JOURNAL OF MANAGEMENT AND BUSINESS SOLUTIONS

The Impact of Psychological Needs on Productivity and Sustainable Performance: The Mediating Role of Employees' Job Affects in the Sports Sector of Basra Province, Iraq

1. Ibrahim Musaab. Yaseen Al Rawdhan: Department of Motor Behaviour, Faculty of Physical Education and Sport Sciences, University of Tabriz, Tabriz, Iran
2. Mohammad Taghi. Aghdasi*: Department of Motor Behaviour, Faculty of Physical Education and Sport Sciences, University of Tabriz, Tabriz
3. Yaghoub. Badriazarin: Department of Sport Management, Faculty of Physical Education and Sport Sciences, University of Tabriz, Tabriz, Iran

*corresponding author's email: Iran.mt_aghdasi@tabrizu.ac.ir

ABSTRACT

The aim of this study was to examine the effect of psychological needs on productivity and sustainable performance, with the mediating role of employees' job affects, among staff working in the sports sector of Basra Province, Iraq. In terms of purpose, the research was applied, and in terms of methodology, it was descriptive–correlational. The statistical population included all employees of the Departments of Sport and Youth, sports federations, club staff, and sports teams in Basra Province. Using a simple random sampling method, 274 individuals were selected as the sample. Data were collected using the Psychological Needs at Work Questionnaire by Gagné (2003), the ACHIEVE Human Resource Productivity Questionnaire by Hersey and Goldsmith (1980), the Sustainable Job Performance Questionnaire by Zaid et al. (2018), and the Job-Related Affective Well-Being Scale by Van Katwyk et al. (2000). Face and content validity were confirmed based on the opinions of experts in sport management, and the overall reliability of the questionnaires was calculated using Cronbach's alpha coefficient. Structural equation modeling was employed for data analysis. The results showed that all relationships among the variables of the research model were significant at the 0.99 confidence level, and all hypothesized relationships were confirmed. The findings also indicated that 23.8% of the effect of psychological needs on productivity and 18.1% of their effect on sustainable performance were explained indirectly through the mediating variable of job affects. Therefore, it can be concluded that enhancing productivity and sustainable performance among employees depends on satisfying basic psychological needs—namely, the needs for competence, autonomy, and relatedness—and on paying attention to employees' job affects. These factors should be given serious consideration by sports managers in Basra Province, who should strive to strengthen both variables among their employees.

Keywords: Psychological needs; Productivity; Sustainable performance; Job affects

Introduction

Psychological needs have become a central explanatory lens in contemporary management and organizational behavior research because they capture the "why" behind employees' effort, persistence, and adaptive functioning

Article history:
Received 07 October 2025
Revised 18 December 2025
Accepted 25 December 2025
Published online 31 December 2025

How to cite this article:
Yaseen Al Rawdhan, I. M., Aghdasi, M. T., & Badriazarin, Y. (2025). The Impact of Psychological Needs on Productivity and Sustainable Performance: The Mediating Role of Employees' Job Affects in the Sports Sector of Basra Province, Iraq. *Journal of Management and Business Solutions, 3*(6), 1-16. https://doi.org/10.61838/jmbs.187

© 2025 the authors. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

in demanding work environments. In sectors where human performance is tightly coupled with service quality and stakeholder expectations—such as sport organizations—understanding how employees' psychological needs translate into sustainable performance and productivity is not merely theoretical; it is a strategic concern for organizational effectiveness. Basic Psychological Need Theory (BPNT), as a core mini-theory within Self-Determination Theory, posits that the satisfaction of autonomy, competence, and relatedness functions as a universal psychological nutriment that energizes self-regulated behavior and high-quality motivation, while thwarting these needs undermines functioning and well-being (1). In applied settings, this perspective provides a parsimonious framework for explaining why the same performance management system can yield resilient, proactive, and committed employees in one context but disengaged, strained, or counterproductive behavior in another. The growing attention to BPNT in management is also consistent with broader calls for evidence-based approaches to human resource development and sustainability-oriented performance systems that do not treat productivity and well-being as a zero-sum trade-off, but as potentially reinforcing outcomes when psychological conditions are supportive (2, 3).

