represent an important advancement to the literature pertaining to employee engagement in sport, but one area that has not been sufficiently addressed is

engagement's role within the performance management framework. As such, this study builds upon Svensson et al.'s (2021) and Wu et al.'s (2022) studies that demonstrated that employee engagement supports organizational performance.

Regarding the relationship between safety climate and job engagement, DeJoy et al. (2010) found that as employees believed that their organization cared about their well-being, they became more committed. The commitment that the employees experienced then energized and motivated them to excel in their job, which resulted in higher levels of job engagement. Furthermore, engagement theory highlights that employees' perception of their environment's safety (i.e., physical, emotional, and psychological) is one of the factors that establish their level of engagement (Kahn, 1990). As a result, it leads us to believe that employees who perceive their safety climate to be positive will be more engaged in their jobs. In addition, when employees are engaged in their work, they have a larger resource repertoire and are better equipped to take advantage of opportunities to participate and assist their coworkers in safety behaviors (Yuan et al., 2015). Aligned with engagement theory (Kahn, 1990), job engagement also creates a positive state for the employee, which makes them more likely to take part in prosocial behaviors at work (e.g., safety behaviors; Svensson et al., 2021). As a result of this positive and fulfilling impression, employees are more likely to be compliant with safety behaviors at workplaces (Yuan et al., 2015).

Hypothesis 2: Safety climate is positively related to job engagement.

Hypothesis 3: Job engagement is positively associated with safety compliance.

Peer Safety Compliance

Workgroup safety compliance is regarded as the perception that employees are complying with official safety guidelines as advised by their manager or organization (Simard & Marchand, 1997). Simard and Marchand (1997) explored the influences of six factors (i.e., top management safety commitment, firm socioeconomic context, work processes and risks, workgroup and supervision characteristics) on peer safety compliance. This study found that when there is cooperation between the workgroup and its supervisor, the employees are more likely to adhere to the safety guidelines set by their organization (Simard & Marchand, 1997). As we explore the relationship between job engagement and safety compliance, it is important to examine in what ways peer safety compliance influences the relationship in sport and recreation organizations.

Previous studies have largely focused on the leader's perspective regarding safety and largely discounted the role of coworkers (Brondino et al., 2012). However, coworkers have the ability to demonstrate and encourage behaviors to others, which has the opportunity to alter the discipline of others in the workplace. Thus, following engagement theory (Kahn, 1990), engaged employees are motivated to help their organization, and increased interactions with peers who are highly compliant will be associated with engaged employees being motivated to follow safety guidelines. In contrast, those with peers who refrain from complying with safety guidelines will be less inclined to comply with those guidelines. Thus, we expect the relationship between job engagement and safety compliance to be moderated by peer safety compliance.

Hypothesis 4: Peer safety compliance positively moderates the relationship between job engagement and safety compliance

such that the relationship is stronger as peer safety compliance increases.

Innovation

Similar to employee engagement, innovation and creativity in sport and recreation organizations have become important topics because of their potential to increase organizational performance (e.g., [Delshab et al., 2022](#); [Winand et al., 2010](#)). However, it is important to distinguish the differences between innovation and creativity. Although both are concerned with improving the services that are offered within sport and recreation organizations, they represent separate elements of this developmental process. The process begins with creativity, which is the initial thoughts or ideas of individuals. When these ideas move to an action or implementation stage, they are referred to as innovations ([Amabile, 1988](#)). Restated, innovations represent the tangible outcomes of the initial creative ideas of individuals. A more descriptive form of innovation is innovativeness, which is the practice of “creating new processes that involve an advancement in the way things are currently conducted” ([Ratten, 2017](#), p. 6). Importantly, this definition presents a wide scope of innovativeness in that the innovations can be large or small scale or from an individual or organizational perspective.

Innovation within sport and recreation organizations has seen increased scholarly attention. For example, scholars have explored the impact of knowledge management on innovation in nonprofit sport organizations ([Delshab et al., 2022](#)), innovation in community sport organizations ([Hoerber & Hoerber, 2012](#); [Hoerber et al., 2015](#)), the value of open innovation in nonprofit sport organizations ([Wemmer et al., 2016](#)), and how leadership and organizational structures impact innovation within sport and recreation organizations ([Hoerber & Hoerber, 2012](#); [Paek et al., 2022](#)). Although these studies represent valuable contributions to our understanding of innovation in sport and recreation organizations, there is still a lack of understanding of how innovation is cultivated within sport and recreation organizations and the factors that help innovation contribute to organizational performance. [Delshab et al.’s \(2022\)](#) study informed us that innovativeness among employees leads to organizational performance in nonprofit sport organizations, but [Paek et al.’s \(2022\)](#) study cast doubt on the notion that leadership within sport and recreation organizations supports the development of employee-led innovations. However, [Paek et al.](#) did find that employee engagement positively influenced their creative behaviors. Thus, this study builds on past scholarship by circumventing leadership’s influence and, instead, focusing on organizational support for innovation, the safety climate within the organization, and employee engagement to examine its role in connecting innovation and organizational performance based on engagement’s ability to spur creative behaviors ([Paek et al., 2022](#); [Svensson et al., 2021](#)).

We considered whether the innovativeness of a sport and recreation organization influences its employees’ ability to perform innovations through its employees’ job engagement. Engagement theory ([Kahn, 1990](#)) has informed us that an organization that values and purports innovation will positively contribute to employees’ engagement levels. This occurs because those who are psychologically present and directing consistent positive energy toward their work-related experiences are likely to be empowered to do so by working in an environment that values growth and development ([Shuck et al., 2017](#)).

Such an environment could be one that engenders innovation opportunities as these organizations are more likely to cultivate a

culture of experimentation and learning ([Wemmer et al., 2016](#)). Thus, those organizations that value and enable innovation and learning are likely to see greater job engagement because employees are encouraged to be active learners and innovators, which inspires employees to be active and involved ([Kahn, 1990](#)). It is also put forth that employee engagement will positively influence their capacity to perform innovations. This is based on engagement theory whereby employee engagement stimulates innovation as those employees who are engaged with their jobs are likely to understand the nature of organizational problems and, therefore, are more prepared to offer creative solutions ([Saks, 2006](#)). Furthermore, the relationship between employee engagement and innovative behaviors has been found in sport and recreation settings ([Paek et al., 2022](#); [Svensson et al., 2021](#)).

Hypothesis 5: Organizational innovativeness is positively related to job engagement.

Hypothesis 6: Job engagement is positively associated with innovative work behaviors.

