

Empowering Employee Engagement: The Efficacy of Sports Activities as Stress Coping Mechanisms

Nadir Aliane^{1*}, Ahmad Zakariya²

Abstract

The significance of staff engagement in organisational performance lies in the enhanced efficiency and job satisfaction experienced by engaged individuals. Sports activities have been acknowledged as effective methods for enhancing employee involvement in the workplace. These endeavours not only enhance athletic motivation but also foster a sense of teamwork, leading to a more cohesive work environment. In addition, these programmes aid in promoting the physical well-being of employees by offering stress management techniques that have the potential to enhance overall health and performance. Hence, the objective of this research is to examine the impact of athletic activities on staff engagement, specifically focusing on sports motivation and engagement, team collaboration, and the physical fitness of employees as mechanisms for managing stress. The data has been gathered from the workforce in Saudi Arabia. The researcher employed an online survey methodology. The findings of the study indicate a significant and positive correlation between sports motivation and increased staff engagement. This correlation is accompanied by notable improvements in athletic motivation and team cooperation, which serve as effective strategies for enhancing job engagement. Nevertheless, the effectiveness of sports activities in promoting employee engagement is contingent upon factors such as the industry, organisational culture, and demographic composition. The limited consideration of contextual aspects in previous research has resulted in a constraint on the generalizability of findings to various organisations.

Keywords: Sports Motivation; Sports Engagement; Team Collaboration; Stress Coping Mechanisms; Saudi Arabia

1. Introduction

The importance of employee engagement cannot be overstated, as it has a significant impact on various aspects of organisational functioning, such as productivity, citizenship behaviour, employee satisfaction, and employee performance (Hermawan et al., 2020). Employee engagement is a crucial determinant in the service industry, as it signifies the provision of superior service to customers (Wake & Green, 2019). Organisations place a strong emphasis on employee engagement due to its substantial influence on the effectiveness of the organisation. An employee who is fully engaged demonstrates a positive attitude towards their job and actively contributes to the overall prosperity of the organisation (Jain et al., 2018). The Utrecht Work Engagement Scale (UWES) conceptualises work engagement as a constructive disposition towards work, encompassing three key dimensions: vigour, dedication, and absorption. Vigour is positively associated with a heightened degree of enthusiasm, energy, and mental fortitude exhibited by employees, facilitating their ability

to channel their efforts and commitment towards their work. Dedication encompasses a heightened degree of work engagement and a perception of being esteemed within the professional setting, while absorption denotes the extent of an employee's commitment and immersion in their tasks (Schaufeli et al., 2002).

Previous research has indicated that work engagement plays a crucial role in enhancing service quality within the service sector. This is achieved by stimulating employees to fully utilise their abilities and expertise, thereby highlighting the substantial influence of motivational factors on employee engagement (Wee & Lai, 2022). Given the significant impact of work engagement on individuals' professional lives, it is imperative to conduct research aimed at identifying the specific resources that have the potential to enhance work engagement. Research has indicated that the maintenance of work-life balance in the modern era is heavily dependent on mental well-being. This is supported by empirical evidence revealing that a significant proportion of European employees experience work-related stress, as reported by Work (2019). Consequently, scholarly research has prioritised the

¹ Department of Management, College of Business, King Faisal University, Al-hasa, Saudi Arabi
Email: nhaliane@kfu.edu.sa

² Department of Management Sciences, National University of Modern Languages, Lahore Campus. Pakistan
Emails: aaazakariya@numl.edu.pk

*Corresponding Author: Nadir Aliane; Email: nhaliane@kfu.edu.sa

enhancement of favourable elements within the workplace environment that are associated with the physical, psychological, and social welfare of employees, with the aim of increasing their level of work engagement.

In addition to organisational characteristics, there exists a potential association between employees' engagement in physical activity and their level of work engagement (Park et al., 2021, 2023). However, there is a lack of research examining the effects of sports and physical activity participation on employee engagement, despite its recognised role in enhancing the physical and mental welfare of employees (Niemelä et al., 2019). Research has indicated that engagement in physical activities is strongly correlated with mental well-being, as it is connected to various neurobiological, psychosocial, and behavioural mechanisms. Consequently, physical activity is considered a significant means of managing stress for individuals in the workforce (Bragina & Voelcker-Rehage, 2018). Furthermore, there exists a correlation between physical well-being and multiple aspects of cognitive function, including heightened levels of focus, absorption, and processing velocity (Reigal et al., 2020).

This suggests that engaging in sports and physical activities can have a beneficial effect on stress management techniques and the level of commitment demonstrated by employees. Numerous additional studies have documented the favourable influence of physical activity on the cognitive functioning of individuals (Hoffmann et al., 2021; Northey et al., 2018). The examination of stress coping has conventionally focused on an individualistic perspective. Nevertheless, the presence of a collaborative working environment frequently engenders interpersonal interactions and fosters an improved mechanism for managing stress (Kamphuis et al., 2021). Hence, scholarly research has underscored the significance of fostering a collaborative work environment within an organisation. The execution of tasks through collaborative efforts within a team facilitates the acquisition of a more comprehensive comprehension of individual roles, thereby resulting in heightened efficiency and the establishment of enduring team cohesion.