At the same time, organizations worldwide are increasingly evaluated not only by short-term outputs but by their capacity to generate sustainable performance—economic, social, and environmental value—through responsible and resilient work systems. Sustainable performance at the employee level reflects the ability to maintain effective functioning over time without depleting personal resources or generating harmful spillovers, and it aligns with sustainability-oriented management practices that emphasize continuity, adaptability, and long-term value creation (2, 4). This shift has elevated the importance of psychological resources and affective functioning, because sustainable performance depends on how employees regulate energy, cope with demands, and remain engaged under constraints. Evidence from service contexts suggests that optimism, resilience, and positive psychological capacities can strengthen sustainable work performance, especially when work systems support constructive creativity and adaptive coping (4, 5). In parallel, organizations are also undergoing rapid transformations—digitalization, technology integration, new forms of work, and shifting employment arrangements—that reshape how employees experience autonomy, competence, and social connection. Studies on digital-era HR technology integration and organizational performance highlight that technology can enable productivity gains, but it also changes the psychological structure of work and may intensify uncertainty or relational distance if not designed with human needs in mind (6, 7).

A particularly relevant line of scholarship concerns how need satisfaction is linked to performance through motivational quality, commitment, and self-regulatory processes. BPNT argues that need satisfaction promotes autonomous motivation and internalization, which in turn support persistence, learning, and higher-quality performance outputs (1, 8). Empirically, research in public and organizational contexts indicates that psychological needs are associated with task performance and work engagement, and that engagement often functions as a mechanism translating need satisfaction into performance outcomes (9). Similarly, experimental evidence in public management shows a causal pathway from need satisfaction to job attitudes (e.g., satisfaction), which are known antecedents of performance and retention, reinforcing the managerial relevance of psychological need support (10). In applied organizational settings, the role of supervisor support and the satisfaction of needs has also been tied to work motivation among staff and line employees, implying that need-supportive climates are actionable managerial levers rather than abstract psychological constructs (11). Complementing these findings, transformational and servant leadership perspectives suggest that leadership styles can shape the psychological conditions that either

satisfy or frustrate employees' needs, thereby influencing discretionary behavior and performance-related outcomes (12, 13).

Within this broader framework, job-related affect occupies a critical position because emotions at work are not incidental—they are integral to how employees interpret demands, allocate attention, and sustain effort over time. Job-related affective well-being captures recurring positive and negative affective states associated with work, which influence cognitive functioning, interpersonal behavior, and self-regulation. Theoretically and empirically, affect is a plausible mechanism linking psychological conditions to performance because affective states shape motivation, creativity, decision-making, and persistence under pressure. In organizational studies, job-related affective well-being has been linked to job satisfaction and stress, and self-efficacy has been proposed as an explanatory mechanism within these relationships, underscoring the interplay between affect, beliefs, and work outcomes (14). In adjacent psychological research, positive and negative affect have also been positioned as mediators between psychological resources (e.g., mindfulness) and broader well-being outcomes, supporting the general proposition that affect can transmit the impact of psychological antecedents into consequential outcomes (15). In sport and performance domains, emotions are additionally shaped by cognitive reappraisal and self-regulatory strategies, and need satisfaction is associated with more adaptive emotional profiles, suggesting that need support may indirectly influence performance by improving affective regulation and emotional tone (16). Even in athletic contexts where demands differ from organizational work, controlling styles can undermine need satisfaction and lead to maladaptive affective responses (e.g., fear of failure), highlighting the sensitivity of affective functioning to need-supportive versus controlling environments (17).

The role of affect becomes even more prominent when organizations face stressors that threaten employees' psychological safety, security, or relational needs. Workplace ostracism, exclusion, and interpersonal threat can elicit strong negative affect and undermine relational need satisfaction, while psychological capital and efficacy can shape employees' responses to these threats (18). Similarly, workplace bullying is increasingly recognized as a risk factor for deteriorating mental health, job satisfaction, and productivity helpfulness, implying that affective strain can translate directly into performance loss and diminished sustainability of human resources (19). From a psychological contract perspective, perceived breach can trigger negative emotions and reduce commitment and satisfaction, which in turn can increase turnover intentions and weaken performance systems (20). These streams collectively suggest that sustainable performance requires attending to the emotional realities of work and the psychological conditions that give rise to adaptive versus maladaptive affect. Accordingly, interventions and organizational practices that strengthen psychological empowerment and resilience may buffer employees from stress and sustain functioning, as shown in hospitality and travel contexts where empowerment has been tied to resilience (21). Mini-review evidence likewise points to interconnections among work–life balance, psychological structure, employee resilience, and organizational commitment, indicating that affective and psychological systems operate jointly in shaping employee well-being and functioning (22).