Organizational Performance

Organizational performance is one of the most important constructs as it is a key element to organizational survival. It allows scholars and practitioners to comprehend the outcomes of specific actions and how they perform over time ([Richard et al., 2009](#)). The organizational performance literature has conflicting views on the conceptualization of and approaches to measurements. This is a result of performance holding various definitions depending on how the organization defines success ([Winand et al., 2014](#)). However, it is thought to consist of financial and nonfinancial measures, which provide scholars the ability to probe the use of human, financial, and physical resources acquired to accomplish organizational goals ([Madella et al., 2005](#)). Financial measures are typically utilized to measure a sport and recreation organization’s efficiency, and nonfinancial measures are used to evaluate its effectiveness ([Nowy et al., 2015](#)).

In the current research setting, the performance management framework ([O’Boyle, 2016](#)) helps to explain why employees’ perceived safety compliance can contribute to organizational performance. Essentially, when employees have developed the competencies needed to comply with safety procedures, they are more likely to avoid injuries in the workplace, which assists the organization in being more efficient. In addition, the framework of performance management informs us that employee innovations are likely to improve organizational performance because such advancements to employee skill sets can bring about enhanced services and practices within the organization ([Delshab et al., 2022](#); [O’Boyle, 2016](#); [Radnor & Barnes, 2007](#); [Winand et al., 2010](#)). In other words, as employees develop their own skills through innovations that improve organizational and individual efficiencies, their organization is likely to realize enhanced functionality and performance ([Winand et al., 2010](#)). This relationship has also been demonstrated in nonprofit sport organizations (e.g., [Delshab et al., 2022](#)), and so we put forth that employees’ innovative work behaviors will enhance organizational performance.

Finally, the literature surrounding organizational performance in the sport context has been related to sport governing bodies ([Winand et al., 2010](#)) and nonprofit organizations ([Nowy et al., 2015](#); [Winand et al., 2014](#)). Most of these studies were tasked with exploring ways to effectively evaluate the performance of sport entities. Engagement theory stipulates that those who are more

engaged in their work will provide greater efforts, which contributes to improved performance (Rich et al., 2010). Indeed, scholarship has noted that employees who are engaged in the workplace tend to be more efficient and productive and give more effort (Christian et al., 2011). This results in the employee being proactive to meet the needs of the customer and the organization, which contributes to beneficial outcomes for the organization (Roberts & Davenport, 2002). Based on the framework of performance management and engagement theory and results from past scholarship, we believe that job engagement will enhance organizational performance.

Hypotheses 7, 8, and 9: Safety compliance (H7), job engagement (H8), and employee innovation (H9) are positively associated with organizational performance.

Methods

Measures

Through a comprehensive literature review, the questionnaire was refined to the final version containing seven latent variables (i.e., safety climate, innovativeness, job engagement, employee innovation, safety compliance, organizational performance, peer safety compliance) and demographic information (i.e., gender, age, race, job status, subdepartment). Except for the demographic items, all constructs were measured using existing scales adapted for this study. The perceived safety climate was assessed by Neal and Griffin's (2006) scale, which has demonstrated acceptable reliability and construct validity (Tamakloe et al., 2022). To measure organizational innovativeness, we adapted three items from Lin's (2015) perceived service-related innovation capability. Individual rating of job engagement was measured with a five-item scale adapted from Saks (2006). For safety compliance, we used the three-item safety compliance scale from Neal and Griffin (2006). To measure employee innovation, we adapted Hu et al.'s (2009) employee service innovation behavior scale due to its past performance and relevance with service-based innovation in accordance with sport and recreation organizations' focus on service. Based on previous organizational performance studies (Wemmer et al., 2016), organizational performance was measured using two dimensions: market performance (e.g., member retention) and financial performance (e.g., sales growth). For peer safety compliance, we adapted the items reflecting peers on the safety compliance scale proposed by Neal and Griffin (2006). All the questionnaire items were measured on a 7-point rating scale anchored at 1 (*strongly disagree*) and 7 (*strongly agree*), and the final set of questionnaire items is presented in Table 1.

Regarding common method bias, it is important to acknowledge that our study relied on self-reported data. Therefore, we implemented several procedural and statistical remedies to mitigate its impact. First of all, in designing the questionnaire, we followed Podsakoff et al.'s (2003) recommendations to include page breaks between measurements of the constructs for temporal separation and arrange the items in a random order. These techniques diminish the respondent's motivation to use prior answers for subsequent questions (i.e., consistency motifs), thereby reducing the potential effects of common method variance (CMV). Second, we stated that the anonymity and confidentiality of respondents were guaranteed in the introduction of the survey. Third, we employed a statistical technique to gauge CMV's influence on the study (i.e., controlling for the effects of an unmeasured latent methods factor; Podsakoff et al., 2003).

Data Collection and Sampling

The target population of this study was employees of sport and recreation centers who worked during the COVID-19 pandemic. After securing institutional review board approval, the authors developed an online-based survey (Qualtrics). The data collection was conducted using the member database of the Research and Assessment Committee of the National Intramural and Recreational Sports Association (NIRSA). Since the 1950s, the membership of the NIRSA has undergone rapid growth, encompassing 4,500 dedicated professionals, students, and businesses. The services offered by this collective body extend to over eight million students across 700 academic institutions, conferences, and affiliated associations in the country (NIRSA, 2023). After the lockdowns occurred in March 2020, collegiate sport and recreation centers implemented several strategies (e.g., reduced capacity) to reopen their facilities according to the NIRSA guidelines. When we distributed the survey in February 2021, Phase 3 was in effect, indicating a return to normal operations while still maintaining best practices for sanitation and cleaning. The NIRSA communication team sent out the survey invitation, followed by two survey reminders a week. The survey link remained active for 2 weeks after the final survey participation reminder. Utilizing the NIRSA member database, an email containing an online survey link was distributed to approximately 800 employees who had consented to participate in the survey across 14 institutions in the United States. The email introduced the purpose of the research. The participation rate was 28.3%. Based on the item-to-response ratio of 1:6 (Hair et al., 2018), the minimum required sample size for this study was 162. An initial sample of 227 employees participated in the online survey over a 4-week period. Through data screening, 21 cases were eliminated from the final data set because the respondents failed to pass the attention filter questions. In Table 2, participant characteristics are presented.

Data Analysis

We carried out the data analysis in several steps. First, correlations among factors were calculated, with no values greater than .85 (Kline, 2005). Second, we tested the full measurement model by means of confirmatory factor analysis using Mplus (version 8.1). We evaluated global fit indices, including the comparative fit index (CFI), the Tucker-Lewis index (TLI), and the root mean square error of approximation (RMSEA). Hair et al. (2018) suggested that CFI or TLI values above .93 represent an acceptable model fit when there are 30 or more observed variables (i.e., items) and the sample size is below 250. In terms of RMSEA, a value below .08 with a CFI above .93 is considered an acceptable fit (Hair et al., 2018). To test reliability and convergent validity, we employed composite reliability (CR) and average variance extracted (AVE). We also examined the discriminant validity of each construct by comparing the square root of each AVE value with the correlation between pairs of latent constructs (Fornell & Larcker, 1981). To assess the impact of CMV, we controlled for the effects of an unmeasured latent methods factor. One latent factor, named common latent factor (CLF), was added to the measurement model, and all observed items were loaded onto it to reflect potential method-related variances in the indicators (Podsakoff et al., 2003). The goodness of fit and the standardized regression weights from the two models (i.e., the original model and the extended model with CLF) were compared. Finally, we tested our hypotheses using structural equation modeling (SEM), incorporating all paths.