Additionally, the establishment of a collaborative working environment instigates a transformation in the organisational culture, fostering a sense of camaraderie among employees and enhancing their inclination towards increased work engagement. Therefore, the practice of team collaboration fosters heightened levels of work engagement and cooperation among employees (Martin, 2021). The primary focus of this study is directed towards the service sector within the context of Saudi Arabia. The current study is significant and original due to the limited

number of existing studies that examine the effects of sports motivation, physical fitness, and team collaboration on employee engagement in the service sector of Saudi Arabia, particularly in the presence of stress-coping mechanisms. Despite the exceptional circumstances brought about by the global pandemic, companies operating in Saudi Arabia have successfully maintained high levels of employee engagement. Therefore, there has been an increase in employee engagement from 21% in 2019 to 24% in 2022. Further, the percentage of satisfied employees has increased from 46% in 2019 to 50% in 2022. This high percentage exhibits the resilience of the employers in the country in maintaining the employee engagement (BADER, 2023). Furthermore, according to the World Bank's findings, the service sector accounted for 77.29% of the overall employment in Saudi Arabia during the year 2021 (TE, 2023). The substantial proportion of individuals employed in the service sector renders it a compelling subject for investigation with regards to employee engagement. Hence, the primary objective of this study is to address the existing research void in the service sector of Saudi Arabia. Specifically, it aims to examine (a) the influence of sports motivation, sports engagement, team collaboration, and physical fitness on employee engagement and (b) the potential mediating role of stress coping mechanisms in these relationships.

2. Literature Review

2.1. Theoretical Background

An association has been established between anxiety and motivation and the heightened susceptibility to injury as well as diminished athletic performance upon resumption of sports activities (Wiese-Bjornstal, 2019). The extant body of literature pertaining to the process of resuming athletic activities subsequent to an injury indicates that athletes may encounter feelings of anxiety stemming from apprehensions regarding their capacity to attain the same performance levels as prior to their injury or fulfil the expectations set by their coaches, among other contributing factors (Ryan & Deci, 2017). Moreover, the motivational factors, as delineated in Self-Determination Theory (Ryan et al., 2017), are acknowledged as significant psychological determinants that impact reengagement in sporting activities.

An investigation carried out by Ruffault et al. (2020) examined the impact of self-determination on professional Australian football players during the process of returning to sport. The findings revealed a positive correlation between higher levels of self-determination and more favourable appraisals and emotional states. The current

body of literature pertaining to resuming sports activities predominantly centres around injury and the subsequent rehabilitation process. However, it is important to acknowledge that the conditions imposed by a lockdown exhibit certain resemblances. During these periods, athletes encounter limitations on their customary training regimens and a lack of competitive engagements. Prolonged periods of inactivity and limited access to competitive opportunities present notable hazards to the physical well-being and performance capacities of athletes (Paoli & Musumeci, 2020).

Hence, a comprehensive analysis of the impact of a period of confinement on self-determination and levels of anxiety holds significant scholarly significance (Soltanabadi et al.). The Sport Education Model (SEM) is an educational pedagogical approach that is based on game theory and the participation of the general public in sports (Siedentop, 1994). The purpose of this model is to enhance students' proficiency in sport-related skills, deepen their comprehension of rules, and foster their emotional growth by utilising games as a pedagogical tool. Furthermore, it promotes the development of sportsmanship values as students actively participate in competitive athletic competitions. Belbin and Brown (2022) suggest that the efficient distribution of roles is a crucial factor in achieving success within a team, as outlined in Belbin's team role theory.

According to Yukl et al. (2002), a team is defined as a cohesive entity consisting of individuals who collectively pursue a shared goal, possess interconnected roles, and possess skills that complement one another. Teamwork can be conceptualised as the collective accountability assumed by interdependent individuals within small groups, as they collaborate towards attaining organisational benefits.

2.2. The Impact of Sports Motivation, Sports Engagement, Team Collaboration, and Employees' Physical Fitness on Employee Job Engagement

The study conducted by Di Fronso et al. (2022) examined the perceived stress levels of Italian athletes during the COVID-19 lockdown. The findings of the study revealed significant variations in perceived stress levels based on gender and competitive status. In particular, male athletes and individuals participating in elite-level competitions (i.e., at the national and/or international level) exhibited reduced levels of perceived stress in comparison to their female counterparts and non-elite athletes, respectively. Additionally, research conducted by Clemente-Suárez et al. (2020) revealed that Olympic and Paralympic athletes displayed lower levels of anxiety compared to the general population. This finding suggests that athletes may possess heightened cognitive and emotional capabilities to effectively manage confinement conditions (Costa et al., 2020).