In parallel, a growing body of research has examined determinants of productivity and sustainable performance across industries, emphasizing that performance for sustainability is multi-determined and context-sensitive. For example, in the insurance industry, determinants of employee performance for sustainability reflect organizational and individual factors, illustrating the need for integrative models that connect psychological variables to sustainability outcomes rather than treating sustainability as purely a process or strategy issue (3). In the Ministry of Sport and Youth context, human resource development has been examined as a pathway to productivity,

suggesting that capability building and developmental practices complement psychological need satisfaction in driving productive functioning (23). Research in Iran and other contexts has also indicated that psychological empowerment, workplace happiness, and job engagement can jointly influence productivity, offering convergent evidence that affective and motivational constructs are closely tied to productive behavior (24). Furthermore, studies focusing on psychological empowerment and organizational citizenship behavior, with mediating mechanisms such as social intelligence, reinforce the idea that psychological variables are embedded in social and relational processes that matter for performance (25). In addition, employee voice among knowledge workers in emerging economies highlights that when employees perceive enabling conditions and feel psychologically safe to express ideas, organizations can benefit through learning and innovation, which are critical for long-term and sustainable performance (26).

The sustainability lens also intersects with organizational learning and operational excellence approaches that support performance durability and resource efficiency. For instance, organizational identity and circular economy orientations have been linked with inter- and intra-organizational learning, lean management, and zero-waste practices, demonstrating that sustainable production and consumption agendas require learning-based capabilities that can be strengthened through supportive cultures and identity work (27). Although such studies often operate at the organizational level, their logic implies that sustainable performance is partially a function of human behavior—learning, commitment, and continuous improvement—which is itself shaped by psychological need satisfaction and affective states. Likewise, competitive supply chain pricing and corporate social responsibility dimensions point to the performance consequences of integrating responsibility and sustainability into decision-making systems, which can shape employees' perceptions of purpose and fairness, indirectly influencing engagement and performance (28). In financial and technology-oriented contexts, the impact of e-banking, job security, innovativeness, and productivity on organizational performance further underscores that productivity outcomes arise from a complex system in which psychological security, innovation orientation, and work design matter (29). Collectively, these findings support the relevance of investigating how core psychological needs and affective experiences predict productivity and sustainable performance within specific institutional settings.

The focus on psychological needs is also reinforced by evidence linking need satisfaction to resilience and psychological capital—constructs that are central to sustained functioning. A human agency model suggests that basic psychological needs can support resilience, which is crucial for maintaining performance under adversity and change (30). In workplace contexts, psychological empowerment programs have been shown to increase psychological capital and job-related affective well-being, indicating that organizational interventions can shape both psychological resources and affective outcomes (31). Relatedly, employee psychological well-being has been connected to job performance through mediating and moderating mechanisms, implying that well-being and performance are intertwined rather than competing outcomes (32). Mental health is also a significant determinant of productivity, and critical reviews emphasize that productivity losses can stem from psychological distress and mental health challenges, highlighting the necessity of considering psychological determinants in performance models (33). More recently, studies have expanded to consider counterproductive behaviors and their psychological antecedents, emphasizing roles for organizational embeddedness, emotional intelligence, and psychological ownership—factors closely aligned with how employees experience autonomy, competence, and belonging in organizations (34). In addition, psychological ownership has been linked to retention and mediated by commitment

and engagement, underscoring that psychological experiences shape both performance outcomes and workforce sustainability (35).