Table 1 Standardized Regression Weight, CR, and AVE Values

Constructs and items	Estimates with/ without CLF	CR	AVE
Safety climate		0.85	0.66
Management places a strong emphasis on workplace health and safety.	0.74/0.86		
Safety is given a high priority by management.	0.65/0.80		
Management considers safety to be important.	0.68/0.76		
Innovativeness		0.81	0.59
My sport and recreation center develops new activities.	0.68/0.82		
My sport and recreation center offers innovative services.	0.84/0.88		
My sport and recreation center addresses the new expectations of all members.	0.47/0.58		
Job engagement		0.84	0.56
I really “throw” myself into my job.	0.60/0.67		
Sometimes I am so into my job that I lose track of time.	0.76/0.79		
This job is all consuming; I am totally into it.	0.73/0.81		
I am highly engaged in this job.	0.60/0.71		
Employee innovation		0.92	0.65
At work, I seek new service techniques and methods.	0.62/0.71		
At work, I try to propose my own creative ideas and convince others.	0.78/0.82		
At work, I provide a suitable plan for developing new ideas.	0.86/0.91		
At work, I come up with innovative and creative notions.	0.85/0.92		
At work, I try to secure the funding and resources needed to implement innovations.	0.64/0.68		
Overall, I consider myself a creative member of my team.	0.71/0.78		
Safety compliance		0.88	0.71
I use all the necessary safety equipment to do my job.	0.73/0.85		
I use the correct safety procedures for carrying out my job.	0.68/0.82		
I ensure the highest levels of safety when I carry out my job.	0.69/0.80		
Organizational performance		0.85	0.58
My sport and recreation center is in a better position regarding member retention rate than in the past.	0.70/0.78		
My sport and recreation center is in a better position regarding the new member growth rate than in the past.	0.69/0.79		
My sport and recreation center is in a better position regarding earnings growth rate than in the past.	0.72/0.80		
My sport and recreation center is in a better position regarding sales growth rate than in the past.	0.61/0.67		
Peer safety compliance		0.94	0.83
My colleagues use all the necessary safety equipment to do their job.	0.79/0.89		
My colleagues use the correct safety procedures for carrying out their job.	0.90/0.95		
My colleagues ensure the highest levels of safety when they carry out their job.	0.81/0.89		

Note. CLF = common latent factor; CR = construct reliability; AVE = average variance extracted.

Results

Confirmatory Factor Analysis

Confirmatory factor analysis was used to assess the validity and reliability of the measurement models of latent variables. The factor loading for one item of job engagement, *My mind often wanders and I think of other things when doing my job*, was below the cutoff point of 0.5 (Hair et al., 2018). Furthermore, due to problematic issues associated with reverse-coded items (Weems & Onwuegbuzie, 2001) and the reflective nature of the construct (Hair et al., 2018), this reverse-coded item was excluded from further analysis. The results showed that the model fit the data well (S-B $\chi^2/df = 473.078/278$, $p < .001$, TLI = .94, CFI = .95, RMSEA = .05). We applied the well-established thresholds for the criteria, such as 0.6 for CR (Bagozzi & Yi, 1988) and 0.5 for AVE (Fornell & Larcker, 1981). In Table 1, all CR and AVE values exceeded the cutoff points:

CR < 0.6 (Bagozzi & Yi, 1988) and AVE < 0.5 (Fornell & Larcker, 1981). Table 3 shows that the square roots of AVE are higher than the intercorrelation of the constructs. Based on the Fornell and Larcker criterion (1981), the results provided support for discriminant validity. In terms of CMV, we found that the original measurement was similar to that of the extended model with an inclusion of the CLF (S-B $\chi^2/df = 377.35/252$, $p < .001$, TLI = .95, CFI = .96, RMSEA = .049). The differences were not significant (Δ TLI = .07, Δ CFI = .01, Δ RMSEA = .004). Also, the estimated differences between two models were similar (Table 1). Therefore, we concluded that common method bias was not a concern as CMV was not a latent variable affecting our hypothesized model.

Structural Equation Modeling

In Figure 1, the research model consists of nine direct paths, and the findings are visually depicted. The hypothesized SEM exhibited an

acceptable model fit (S-B $\chi^2/df=407.75/221, p < .001, TLI = .93, CFI = .94, RMSEA = .06$). Both paths from safety climate to safety compliance (H1) and job engagement (H2) were positive and statistically significant as hypothesized. The path from job engagement to safety compliance (H3) was also positive and statistically significant. Regarding Hypothesis 4, the interaction between job engagement and peer safety compliance was statistically yet negatively related to safety compliance, not supporting H4. In Figure 2, a graphical plot of the interaction effect shows that job engagement was more strongly related to safety compliance when

peer safety compliance was lower. Although both job engagement and peer safety compliance had positive relationships with safety compliance, the interaction term showed a negative relationship with safety compliance. This finding was categorized as a substituting effect among linear interaction types (Gardner et al., 2017). In addition, the paths from innovativeness to job engagement (H5) and from job engagement to employee innovation (H6) were positive and statistically significant. Three paths from safety compliance (H7), job engagement (H8), and employee innovation (H9) to organizational performance were all positive and statistically significant in the hypothesized directions. Except for the hypothesis regarding the moderating effect (H4), other research hypotheses for direct effects were found to be supported.

Table 2 Demographic Information

Categories	%
Gender	
Female	70.9
Male	27.7
Other	1.4
Age ($M=21.96, SD=3.98$)	
Below 20	14.7
20–24	74.3
25–29	6.8
30 and above	4.4
Race	
African American	8.3
Asian	3.4
White	82.0
Hispanic	3.4
Other	2.9
Job status	
Full time	10.7
Part time	83.5
Other	5.8
Subdepartment	
Aquatics	9.7
Facility	34.5
Fitness	18.9
Intramurals and sports club	11.2
Membership service	6.8
Outdoor	8.3
Other	10.6

Discussion

The recent focus on organizational climate has brought attention to the need for a climate that supports effective management in sport and recreation organizations to ensure the safety and well-being of staff and visitors. Meanwhile, innovativeness is also integral to an organization’s success in the sport and recreation industry. This study aimed to identify the impacts of perceived safety climate and organizational innovativeness on job engagement and investigate whether job engagement is related to safety compliance, employee innovation, and organizational performance among sport and recreation employees. The hypotheses for eight direct paths were supported, whereas Hypothesis 4 for a moderating effect was rejected.