Moreover, the findings derived from a qualitative inquiry examining the psychological variables linked to the resumption of competitive play among basketball athletes hold significant importance. The participants expressed that their confidence in achieving enhanced performance and their concerns about the risk of reinjury were alleviated by participating in organised training programmes prior to resuming competitive activities. Moreover, the main driving force behind dedicating "100% effort" to pre-competition training programmes was the participants' desire to reach the same performance levels they had previously accomplished, as emphasised in the research conducted by Conti et al. (2019). The aforementioned results highlight the importance of considering both anxiety and motivation when analysing the psychological aspects of resuming sports activities following a period of inactivity.

The present study conducted by Lera-López et al. (2021) demonstrates a positive association between diverse manifestations of passive sport engagement, encompassing the frequency of attending sporting events as well as other passive sports participation activities such as watching sports on television, listening to sports programmes, reading sports news, and engaging in sports-related conversations, and individuals' self-reported levels of happiness. This finding indicates that there is a more pronounced correlation between passive sport engagement and individual happiness when compared to active sport participation. Furthermore, this highlights the importance of particular types of sports engagement in promoting social interactions and relational advantages. The importance of this particular aspect becomes apparent when considering participation in sports. The existing body of evidence emphasises the significance of participating in sports as a means of developing social networks and promoting social trust. This has been observed in the research conducted by Ekholm (2019), who also highlights the relevance of social interactions resulting from engagement in sports.

Further, the present research trajectory highlights the significance of engaging in sports, particularly in recreational settings, as a means of facilitating socialisation. Such involvement assists individuals in cultivating proficient communication and cooperation abilities, which in turn can enhance their overall life satisfaction (Balish et al., 2016). Silva et al. (2020) have observed a non-linear association. With respect to passive sport participation, our findings suggest a statistically significant positive correlation between the frequency of attending sporting events and engaging in other forms of passive sports participation, such as watching sports on television, listening to sports programmes, reading sports

news, and participating in sports-related conversations, and individual happiness. It is important to acknowledge that previous empirical studies have confirmed the existence of a positive correlation between sports attendance and happiness (Jang et al., 2017). The positive impacts of maintaining a high level of physical fitness on an individual's health are apparent irrespective of variables such as age, gender, body composition, smoking habits, alcohol consumption, and other clinical factors.

However, it is important to highlight that there exists a disparity between genders in terms of physical activity levels, with women generally exhibiting lower levels of physical activity than men. This pattern of behaviour has been found to be associated with decreased physical fitness and an increased susceptibility to cardiovascular disease (CVD) (Fang et al., 2019). In addition, it is common for modern job positions to involve a substantial number of sedentary tasks, resulting in an increase in periods of physical inactivity (Rhodes et al., 2012). Consequently, this leads to a reduction in the overall number of calories expended. As a result, there has been a collective endeavour in recent times to execute diverse strategies in the labour force, specifically targeting female workers, with the objective of reducing sedentary behaviour and improving both body composition and overall health through physical activity initiatives (Lassen et al., 2018).

A recent literature review conducted by Vendramin et al. (2016) has brought attention to the potential classification of Zumba Fitness as a form of aerobic training. The review suggests that Zumba Fitness may have a positive impact on aerobic and cardiovascular outcomes, as evidenced by its promising but modest effects on body composition, muscular strength, balance, and quality of life. As stated by Kao (2019), physical education is crucial in promoting the development of both physical and social abilities. In the realm of physical education, the development of team cohesion holds significance as it not only impacts team performance but also imparts students with valuable skills that can be transferred to future social settings. Nevertheless, there is still a lack of clarity regarding the degree to which the utilisation of teaching strategies in physical education influences the formation of team cohesion. Hence, following hypothesis can be postulated:

H1: *Higher levels of Sports Motivation among employees are positively associated with increased Employee Job Engagement.*

H2: *Greater Sports Engagement among employees is positively related to higher Employee Job Engagement.*

H3: *Improved Team Collaboration within the workplace is positively correlated with increased levels of Employee Job Engagement.*

H4: *Employees' Physical Fitness, when enhanced, is positively associated with higher levels of Employee Job Engagement.*