Another managerial relevance stems from the operationalization of psychological needs and their measurement across contexts. Research across diverse populations has examined how need satisfaction relates to well-being and outcomes, including gig workers, adolescents, and physical activity contexts, offering methodological insights and evidence of the broad applicability of need constructs (7, 36, 37). While these contexts differ from workplace settings, they strengthen confidence in the robustness of need satisfaction as a predictor of well-being and adaptive functioning. Studies focused on physical training outcomes demonstrate that psychological needs, self-efficacy, and motivation can predict behavioral adherence and performance outcomes, supporting the argument that need satisfaction influences action through motivational and efficacy pathways (38). Similarly, research on psychological empowerment and resilience in service industries indicates that empowerment processes can sustain adaptive functioning under uncertainty, which is relevant for organizations operating in competitive, resource-constrained environments (21). In organizational competence research, psychological factors and organizational intelligence have been linked to people's competence, suggesting that psychological determinants are foundational for skill expression and capability utilization, which are central to productivity (39). Moreover, workplace productivity has been studied directly as a function of psychological factors, indicating consistent empirical attention to psychological antecedents of productive outcomes (40).

Within sport-sector organizations specifically, the work environment is characterized by a unique mix of public accountability, seasonal demand fluctuations, stakeholder pressures, and emotionally charged interactions with athletes, clubs, and communities. These features may intensify the salience of employees' affective experiences and psychological need satisfaction. Leadership styles and HR systems that promote need satisfaction and engagement may be particularly crucial for sustaining performance quality in such contexts (12, 41). High-performance HRM practices have been linked to readiness for change, affective commitment, and employee performance, with cultural moderators such as hierarchy culture shaping these relationships, implying that sport organizations—often embedded in public and semi-public institutional logics—must align HR practices with culture to translate psychological and affective resources into performance (41). In addition, workplace spirituality and passion-related mechanisms have been associated with job performance, mediated by deviant behavior and workplace passion, pointing to the importance of meaning, values, and affective energy in shaping performance outcomes (42). When these considerations are combined with evidence that exclusion and interpersonal threat shape relational needs and efficacy responses (18), it becomes apparent that an affective-mediation model is theoretically coherent for sport-sector employees.

Despite the expanding literature, two gaps remain salient for research and practice. First, many studies examine psychological needs in relation to engagement or satisfaction, but fewer explicitly integrate productivity and sustainable performance simultaneously within a single structural model, especially in sport-sector administrative and organizational settings. Second, while affect is frequently treated as an outcome (e.g., well-being), its mediating role between need satisfaction and performance outcomes—particularly sustainable performance that includes long-term functioning—remains under-investigated in certain regional contexts. This is especially important in emerging economies where institutions, labor markets, and organizational systems may create distinct pressures on employees' autonomy, competence development, and relatedness. Moreover, increasing technological integration and organizational transformation can alter employees' experience of control, capability use, and social

connection, potentially changing the need–affect–performance dynamics (6). Considering these dynamics is critical for designing management interventions that achieve performance goals without compromising human sustainability.

Against this background, the present study positions basic psychological needs as foundational antecedents and job affects as a proximal psychological mechanism through which needs influence two key organizational outcomes: human resource productivity and employee sustainable performance. The model is aligned with BPNT's proposition that need satisfaction fosters adaptive functioning, with affect providing an explanatory pathway through which psychological conditions translate into performance-relevant behavior and long-term functioning (1, 32). It also resonates with empirical findings that psychological conditions and capabilities are associated with sustainable work performance and productivity across sectors (3, 5, 24). By testing this integrated model in the sports sector of Basra Province, the study contributes context-specific evidence that can inform sport management practice, HR development, and sustainability-oriented performance systems.

The aim of this study was to examine the effect of basic psychological needs on human resource productivity and sustainable employee performance, considering the mediating role of employees' job affects in the sports sector of Basra Province, Iraq.

Methods and Materials

The design of the present study is a correlational design implemented through structural equation modeling (SEM), which constitutes a multivariate correlational method. The statistical population of the study included all employees of the Departments of Sport and Youth, sports federations, club staff, and sports teams in Basra Province in 2024, totaling 820 individuals. Using a simple random sampling method, 274 participants were selected as the sample. In the present study, information related to the research background was collected from journal articles, books, and academic databases, and data collection was carried out using four standardized questionnaires, as described below.