We first proposed that if employees perceived a safe climate, it would positively influence their safety compliance behavior. The results of the current study align with previous literature (e.g., Griffin & Neal, 2000) and provide additional empirical evidence of the proposed relationship in the sport setting, supporting Hypothesis 1. Within service-producing organizations, a perceived positive organizational climate plays a crucial role in facilitating employees’ proactive behaviors for achieving organizational goals. Safety climate, as a specific type of organizational climate, is closely linked to the voluntary actions of sport and recreation employees in adhering to safety procedures and protocols. These safety compliance behaviors manifest in various ways, including placing hand sanitizers, encouraging patrons to disinfect exercise equipment immediately after use, and checking patrons’ temperature at the entrance. Next, we proposed that safety climate is positively related to employee’s job engagement. The results supported Hypothesis 2 and previous studies from occupational psychology (e.g., DeJoy et al., 2010; Huang et al., 2016). It is likely that when employees in sport and recreation organizations

Table 3 Mean, SD, and Correlations

Constructs	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Safety climate	5.79	1.08	(.81)						
2. Innovativeness	5.72	0.99	.18*	(.77)					
3. Job engagement	5.23	1.12	.31*	.33*	(.75)				
4. Employee innovation	4.78	1.18	.37*	.21*	.46*	(.81)			
5. Safety compliance	6.61	0.54	.32*	.41*	.34*	.11	(.84)		
6. Organizational performance	6.16	0.80	.45*	.45*	.39*	.33*	.51*	(.76)	
7. Peer safety compliance	6.04	1.08	.19*	.38*	.23*	.13	.37*	.38*	(.91)

Note. Diagonal elements (values in parentheses) are the square root of the average variance extracted values.

* $p < .01$.

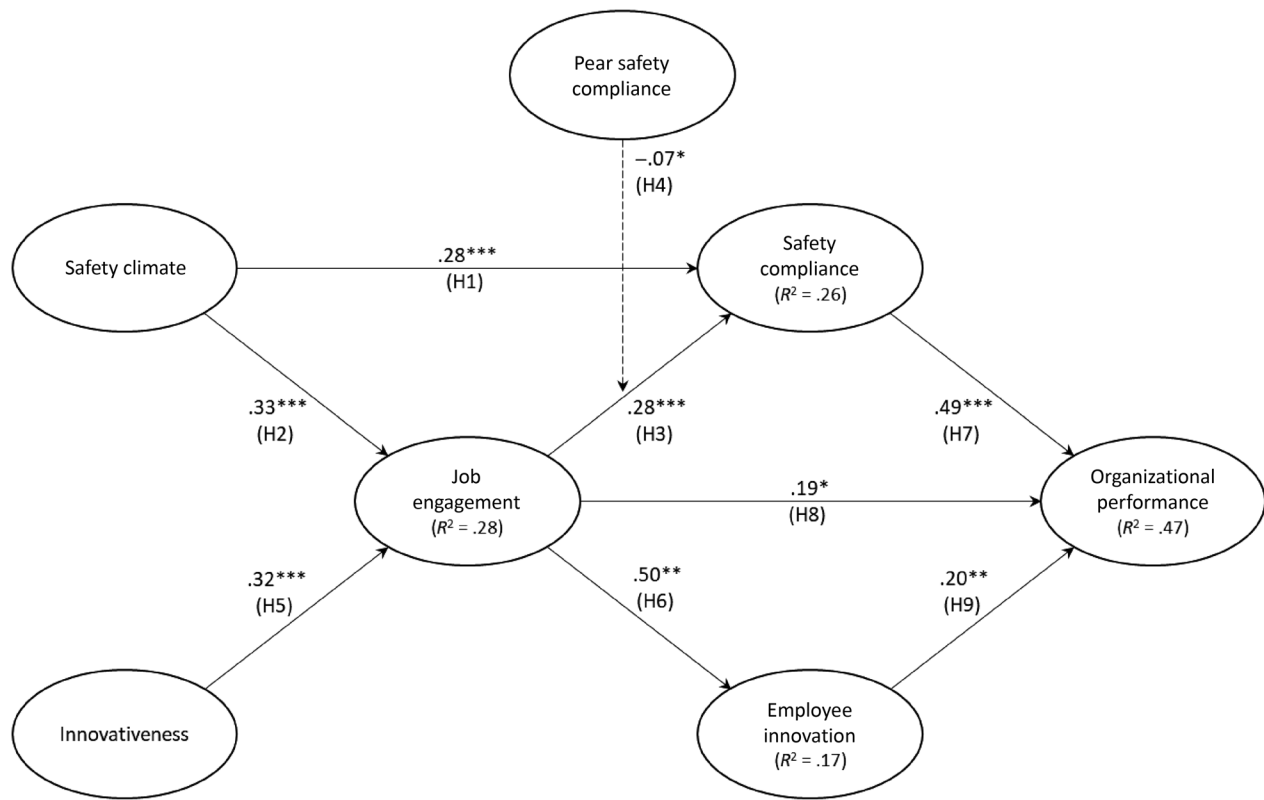


Figure 1 — The structural model with hypotheses testing. * $p < .05$. ** $p < .01$. *** $p < .001$.

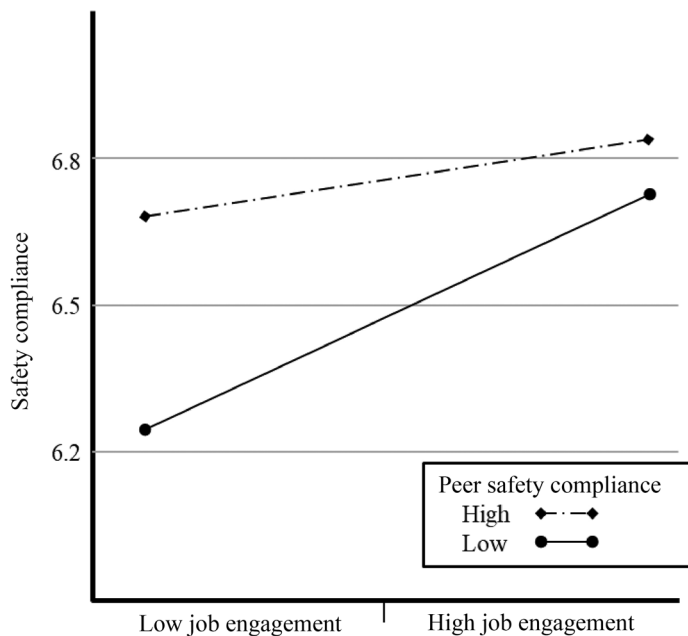


Figure 2 — Moderating effect of peer safety climate.

recognize the managerial efforts to ensure the safety of patrons and other employees, they will be further engaged with their assigned work. Particularly during the COVID-19 pandemic, employees are tasked with broader roles and responsibilities that prioritize the well-being of both patrons and fellow employees. Even within this challenging circumstance, employees can fully concentrate on their

tasks in the campus sport and recreation centers, provided they feel a sense of security.