2.3. Mediating Role of Stress Coping Mechanisms

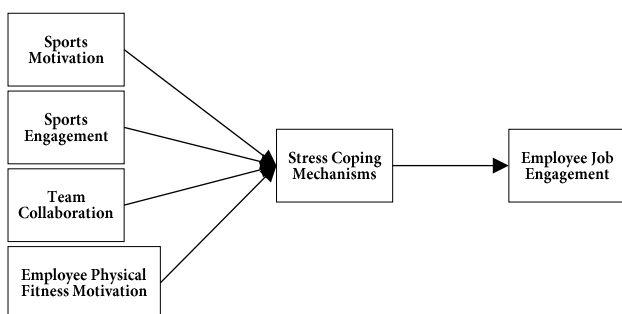
Stress, in its fundamental sense, can be described as a condition of both physiological and psychological arousal that emerges when external demands exceed an individual's ability to manage, thereby requiring the implementation of adaptive behavioural modifications. The initiation of the stress response can be attributed to stressors, which encompass both cognitive and environmental triggers of stress, as evidenced by the research conducted by Statler and DuBois (2016). Stressors can be classified into two categories, namely acute or chronic, based on the duration of their impact. According to Lopes Dos Santos et al. (2020), acute stressors are characterised by the abrupt occurrence of stressful situations that trigger physiological reactions, including heightened hormonal levels, increased blood flow, elevated cardiac output, raised blood sugar levels, dilation of the pupils, and expansion of the airways. After the resolution of the acute stressor, a cascade of hormonal responses occurs in order to return the body to its original state of equilibrium, commonly referred to as homeostasis.

However, in cases where acute stressors endure and transform into chronic stressors, they have the potential to increase an individual's susceptibility to various conditions, such as anxiety, depression, or metabolic disorders. Furthermore, prior scholarly works have established a significant association between the accumulation of stress and a heightened vulnerability to both physical ailments and injuries, as exemplified by the research conducted by Hamlin et al. (2019). The advent of the COVID-19 pandemic has had an unprecedented influence on the realm of sports (Leguizamo et al., 2021). The abrupt and unforeseen nature of this crisis has caused disruptions to the training regimens of athletes and resulted in the cancellation of notable sporting events, thereby presenting substantial obstacles to their athletic pursuits.

This scenario has the potential to elicit increased levels of stress and emotional disruption, similar to the challenges faced by athletes coping with injuries. The utilisation of the Global Psychological Model of Sports Injury (MGPLD) is currently being employed to examine and comprehend the psychological ramifications of this distinctive historical context for athletes, in light of the extensive existing research on the correlation between psychological factors and sports injuries (Leguizamo et al., 2021). In response to the extant literature, sports injuries have been found to elicit a range of psychological and emotional reactions, both in response to the injury itself (Abenza et al., 2010) and the subsequent rehabilitation process. Moreover, the primary objective of this research is to examine the psychological factors associated with an athlete's

reintegration into competitive sports following a period of physical inactivity resulting from a sports-related injury, along with the apprehension surrounding the possibility of recurrence (Podlog et al., 2011).

In accordance with Zafra and García-Mas (2009), the Global Psychological Model of Sports Injury (MGPLD) suggests that multiple factors, such as motivation, competitive anxiety, psychosocial stress, and coping strategies, have an impact on an athlete's psychological well-being during different phases of the injury process (prior to the injury, during the recovery period, and after the injury has occurred). From a theoretical standpoint, we hypothesise that the restrictions imposed by the COVID-19 pandemic may have notable psychological consequences for athletes, similar to those observed in individuals who perform daily activities while being confined. The observed effects align with previous research investigating the phenomenon of sports withdrawal, whether it is a partial or complete cessation of sports participation resulting from sports-related injuries.



There are various factors that possess the potential to influence an athlete's performance, such as psychological well-being, sleep quality, and the acquisition of athletic coping skills. Mindfulness-based interventions, such as the widely recognised mindfulness-based stress reduction (MBSR) programme, have exhibited efficacy in exerting a positive influence on the aforementioned factors (Jones et al., 2020). This suggests that these interventions have the potential to indirectly enhance athletic performance. In addition, while there is evidence suggesting a correlation between mindfulness training and enhanced precision in specific sports that require a high degree of accuracy, the extent to which it can improve other aspects of athletic performance that do not heavily rely on precision is still uncertain.

Mindfulness is defined as a cognitive state characterised by the absence of evaluative judgement and the presence of receptive awareness towards the present moment, including one's internal cognitive processes and affective experiences. One well-established mindfulness training programme is known as Mindfulness-Based Stress Reduction (MBSR). Empirical research conducted by Kabat-Zinn (1982) has consistently

shown the programme's efficacy in alleviating symptoms of stress, anxiety, depression, and pain. Mindfulness-Based Stress Reduction (MBSR) has demonstrated potential for improving the quality of sleep.