Basic Psychological Needs Satisfaction Scale (BNSS) was adapted from the Psychological Needs at Work Scale developed by Gagné (2003). The scale was translated into Persian for use in the Iranian population by Daftarchi (2010). It consists of 21 items and measures the satisfaction of three needs: autonomy, competence, and relatedness. Items are rated on a seven-point Likert scale ranging from 7 (completely true) to 1 (completely false). For example, the item "I feel free to decide for myself how to live my life" assesses autonomy need satisfaction; the item "Recently, I have been able to learn new and interesting skills" assesses competence; and the item "Overall, people treat me warmly" assesses relatedness. Gagné et al. (2005) reported Cronbach's alpha coefficients of 0.68 for autonomy, 0.75 for competence, and 0.85 for relatedness, indicating acceptable reliability, and also reported satisfactory validity for the scale. In the study by Omranian and Sheikh Eslami (2012), test–retest reliability was examined with 42 participants over a one-month interval, yielding reliability coefficients of 0.88 for autonomy, 0.69 for competence, and 0.78 for relatedness, which indicate appropriate reliability of the questionnaire.

In the present study, job affects were measured using the Job-Related Affective Well-Being Scale developed by Van Katwyk et al. (2000). This scale consists of 20 items and assesses two components: positive affect and negative affect. Responses are scored on a five-point Likert scale ranging from 1 (never) to 5 (always). Van Katwyk et al. (2000) reported Cronbach's alpha coefficients of 0.80 for positive affect and 0.95 for negative affect. Hashemi et al. (2014) reported Cronbach's alpha coefficients of 0.92 for positive affect and 0.93 for negative affect. Similarly,

Farrokhi and Ahmadard (2019) reported reliability coefficients of 0.90 for positive affect and 0.86 for negative affect using Cronbach's alpha.

The Human Resource Productivity Questionnaire is based on the ACHIEVE model proposed by Hersey and Goldsmith in 1980. This instrument uses a five-point Likert scale (very low, low, moderate, high, very high) and includes seven dimensions with a total of 26 items: ability (items 1–3), clarity (items 4–7), support (items 8–11), motivation (items 12–15), evaluation (items 16–19), validity (items 20–23), and environment (items 24–26). Scoring is based on the five-point Likert scale, with one point assigned to "very low" and five points to "very high." The minimum total score is 26 and the maximum score is 130. For the ability and environment dimensions, scores range from 3 to 15, while for the other dimensions, scores range from 4 to 20 (Ryan & Deci, 2017). In this questionnaire, a mean score below 2 indicates a weak level, a mean score between 2 and 4 indicates a moderate level, and a mean score between 4 and 5 indicates an excellent level. Due to the extensive use of the ACHIEVE model questionnaire in human resource productivity studies and its standardized nature, its validity has been repeatedly confirmed in Iran by academic experts. Yaqubi et al. (2010) reported a Cronbach's alpha coefficient of 0.87, indicating satisfactory reliability.

To assess employees' sustainable performance, the five-point scale developed by Zaid et al. (2018) was used. This questionnaire includes three subdimensions: economic performance, social performance, and environmental performance. Responses are scored on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Hamzavi et al. (2024) confirmed the face and content validity of the questionnaire and reported a Cronbach's alpha coefficient of 0.773, indicating acceptable reliability.

Data collection was conducted using both field and library methods. In the library method, the researcher reviewed up-to-date domestic and international books and journal articles, academic databases, and electronic resources to develop the theoretical framework. For the field method, after preparing and revising the questionnaires based on the supervisor's feedback, the researcher distributed them among employees active in the sports sector of Basra Province. During distribution, necessary explanations were provided, and any ambiguities in the questionnaire items were clarified for participants. To prevent sample attrition, 295 questionnaires were distributed; after collection and removal of incomplete questionnaires, 274 valid questionnaires were retained for analysis. Following hypothesis testing, discussion and final conclusions were conducted.