Furthermore, in support of Hypothesis 3, job engagement was found to have a positive relationship with safety compliance. Job engagement contributes to various organizational outcomes, such as organizational citizenship behaviors (Organ, 1988) and safety compliance (Christian et al., 2011). In this research context, highly engaged employees are preferred because they have a more responsible mindset for their centers and pay attention to the details of the various tasks that they need to do simultaneously. Such dedicated behaviors can lead to ensuring the diligent use of necessary safety equipment for themselves and their respective work units before initiating any task in sport and recreation centers. Accordingly, our results can be interpreted such that sport and recreation employees who are highly engaged with their job in the centers are likely to adhere to safety-related tasks.

Interestingly, the data revealed that the relationship between job engagement and safety compliance is weaker as peer safety compliance increases, not supporting Hypothesis 4. Differing from the direction postulated in Hypothesis 4, peer safety compliance may substitute the organizational engagement effect. The result, however, still underscores an important moderating effect of peer safety compliance in the job engagement–safety compliance relationship. According to interactional psychology (Ender & Magnusson, 1976), people’s behavior depends on the interaction between interindividual features and intraindividual situations. That is, we can expect different outcomes for individuals based on their interactions with their environment. We found that employees with lower levels of job engagement are more likely to be influenced by peer safety behaviors in their safety behaviors in this context. Conversely, employees with higher levels of job

engagement may experience reduced motivation for safety compliance, instead concentrating on their job duties as their peer safety compliance increases. This result can be explained as those employees with higher levels of engagement having alternative interactions with the safety climate than those with lower engagement whereby the former, instead, focus on their specific work tasks and the latter emphasize safety compliance. This result enriches our understanding of the joint influences of individuals and the situations they encounter within the organization when forming the safety climate.

As anticipated in Hypothesis 5, the empirical evidence supported the proposal that innovativeness has positive associations with job engagement. Innovativeness is a critical factor that can support employees' credibility in, preference for, and loyalty toward the organization (Hakanen et al., 2008). We found that when sport and recreation organizations prioritized providing innovative services, employees were more likely to be more engaged in their jobs. In this transaction, highly engaged employees may actively display signs for safety regulations, organize necessary equipment, and share visuals on their social media platforms to attract potential patrons. Then, regarding Hypothesis 6, we found a significant influence of job engagement on employee innovation. Prior to the COVID-19 pandemic, the responsibilities of sport and recreation employees primarily revolved around routine and seasonal tasks. Nevertheless, during the transition from the pandemic to the post-pandemic phase, it has become imperative for sport and recreation employees to continuously develop problem-solving mechanisms and new ideas. With the current findings, it is put forth that sport and recreation employees who are fully engaged are more prepared to contend with organizational problems because they are more likely to display innovative behaviors.

Furthermore, the hypothesized model holds that organizational performance can be enhanced based on safety compliance (Hypothesis 7), job engagement (Hypothesis 8), and employee innovation (Hypothesis 9). Safety compliance foremost concerns the core safety-related activities required of employees to maintain a safety-supportive environment (Griffin & Curcuruto, 2016). Campus sport and recreation centers, as service-oriented organizations, must ensure patrons' positive perceptions of their safety measures, which is key to their organizational performance. By ensuring that sport and recreation employees uphold the utmost safety standards in every task and, thus, provide a safe environment for patrons, organizational performance is likely to be optimized as is the ability to confront the next pandemic.

In addition, many sport and recreation management researchers have examined the impact of job engagement on desired organizational outcomes, notably organizational performance (Svensson et al., 2021). In our research setting, employees' engagement with their assigned responsibilities collectively had a positive relationship with organizational performance. In service-producing organizations, the role of employee engagement becomes another key facet for fostering employees that can improve organizational operations that can support sport and recreation organizations (e.g., by increasing retention rates).

Finally, employee innovation is closely related both to creative decision making within an organization and to customer satisfaction of impressive service quality, which are both factors that can accurately predict organizational success (Kesting & Ulhøi, 2010). Especially among younger employees, there is a tendency to leverage technology to foster innovation and meet challenges at work (Bencsik et al., 2016). Given the average age of participants surveyed in this study (i.e., 22 years old), they are likely to be

motivated to propose more creative managerial strategies for activities such as summer camps and intramural leagues, which are closely related to their centers' revenue. Consequently, employees' innovative behaviors were found to be pivotal for reinforcing perceptions among employees of a successful organization.

Theoretical and Empirical Contributions

This research contributes to the performance management framework in sport (Chelladurai, 1987; Kasale et al., 2018; O'Boyle, 2016; O'Boyle & Hassan, 2014; Winand et al., 2014) by demonstrating that safety climate and innovation had positive associations with job engagement and positive relationships with organizational performance. The study includes three nuanced theoretical advancements. First, this study utilizes the individual level of analysis, which is an underdeveloped facet of sport performance management literature (Kasale et al., 2018). This study found that employees (i.e., individual level of analysis) can be influenced by supportive organizations. Sport and recreation organizations enabled employee safety compliance, job engagement, and innovations by offering supportive environments, which indicates that the overall climate of an organization plays a key role in the effectiveness of employees' actions positively impacting organizational performance. In addition, employees' individual actions (i.e., safety compliance, job engagement, and innovations) had a positive relationship with organizational performance. This finding provides empirical evidence for Kasale et al.'s (2018) assertion that the individual level of analysis of the performance management framework does have a positive influence on organizational performance, with the added distinction that supportive organizations empower the process of individuals impacting organizational performance.

Second, job engagement was found to be a valuable construct within this process. Job engagement has yet to be utilized within sport performance management examinations, but this study demonstrates its utility within the framework. Job engagement is a proactive psychological state of employees as they contribute cognitive, emotional, and behavioral energy to their workplace (Shuck et al., 2017). This study provides evidence that employees' job engagement not only has a direct influence on organizational performance but also describes the process of individual contributions leading to organizational performance. As employees contribute energy to their jobs, they can gather the motivation (Shuck et al., 2017) to be safety compliant and innovative, which contributes to organizational performance. Thus, engagement theory offers a deeper understanding of the performance management framework by offering a theoretical mechanism for how individual contributions lead to enhanced organizational performance.