According to a study conducted by Rusch et al. (2019), mindfulness-based interventions have demonstrated greater efficacy in enhancing sleep quality in populations with sleep disturbances in comparison to placebo interventions. The study conducted by Cincotta et al. (2010) has demonstrated that engagement in Mindfulness-Based Stress Reduction (MBSR) among individuals who are in good health is linked to self-reported decreases in cognitive arousal before sleep and improvements in the overall quality of sleep. In a study conducted by Li et al. (2018), it was found that athletes who practiced brief mindfulness meditation before going to bed experienced a decrease in pre-sleep arousal and an overall enhancement in sleep quality. Hence, these hypotheses can be postulated:

H5: *Stress Coping Mechanisms mediate the relationship between Sports Motivation and Employee Job Engagement.*

H6: *Stress Coping Mechanisms mediate the relationship between Sports Engagement and Employee Job Engagement.*

H7: *Stress Coping Mechanisms mediate the relationship between Team Collaboration and Employee Job Engagement.*

H8: *Stress Coping Mechanisms mediate the relationship between Employees' Physical Fitness and Employee Job Engagement.*

3. Methodology

3.1. Participants and Procedures

Data was collected from employees working in the service sector of the Saudi Arabian region. The researcher employed an online survey methodology. The researcher employed the electronic mail medium and structured the email into distinct sections. (a): A preliminary letter providing background information to the higher authorities of various service sector organisations regarding the researcher, the study, and the objective of data collection; (b): The hyperlink to the Google Doc survey created by the researcher, encompassing inquiries pertaining to the respondents and study variables; (c): Remuneration offered for survey participation. In order to address the issue of low response rates in online data collection, the researcher employed a strategy wherein a total of 450 emails were distributed to the study participants. Specifically, efforts were made to target respondents who were geographically distant and thus physically inaccessible.

This effort was undertaken to ensure the incorporation of the concept of generalizability within the data sample of the study. The researcher employed the purposive

sampling technique to specifically focus on employees within the service sector, while excluding individuals employed in other sectors of service industry firms.

3.2. Measures of the Targeted Variables

The study tool for data collection was organised into distinct sections within an online platform, specifically the Google Doc website. The researcher commenced by providing a concise introduction to the study and outlining the objectives of the data collection process. Subsequently, the researcher proceeded to incorporate demographical inquiries pertaining to the participants,

followed by the inclusion of scale items pertaining to the variables under investigation in the study. The researcher conducted a comprehensive review of the existing literature and obtained the scale items for each variable from reliable sources and studies that have demonstrated empirical significance. The scale items used in this study were assessed using a 5-point Likert scale, which ranged from 1 to 5 and featured distinct labels. In order to achieve an aesthetically pleasing arrangement, the researcher has meticulously organised all pertinent information pertaining to the scale items utilised in this study within a sophisticated and visually appealing tabular format.

Table 1

Measurement details

No.	Name of the targeted variables	No of the items used	Source of the adopted items	Cronbach alpha values from previous studies
1	Employee Job Engagement	4	(Rasool et al., 2021)	0.759
2	Stress Coping Mechanisms	6	(Bae, 2023)	0.86
3	Employees' Physical Fitness	6	(Nishida et al., 2003)	-.93
4	Team collaboration	8	(Mellin et al., 2010)	-
5	Sports Engagement	15	(Stolarski et al., 2022)	0.93
6	Sports Motivation	4	(Mallett et al., 2007)	

4. Results and Interpretation

4.1. Demographics of the Respondents

This study was conducted with the participation of 150 employees working in the service sector of Saudi Arabia. The majority of the respondents were male, accounting for 113 individuals. The researcher has included the table below to illustrate the current distribution of gender percentages within the data sample.

Subsequently, the researcher conducted a comprehensive series of preliminary and final examinations to screen and analyse the collected data. The researcher employed Levene's Test for Equality of Variances as a means to support the assumption of homogeneity within the data

sample. The test utilised in this study has a threshold significance value, denoted as the p-value, which is greater than 0.5. Upon conducting data analysis, the results of the test indicated support for the assumption of equal variance. Specifically, the significance value obtained was 0.516, suggesting that the data used in the analysis was appropriate for research purposes. The subsequent table presents the results of the equal variance test.

Table 2

Gender

gender	N	Group Statistics		
		Mean	Std. Deviation	Std. Error Mean
male	113	3.5885	.79894	.07516
female	37	3.6824	.63369	.10418

Table 3

Independent Sample Test

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Eje	Equal variances assumed	3.165	.077	-.651	148	.516	-.09394	.14434	-.37917	.19130
	Equal variances not assumed			-.731	76.560	.467	-.09394	.12846	-.34975	.16188

4.2. Descriptive Test and Normality of the Data

The researcher employed descriptive statistics as a fundamental test to examine the patterns in the responses and assess the normal distribution of the data. The researcher employed the skewness and kurtosis tests to assess the normality of the data, utilising a threshold range of -1 to +1 (Demir, 2022). The analysis performed on the data revealed that the responses to the variables' items exhibited normality and an even distribution. Furthermore, the researcher

assessed the average values of the variables in order to examine and comprehend the patterns of the responses and the cognitive processes of the participants during the completion of the response sheet. The results of the test indicated that all computed variables had values above 3. This suggests that the respondents completed a significant portion of the response sheet with a wide range of agreement and held a positive perception of the concepts addressed in the scale items. The following table provides a tabular summary of the discussion described in the preceding paragraph.