After data collection via questionnaires, the Kolmogorov–Smirnov test was used to examine the distribution of the data. Structural equation modeling was employed to predict the contribution and role of predictor variables on the criterion variable and the mediating variable. For this purpose, SmartPLS version 3 and SPSS version 26 were used. In this study, after translating the questionnaires into Arabic, face and content validity were assessed and confirmed using the opinions of 10 experts in sport management and Arabic language specialists. After reviewing their comments and making the necessary revisions, face and content validity were established. Reliability was assessed using Cronbach's alpha, yielding coefficients of 0.813 for basic psychological needs, 0.835 for productivity, 0.774 for sustainable performance, and 0.830 for job affects.

Findings and Results

The results of the demographic characteristics presented in Table 1 show that out of 274 respondents, 125 were women (45.6%) and 149 were men (54.4%). In terms of marital status, 79 participants (28.8%) were single and 195 participants (71.2%) were married. Regarding age, 87 participants (31.8%) were in the 30–35 age range, while 9

participants (3.3%) were over 60 years old. In terms of educational level, 164 respondents (59.9%) held a bachelor's degree, whereas 46 respondents (16.9%) held a doctoral degree.

Table 1. Demographic Characteristics of the Study Sample

Variable	Category	Frequency	Percentage
Gender	Female	125	45.6
	Male	149	54.4
Marital status	Single	79	28.8
	Married	195	71.2
Education	Associate degree	64	23.4
	Bachelor's degree	164	59.9
	Doctoral degree	46	16.9
Age	Under 30 years	66	24.1
	30–35 years	87	31.8
	36–50 years	80	29.2
	51–60 years	32	11.7
	Over 60 years	9	3.3

Table 2 presents descriptive indices including skewness, kurtosis, multivariate kurtosis, mean, standard deviation, and the minimum and maximum scores of participants for the study variables.

Table 2. Distribution Indices of the Research Variables

Variable	Skewness	Kurtosis	Kolmogorov–Smirnov	Sig. level	Mean	SD
Basic psychological needs	0.024	−0.537	0.078	0.087	3.42	0.64
Human resource productivity	0.112	−0.160	0.087	0.078	3.26	0.55
Sustainable performance	−1.060	0.299	0.069	0.097	4.11	0.58
Job affects	−0.117	−0.170	0.085	0.081	3.22	0.72
Autonomy	−0.029	−0.367	0.093	0.073	3.45	0.78
Competence	−0.034	−0.363	0.082	0.083	3.49	0.75
Relatedness	−0.307	−0.464	0.091	0.074	3.32	0.71
Multivariate kurtosis (critical value)						(3.059 / 1.768)

The results indicated that, based on the skewness and kurtosis indices—considering ±2 for skewness and ±7 for kurtosis—all variables were normally distributed. For multivariate normality, the ratio of the multivariate kurtosis index (3.059) to the critical value (1.768) was 1.730, which is less than 2; therefore, multivariate normality was confirmed. In addition, because the significance levels of the Kolmogorov–Smirnov test for all variables were greater than 0.05, the normal distribution of the data can be assumed.

The means and standard deviations were as follows: basic psychological needs (M = 3.42, SD = 0.64), job affects (M = 3.45, SD = 0.78), human resource productivity (M = 3.26, SD = 0.55), and sustainable performance (M = 4.11, SD = 0.58).

The following figure illustrates the model based on coefficients of determination and significance levels.