Third, this study details a process of developing employees' innovative behaviors, which result in having positive implications for organizational performance. This finding signals the value of organizational climate within the performance management framework (Kasale et al., 2018) as innovation represents a key element of organizational performance (Delshab et al., 2022; O'Boyle, 2016; Radnor & Barnes, 2007) and was made possible when it was supported by an organizational climate that supported innovation. To this point, sport management scholars have recently highlighted the importance of employees' perceived organizational innovativeness for supporting desired outcomes, such as organizational citizenship behaviors and innovative work behaviors (Barnhill & Smith, 2019). This study extends previous literature by emphasizing the role of organizational support for innovation as opposed to

an individual leader's influence. For example, Paek et al. (2022) found that leaders' authentic leadership had a negative influence on sport employees' creativity. This study, instead, highlights the impact of the climate of the organization on employee innovation. The results of this study and existing literature inform us that performance management's premise of employees contributing to organizational performance (Kasale et al., 2018) is, perhaps, best realized when the climate of the overall organization, as opposed to individual leaders, is focused on employee growth and development.

Practical Implications

Practically speaking, these findings have implications moving forward in relation to general levels of job engagement and organizational performance, considering the influences of safety and innovation. This is particularly notable given that engaged employees are likely to be more efficient and productive (e.g., Christian et al., 2011; Roberts & Davenport, 2002). From the viewpoint of employees, the ways that organizations address and promote safety for patrons and staff influence employee attitudes and behaviors at the workplace. Our findings have broad applicability in developing safety strategies because the data were collected after returning to normal operations. Enhanced safety climate is important not only for the behaviors exhibited by employees but also for its broader implications at the organizational level, encompassing aspects such as productivity, performance, and innovation. For example, prioritizing the perceived safety climate should lead to a decrease in accidents and injuries in sport and recreation centers.

Our findings showed that innovativeness is positively associated with job engagement, and there is clear support highlighting how safety climate and innovation are positively linked with organizational performance. We assert that it is essential for coordinators in subdepartments of sport and recreation centers (e.g., facilities, operations, events) to understand how to foster a vibrant safety climate whereby employees and patrons value safety procedures to protect against a variety of maladies (e.g., physical injuries, mental health, and communicable diseases) and encourage all stakeholders to actively participate in their safety responsibilities. Innovation is related to creative decision making and to customer satisfaction (Kesting & Ulhøi, 2010); this is especially relevant from a practical perspective as sport and recreation employees play a key role in optimal organizational performance. When employees are more engaged with their jobs, our findings show that they are less likely to be influenced by peers' safety compliance. Therefore, it is essential to promote peer-to-peer evaluation activities and have upper level supervisory staff setting a positive example for their colleagues.

Furthermore, engaged employees will help individuals better showcase their distinct individual skill sets, thereby contributing to innovation and organizational performance. Given the diverse spectrum of services offered by sport and recreation centers (e.g., weight training, cardio training, group classes, virtual classes, intramural sports, adventure sports, etc.), it becomes imperative for employees to leverage their own skill sets, sport backgrounds, and personalities to drive innovation and augment organizational performance. Some examples of specific actionable innovations could include the use of biometric screenings, virtual class offerings, mental health programming, and emerging sports offerings (e.g., pickleball, esports).

Limitations and Future Directions

This study was not without its limitations in that it was limited to interviewees who worked in recreation organizations in the college campus setting. The college campus recreation environment inherently involves relying on student (i.e., temporary) employees for many of its day-to-day operational tasks. These subsets of employees may have varying levels of organizational commitment in comparison with employees with longer tenured job prospects. It is also notable that the patrons themselves (i.e., mostly students) are peers to many of the employees. This could be an area to explore further moving forward while also considering that other types of sport and recreation organizations similarly rely on more short-term employees to help support their overall organizational operations.

In addition, this study did not delve into individual extenuating circumstances that may limit subsets of employees (e.g., those with underlying health conditions or personal/familial obligations impacted by such safety climate changes) from continuing to work. This is relevant considering that being able to engage in innovation and safety climate alterations during work chaos is having the agency and capacity to continue to work. Finally, although this work, importantly, focused on the aftermath of the COVID-19 pandemic, the authors endeavored to highlight how the hypotheses and results could and should be considered relevant for sport and recreation organizations moving forward for the ways in which safety and innovation impact job engagement and organizational performance.

Conclusion

This study examined the influences of safety and innovation on both the job engagement of recreational sport employees and the overall performance of their organizations. This study offers evidence of the value of maintaining a safe environment for sport participants through the safety compliance of employees by enhancing employee engagement and organizational performance. Moreover, organizations that were viewed as supportive of innovation were found to cultivate employee engagement and innovative behaviors, which were positively related to organizational performance. Thus, having a disposition in favor of innovation was found to be an equally valuable variable given its positive relationship with recreational sport organizations' performance. Taken together, this study provides critical insights into how recreational sport organizations can further enhance their operations as society moves past the pandemic.

References

- Amabile, T.M. (1988). A model of creativity and innovation in organizations. *Research in Organizational Behavior*, 10(1), 123–167.
- Bagozzi, R.P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94. <https://doi.org/10.1007/BF02723327>
- Barnhill, C.R., & Smith, N.L. (2019). Psychological contract fulfilment and innovative work behaviours of employees in sport-based SBES: The mediating role of organisational citizenship. *International Journal of Sport Management and Marketing*, 19(1/2), 106–128. <https://doi.org/10.1504/IJSM.2019.10018029>
- Baugh, C.M., Kroshus, E., Daneshvar, D.H., Filali, N.A., Hiscox, M.J., & Glantz, L.H. (2015). Concussion management in United States