Table 4

Descriptive Analysis

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
EPF	150	1.00	5.00	3.5256	.90337	-.291	.198
TC	150	1.00	5.00	4.0008	.72505	-.914	.198
SCM	150	1.00	5.00	2.7967	1.05831	-.017	.198
EJE	150	1.00	5.00	3.6117	.76057	-.339	.198
SM	150	1.00	5.00	3.7583	.78920	-.494	.198
SE	150	1.00	5.00	3.3307	.98028	-.636	.198
Valid N (listwise)	150						

EPF: employee physical fitness; TC: team collaboration; SCM: stress coping mechanism; EJE: employee job engagement; SM: sports motivation; SE: Sports engagement.

4.3. Sample Test for Data Redundancy and Adequacy

The researcher performed the Kaiser-Meyer-Olkin (KMO) test and Bartlett's test in order to assess the adequacy of the sample and the sufficiency of the data. According to Shrestha (2021), the KMO test has a minimum threshold value of 0.6. The findings of this study indicate a KMO test value of 0.853, providing evidence that the collected data and sample size were sufficient for the intended model. Additionally, Bartlett's test was employed to assess the presence of redundancy in the data, while the significance value in the subsequent table verified that the data exhibits a null trend of correlation between the coefficients.

Table 5

Sample Adequateness

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.853
Bartlett's Test of Sphericity	Approx. Chi-Square	4871.630
	df	903
	Sig.	.000

4.4. Exploratory Factor Analysis

The researcher conducted an examination of the scale items' validity through the utilisation of factor loading analysis. Additionally, the researcher assessed the rotated component matrix to facilitate the interpretation of the obtained results. The researcher employed a predetermined threshold value of 0.7 and observed that all variables exhibited values exceeding this threshold range in their respective columns. This finding provides assurance regarding the quality and reliability of the collected data. The subsequent table presents the factor loading values of the items within the rotated component matrix table.

4.5. Correlation Testing

The purpose of this study was to examine the internal relationship between the variables included in the research framework. To assess this relationship, the researcher employed the Pearson correlation analysis technique. The resulting correlation values, along with their corresponding significance levels, are presented in the attached table.

Table 6

EFA

	1	2	3	4	5	6
EPF1			.721			
EPF2			.829			
EPF3			.783			
EPF4			.773			
EPF5			.774			
EPF6			.829			
TC1		.795				
TC2		.750				
TC3		.841				
TC4		.800				
TC5		.822				
TC6		.833				
TC7		.705				
TC8		.736				
SCM1			.802			
SCM2			.784			
SCM3			.712			
SCM4			.805			
SCM5			.829			
SCM6			.757			
EJE1					.819	
EJE2					.859	
EJE3					.780	
EJE4					.737	
SM1				.832		
SM2				.881		
SM3				.775		
SM4				.828		
SE1	.779					
SE2	.778					
SE3	.757					
SE4	.854					
SE5	.824					
SE6	.785					
SE7	.876					
SE8	.879					
SE9	.805					
SE10	.803					
SE11	.787					
SE12	.781					
SE13	.696					
SE14	.688					
SE15	.784					

Table 7

Correlation

		EPF	TC	SCM	EJE	SM	SE
EPF	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	150					
TC	Pearson Correlation	.129	1				
	Sig. (2-tailed)	.117					
	N	150	150				
SCM	Pearson Correlation	-.067	.045	1			
	Sig. (2-tailed)	.418	.581				
	N	150	150	150			
EJE	Pearson Correlation	.177*	.351**	-.141	1		
	Sig. (2-tailed)	.030	.000	.086			
	N	150	150	150	150	150	150
SM	Pearson Correlation	.382**	.224**	-.086	.375**	1	.023
	Sig. (2-tailed)	.000	.006	.293	.000		.784
	N	150	150	150	150	150	150
SE	Pearson Correlation	-.054	-.115	.186*	-.064	.023	1
	Sig. (2-tailed)	.513	.162	.023	.439	.784	
	N	150	150	150	150	150	150

4.6. R-Square Test

The present study employed a test to assess the collective impact of the independent variables on the dependent variable. The subsequent table displays the overall variance of 21% observed in the dependent variable.

Table 8

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.467 ^a	.218	.196	.68189

The purpose of this test is to assess the overall fitness of the model by examining the significance of the f-value. The subsequent table provides further confirmation of the model's fitness by considering the presence of a significant f-value.

Table 9

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.770	4	4.693	10.092	.000 ^b
	Residual	67.422	145	.465		
	Total	86.192	149			

4.8. Hypotheses Testing

The researchers employed fundamental regression analysis to determine the significance of the synthesised relationships among the variables discussed in the literature review. The subsequent table, serving as an analytical tool, presents the

regression coefficients for each variable. The correlation between team collaborations, sports motivation, and employee job engagement yielded statistically significant results. However, the correlation between sports engagement, employee physical fitness, and employee job engagement was found to be statistically insignificant.