- college sports: Compliance with National Collegiate Athletic Association concussion policy and areas for improvement. *American Journal of Sports Medicine*, 43(1), 47–56. <https://doi.org/10.1177/0363546514553090>
- Bencsik, A., Horváth-Csikós, G., & Juhász, T. (2016). Y and Z Generations at workplaces. *Journal of Competitiveness*, 6(3), 90–106. <https://doi.org/10.7441/joc.2016.03.06>
- Borucki, C.C., & Burke, M.J. (1999). An examination of service-related antecedents to retail store performance. *Journal of Organizational Behavior*, 20(6), 943–962. [https://doi.org/10.1002/\(SICI\)1099-1379\(199911\)20:6<943::AID-JOB976>3.0.CO;2-9](https://doi.org/10.1002/(SICI)1099-1379(199911)20:6<943::AID-JOB976>3.0.CO;2-9)
- Brondino, M., Silva, S.A., & Pasini, M. (2012). Multilevel approach to organizational and group safety climate and safety performance: Co-workers as the missing link. *Safety Science*, 50(9), 1847–1856. <https://doi.org/10.1016/j.ssci.2012.04.010>
- Chelladurai, P. (1987). Multidimensionality and multiple perspectives of organizational effectiveness. *Journal of Sport Management*, 1(1), 37–47. <https://doi.org/10.1123/jsm.1.1.37>
- Christian, M.S., Garza, A.S., & Slaughter, J.E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64(1), 89–136. <https://doi.org/10.1111/j.1744-6570.2010.01203.x>
- Dalgarn, M.K. (2001). The role of the campus recreation center in creating a community. *Recreational Sports Journal*, 25(1), 66–72. <https://doi.org/10.1123/nirsa.25.1.66>
- DeJoy, D.M., Della, L.J., Vandenberg, R.J., & Wilson, M.G. (2010). Making work safer: Testing a model of social exchange and safety management. *Journal of Safety Research*, 41(2), 163–171. <https://doi.org/10.1016/j.jsr.2010.02.001>
- Delshab, V., Winand, M., Boroujerdi, S.S., Hoerber, L., & Mahmoudian, A. (2022). The impact of knowledge management on performance in nonprofit sports clubs: The mediating role of attitude toward innovation, open innovation, and innovativeness. *European Sport Management Quarterly*, 22(2), 139–160. <https://doi.org/10.1080/16184742.2020.1768572>
- Endler, N.S., & Magnusson, D. (1976). Toward an interactional psychology of personality. *Psychological Bulletin*, 83(5), 956–974. <https://doi.org/10.1037/0033-2909.83.5.956>
- Forehand, G.A., & Gilmer, B.V.H. (1964). Environmental variation in studies of organizational behavior. *Psychological Bulletin*, 62(6), 361–382. <https://doi.org/10.1037/h0045960>
- Fornell, C., & Larcker, D.F. (1981). Evaluation structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
- Gardner, R.G., Harris, T.B., Li, N., Kirkman, B.L., & Mathieu, J.E. (2017). Understanding “it depends” in organizational research: A theory-based taxonomy, review, and future research agenda concerning interactive and quadratic relationships. *Organizational Research Methods*, 20(4), 610–638. <https://doi.org/10.1177/1094428117708856>
- Griffin, M.A., & Curcuruto, M. (2016). Safety climate in organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 3(1), 191–212. <https://doi.org/10.1146/annurev-orgpsych-041015-062414>
- Griffin, M.A., & Neal, A. (2000). Perceptions of safety at work: A framework for linking safety climate to safety performance, knowledge, and motivation. *Journal of Occupational Health Psychology*, 5(3), 347–358. <https://doi.org/10.1037/1076-8998.5.3.347>
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2018). *Multivariate data analysis* (8th ed.). Cengage.
- Hakanen, J.J., Perhoniemi, R., & Toppinen-Tanner, S. (2008). Positive gain spirals at work: From job resources to work engagement, personal initiative and work-unit innovativeness. *Journal of Vocational Behavior*, 73(1), 78–91. <https://doi.org/10.1016/j.jvb.2008.01.003>
- Hoerber, L., Doherty, A., Hoerber, O., & Wolfe, R. (2015). The nature of innovation in community sport organizations. *European Sport Management Quarterly*, 15(5), 518–534. <https://doi.org/10.1080/16184742.2015.1085070>
- Hoerber, L., & Hoerber, O. (2012). Determinants of an innovation process: A case study of technological innovation in a community sport organization. *Journal of Sport Management*, 26(3), 213–223. <https://doi.org/10.1123/jsm.26.3.213>
- Hu, M.L.M., Horng, J.S., & Sun, Y.H.C. (2009). Hospitality teams: Knowledge sharing and service innovation performance. *Tourism Management*, 30(1), 41–50. <https://doi.org/10.1016/j.tourman.2008.04.009>
- Hu, X., Griffin, M.A., & Bertuleit, M. (2016). Modelling antecedents of safety compliance: Incorporating theory from the technological acceptance model. *Safety Science*, 87, 292–298. <https://doi.org/10.1016/j.ssci.2015.12.018>
- Huang, Y.H., Lee, J., McFadden, A.C., Murphy, L.A., Robertson, M.M., Cheung, J.H., & Zohar, D. (2016). Beyond safety outcomes: An investigation of the impact of safety climate on job satisfaction, employee engagement and turnover using social exchange theory as the theoretical framework. *Applied Ergonomics*, 55, 248–257. <https://doi.org/10.1016/j.apergo.2015.10.007>
- James, L.A., & James, L.R. (1989). Integrating work environment perceptions: Explorations into the measurement of meaning. *Journal of Applied Psychology*, 74(5), 739–751. <https://doi.org/10.1037/0021-9010.74.5.739>
- James, L.R., & Jones, A.P. (1974). Organizational climate: A review of theory and research. *Psychological Bulletin*, 81(12), 1096–1112. <https://doi.org/10.1037/h0037511>
- Kahn, W.A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724. <https://doi.org/10.2307/256287>
- Kampf, S., & Teske, E.J. (2013). Collegiate recreation participation and retention. *Recreational Sports Journal*, 37(2), 85–96. <https://doi.org/10.1123/rsj.37.2.85>
- Kasale, L.L., Winand, M., & Robinson, L. (2018). Performance management of national sports organisations: A holistic theoretical model. *Sport, Business and Management: An International Journal*, 8(5), 469–491. <https://doi.org/10.1108/SBM-10-2017-0056>
- Kesting, P., & Ulhøi, J.P. (2010). Employee-driven innovation: Extending the license to foster innovation. *Management Decision*, 48(1), 65–84. <https://doi.org/10.1108/00251741011014463>
- Kline, R.B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). Guilford Press.
- Lin, C.Y. (2015). Conceptualizing and measuring consumer perceptions of retailer innovativeness in Taiwan. *Journal of Retailing and Consumer Services*, 24(C), 33–41. <https://doi.org/10.1016/j.jretconser.2015.01.009>
- Ludvigsen, J.A.L. (2020). The “troika of security”: Merging retrospective and futuristic “risk” and “security” assessments before Euro 2020. *Leisure Studies*, 39(6), 844–858. <https://doi.org/10.1080/02614367.2020.1775872>
- Madella, A., Bayle, E., & Tome, J. (2005). The organisational performance of national swimming federations in Mediterranean countries: A comparative approach. *European Journal of Sport Science*, 5(4), 207–220. <https://doi.org/10.1080/17461390500344644>
- Nallavan, G. (2020). Impact of recent developments in fabrication of auxetic materials on safety and protection in sport. *AIP Conference Proceedings*, 2271(1), 030006-1–030006-9. <https://doi.org/10.1063/5.0024805>
- National Intramural-Recreational Sports Association. (2023). *NIRSA*. <https://nirsa.net/nirsa/>

- Neal, A., & Griffin, M.A. (2002). Safety climate and safety behaviour. *Australian Journal of Management*, 27(1), 67–75. <https://doi.org/10.1177/031289620202701S08>
- Neal, A., & Griffin, M.A. (2006). A study of the lagged relationships among safety climate, safety motivation, safety behavior, and accidents at the individual and group levels. *Journal of Applied Psychology*, 91(4), 946–953. <https://doi.org/10.1037/0021-9010.91.4.946>
- Nowy, T., Wicker, P., Feiler, S., & Breuer, C. (2015). Organizational performance of nonprofit and for-profit sport organizations. *European Sport Management Quarterly*, 15(2), 155–175. <https://doi.org/10.1080/16184742.2014.995691>
- O'Boyle, I. (2016). *Organisational performance management in sport*. Routledge.
- O'Boyle, I., & Hassan, D. (2014). Performance management and measurement in national-level non-profit sport organisations. *European Sport Management Quarterly*, 14(3), 299–314. <https://doi.org/10.1080/16184742.2014.898677>
- Organ, D.W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington Books/DC Heath and Com.
- Otto, M.G., Martinez, J.M., & Barnhill, C.R. (2021). Impact of engagement on satisfaction and retention among volunteers at college football bowl games. *Journal of Issues in Intercollegiate Athletics*, 14, 387–410.
- Paek, B., Martyn, J., Oja, B.D., Kim, M., & Larkins, R.J. (2022). Searching for sport employee creativity: A mixed-methods exploration. *European Sport Management Quarterly*, 22(4), 483–505. <https://doi.org/10.1080/16184742.2020.1804429>
- Parnell, D., Widdop, P., Bond, A., & Wilson, R. (2022). COVID-19, networks and sport. *Managing Sport and Leisure*, 27(1–2), 78–84. <https://doi.org/10.1080/23750472.2020.1750100>
- Petitta, L., Probst, T.M., Barbaranelli, C., & Ghezzi, V. (2017). Distinguishing the roles of safety climate and safety culture: Multi-level effects on the relationship between supervisor enforcement and safety compliance. *Accident Analysis & Prevention*, 99(Pt. A), 77–89. <https://doi.org/10.1016/j.aap.2016.11.012>
- Podsakoff, P.M., MacKenzie, S.B., Lee, J., & Podsakoff, N.P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Radnor, Z.J., & Barnes, D. (2007). Historical analysis of performance measurement and management in operations management. *International Journal of Productivity and Performance Management*, 56(5/6), 384–396. <https://doi.org/10.1108/17410400710757105>
- Ratten, V. (2017). *Sports innovation management*. Routledge.
- Rich, B.L., Lepine, J.A., & Crawford, E.R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53(3), 617–635. <https://doi.org/10.5465/amj.2010.51468988>
- Richard, P.J., Devinney, T.M., Yip, G.S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of Management*, 35(3), 718–804. <https://doi.org/10.1177/0149206308330560>
- Roberts, D.R., & Davenport, T.O. (2002). Job engagement: Why it's important and how to improve it. *Employment Relations Today*, 29(3), 21–29. <https://doi.org/10.1002/ert.10048>
- Saks, A.M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600–619. <https://doi.org/10.1108/02683940610690169>
- Schuetz, L., Paek, B., Oja, B.D., & Kim, M. (2021). Developing flourishing among employees in the college sport workplace. *Sport, Business and Management: An International Journal*, 11(5), 647–665. <https://doi.org/10.1108/SBM-09-2020-0096>
- Sepehri, Z., & Sheikhalizadeh, M. (2020). Descriptions and overall safety status of sport fields in schools of Ardabil city, Iran. *Journal of Social Sciences and Humanities Research*, 8(1), 24–28. <https://doi.org/10.24200/jsshr.vol8iss1pp%25p>
- Shuck, B., Adelson, J.L., & Reio, T.G., Jr. (2017). The employee engagement scale: Initial evidence for construct validity and implications for theory and practice. *Human Resource Management*, 56(6), 953–977. <https://doi.org/10.1002/hrm.21811>
- Simard, M., & Marchand, A. (1997). Workgroups' propensity to comply with safety rules: The influence of micro-macro organisational factors. *Ergonomics*, 40(2), 172–188. <https://doi.org/10.1080/001401397188288>
- Spengler, J.O., Connaughton, D.P., & Earnshaw, J. (2002). Perspectives on lightning safety risk management in sport and recreational activities. *World Leisure Journal*, 44(4), 22–29. <https://doi.org/10.1080/04419057.2002.9674288>
- Svensson, P.G., Jeong, S., Shuck, B., & Otto, M.G. (2021). Antecedents and outcomes of employee engagement in sport for development. *Sport Management Review*, 24(4), 673–696. <https://doi.org/10.1080/14413523.2021.1880758>
- Tamakloe, S.A., Amponsah-Tawiah, K., & Mensah, J. (2022). Safety climate and psychological well-being among workers in the Ghanaian aviation industry: Does fatigue matter? *Occupational Health Science*, 6(2), 279–293. <https://doi.org/10.1007/s41542-022-00110-2>
- Weems, G.H., & Onwuegbuzie, A.J. (2001). The impact of midpoint responses and reverse coding on survey data. *Measurement and Evaluation in Counseling and Development*, 34(3), 166–176. <https://doi.org/10.1080/07481756.2002.12069033>
- Wemmer, F., Emrich, E., & Koenigstorfer, J. (2016). The impact of cooptation-based innovation on performance in nonprofit sports clubs. *European Sport Management Quarterly*, 16(3), 341–363. <https://doi.org/10.1080/16184742.2016.1164735>
- Winand, M., Vos, S., Claessens, M., Thibaut, E., & Scheerder, J. (2014). A unified model of non-profit sport organizations performance: Perspectives from the literature. *Managing Leisure*, 19(2), 121–150. <https://doi.org/10.1080/13606719.2013.859460>
- Winand, M., Zintz, T., Bayle, E., & Robinson, L. (2010). Organizational performance of Olympic sport governing bodies: Dealing with measurement and priorities. *Managing Leisure*, 15(4), 279–307. <https://doi.org/10.1080/13606719.2010.508672>
- Wu, J., Inoue, Y., Filo, K., & Sato, M. (2022). Creating shared value and sport employees' job performance: The mediating effect of work engagement. *European Sport Management Quarterly*, 22(2), 272–291. <https://doi.org/10.1080/16184742.2020.1779327>
- Yoshida, M., James, J.D., & Cronin, J.J., Jr. (2013). Sport event innovativeness: Conceptualization, measurement, and its impact on consumer behavior. *Sport Management Review*, 16(1), 68–84. <https://doi.org/10.1016/j.smr.2012.03.003>
- Yuan, Z., Li, Y., & Tetrick, L.E. (2015). Job hindrances, job resources, and safety performance: The mediating role of job engagement. *Applied Ergonomics*, 51, 163–171. <https://doi.org/10.1016/j.apergo.2015.04.021>
- Zohar, D. (2000). A group-level model of safety climate: Testing the effect of group climate on microaccidents in manufacturing jobs. *Journal of Applied Psychology*, 85(4), 587–596. <https://doi.org/10.1037/0021-9010.85.4.587>