Table 10

Direct Effects

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
(Constant)	1.379	.450		3.066	.003	
1	EPF	.019	.067	.023	.287	.775
	TC	.289	.080	.275	3.624	.000
	SM	.294	.078	.305	3.764	.000
	SE	-.029	.058	-.038	-.508	.612

4.9. Mediation Analysis

There were four hypotheses that the researcher came up with about how stress-coping strategies might affect the relationship between the independent variables (IVs) and

the outcome variable (EPE). However, the analysis showed that SPM's role as a mediator is not statistically significant. This means that all mediation hypotheses put forward in the previous literature are not valid. The subsequent table displays the results of the mediation analysis.

Table 11

Indirect effects

Relationship	Indirect effect	Confidence Interval		t-statistics	Conclusion
		Lower-bound	Upper-bound		
EPF→SCM→ EPE	.0097	-.0273	.0559	.0201	Rejected
SE→ SCM → EPE	-.0067	-.0472	.0381	.0209	Rejected
SM→ SCM→ EPE	.0362	-.0021	.0884	.0236	Rejected
TC→ SCM → EPE	.0282	-.0102	.0761	.0223	Rejected

5. Discussion

The primary objective of this study was to investigate the influence of social support, time control, and emotional processing flexibility on employee job engagement, particularly in the context of stress-coping strategies. The study's empirical findings demonstrate a noteworthy influence of social media (SM) on employee job engagement, thereby providing support for hypothesis 1 (H1). This finding suggests that individuals who demonstrate motivation to engage in sports or other physical activities outside of their professional responsibilities exhibit a heightened degree of job engagement. Therefore, employees who possess authentic motivation for sports may demonstrate a high level of enthusiasm and dedication towards their job engagement. Consequently, the cultivation of sports motivation within the workforce can effectively enhance employees' levels of job engagement, thereby underscoring the significance of taking into account employees' overall well-being in addition to their professional obligations.

Additionally, the study posited a noteworthy correlation between employees' involvement in sports and their level of engagement in their job. Nevertheless, the empirical results failed to demonstrate any substantial influence of social entrepreneurship (SE) on employees' job engagement, thereby refuting hypothesis H2. Put differently, there is no direct correlation between the degree of employee involvement in sports or physical activities and their level of engagement in their professional roles. This finding differs from those of a prior study by [Kiema-Junes et al. \(2022\)](#), which showed a significant impact of participating in sports and physical activities on employees' work engagement. In a previous study, [Jindo et al. \(2020\)](#) found a notable association between engagement in physical activities and levels of work engagement. The study does not present evidence of a statistically significant association between self-esteem (SE) and emotional job engagement (EJE).

Based on the findings of the literature review, there is a lack of statistical evidence to support a substantial correlation

between the two variables within the service sector of the Kingdom of Saudi Arabia (KSA). Moreover, the results of the investigation provide evidence for a substantial association between transformational leadership (TC) and employee job engagement, thereby confirming hypothesis H3. The findings of the study indicate that an increase in TC within the organisational setting is associated with a notable improvement in work engagement among the workforce. The proposition posits that individuals who demonstrate high levels of effectiveness within a collaborative work setting, wherein they engage in the exchange of ideas and provide mutual support, are more likely to contribute to the attainment of organisational objectives, thereby fostering increased levels of job engagement.

It is imperative for organisations to develop strategic initiatives aimed at fostering teamwork and cultivating a collaborative work environment in order to enhance levels of job engagement among employees. Therefore, the promotion of collaboration and trust-building among employees has the potential to enhance their level of job engagement, aligning with the conclusions drawn in the research conducted by Christopoulos (2021). Furthermore, the study posited a noteworthy influence of Employee Performance Feedback (EPF) on individuals' levels of job engagement. Nevertheless, the results obtained from the study fail to provide evidence in favour of this association, thereby leading to the rejection of Hypothesis 4 (H4). Therefore, the results of this study do not support the notion that EPF has a substantial influence on job engagement within the specific context of this research. Put differently, there was no apparent correlation between improving the physical fitness of employees and an elevated level of EJE.

Additionally, the current study also investigated the mediating impact of supply chain management (SCM). However, the empirical evidence does not provide support for the substantial mediating influence of supply chain management (SCM) on any observed correlation in the study. The absence of support for the mediating function of supply chain management (SCM) implies that it does not facilitate the translation of the effects of social media (SM), social entrepreneurship (SE), technological capabilities (TC), and environmental performance factors (EPF) on environmental, social, and economic outcomes (EJE).

6. Conclusion

The Kingdom of Saudi Arabia (KSA) has prioritised the improvement of job engagement among employees in the service sector as a means to deliver superior services to consumers. The primary objective of this study was to examine

the complex interplay between social media (SM), traditional communication (TC), electronic personalisation features (EPF), and emotional job engagement (EJE). The study's findings underscore the notable factors that exert influence on employees' work engagement in the workplace. The findings of the study indicate a positive correlation between higher levels of social media usage (SM) among employees and increased levels of job engagement. This highlights the importance of motivational factors in increasing employees' work-related enthusiasm and enhancing their job engagement. The service sector can leverage this insight to incorporate social media (SM) as a component of its strategy aimed at improving the overall economic and job environment (EJE).

Additionally, the research has yielded valuable insights regarding the importance of TC in enhancing the EJE. The cultivation of teamwork and collaboration within an organisational setting fosters an atmosphere in which employees actively provide assistance and establish a unified team, resulting in heightened levels of work engagement. Furthermore, the research findings revealed that the mediating effect of SCM was deemed statistically insignificant, suggesting that it does not adequately serve as an intermediary variable in the observed correlations. Consequently, the research emphasised the necessity for organisations to cultivate a work environment that promotes motivation and collaboration among their workforce in order to enhance their level of job engagement.

7. Implications

The study holds greater significance both in terms of theory as well as practicality. The theoretical and practical implications of the study are discussed as under.

7.1 Theoretical Implications

This study holds significant theoretical importance within the fields of sports psychology and human resource management. The study's findings have relevance and applicability within both of these broader domains. This study has investigated the potential impact of sports activities on employees' levels of engagement in their professional duties. This study expands upon the current body of literature by examining various factors that are associated with sports motivation, sports engagement, team collaboration, employee physical fitness, stress coping mechanisms, and employee job engagement. This study contributes to the existing body of knowledge by examining the variables in question and assessing their formulated hypotheses. Specifically, the present study investigates the moderating role of stress coping mechanisms, thereby introducing novel insights to the existing literature. Within the specific context of Saudi

Arabia, the outcomes of the research possess heightened theoretical significance.

7.2 Practical Implications

The study proposes that managers in the service sector of Saudi Arabia should consider integrating sports activities into their fundamental business strategies. The imperative for management within these firms is to prioritise sports events as a means of fostering employee engagement and promoting ongoing empowerment. The study's findings also emphasise crucial elements and variables that can assist managers in enhancing employee empowerment and promoting their physical and mental well-being. According to the study's findings, it is recommended that organisations incorporate athletic activities into their operations and offer comprehensive training to employees. This will enable staff members to actively engage in sports activities, thereby enhancing overall staff engagement levels. Enhancing team cooperation and athletic motivation is of paramount importance.

The study proposes that organisational managers should prioritise the development and implementation of optimal stress coping mechanisms and techniques. This is crucial in order to enhance employee engagement, as stress has negative implications for both health and work performance. In conclusion, the study proposes that the government of Saudi Arabia and its policymakers should develop and enact policies and regulations that promote sports activities within organisational settings. This would require all organisations to comply with these policies, leading to enhanced working conditions and overall employee performance. Moreover, such measures would ultimately benefit firms by reducing employees' turnover intentions and increasing their job engagement.

8. Limitations and Future Directions

The current study offers significant contributions to the understanding of the interconnections among social media usage, self-esteem, trust in others, emotional processing flexibility, and emotional job engagement. However, it is important to acknowledge that this study also has certain limitations. A noteworthy constraint of this study pertains to the context that is specific to the industry under investigation. The research primarily concentrates on the service sector within the Kingdom of Saudi Arabia (KSA), which could potentially restrict the applicability of the results to different

sectors and demographic groups. Each sector or industry possesses a distinct workplace culture and set of job demands, which can exert a substantial impact on the observed correlations in the current study.

Therefore, it is recommended that future research endeavours strive to incorporate a wider range of industries in order to yield more comprehensive and inclusive results. Furthermore, the current investigation is centred on a specific set of variables and may inadvertently neglect other significant factors that impact the EJE. This limitation arises from the inherent difficulty of encompassing all relevant variables within the scope of a single study. Hence, it is imperative for future research endeavours to undertake an analysis of additional pertinent factors, including leadership style and organisational culture. Thus, forthcoming research endeavours may incorporate the consideration of moderating variables that exert an influence on the associations between the variables under observation. For example, future research endeavours may investigate the moderating influence of organisational support and policies on the promotion of social media usage among employees as a means to enhance the organisation's overall employee job engagement. This encompasses the assessment of the efficacy of different fitness programmes or sports campaigns supported by the organisation in order to augment Employee Job Engagement (EJE).

Furthermore, the current study is predominantly grounded in a quantitative research design and provides a statistical analysis to investigate the associations among the variables. While this particular research design provides valuable insights into the factors that influence EJE, it is possible that it may not fully capture the contextual nuances that can be obtained through qualitative research methods. Hence, forthcoming research endeavours may consider integrating qualitative research methodologies, such as interviews or surveys, to effectively capture the subjective perspectives of employees pertaining to social entrepreneurship, employee job engagement, and team collaboration. Therefore, it is important to consider the limitations of the current study as it provides valuable insights for future research in this field.

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