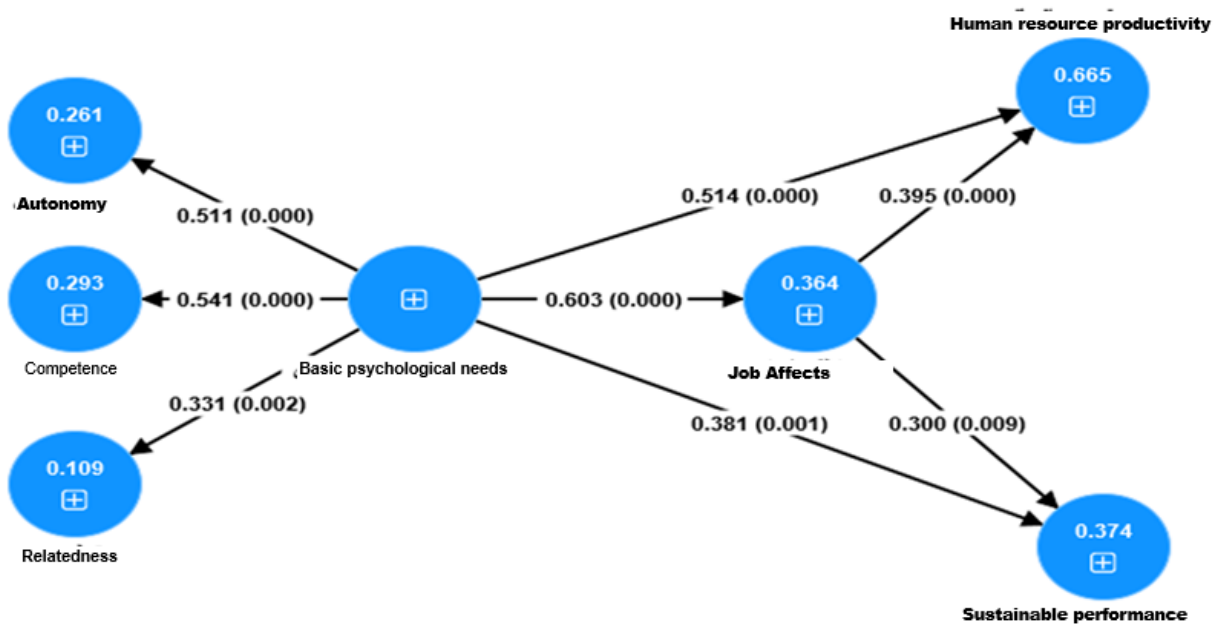

Figure 1. Coefficients of determination and significance levels.

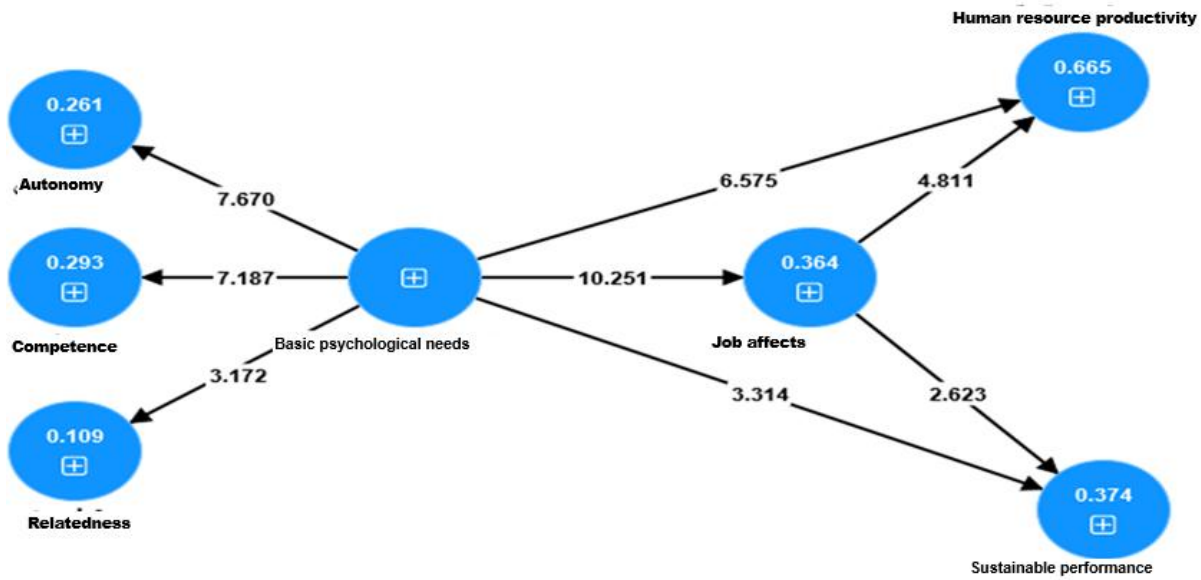

Figure 2. t-statistic values at the 0.95 confidence level.

As shown, all paths were significant, with t-statistic values exceeding 1.96 at the 0.95 confidence level and error values below 0.05.

The overall research model was evaluated using the SRMR criterion.

Table 3. Goodness-of-Fit Indices for the Overall Research Model

Index	Saturated model	Estimated model
Standardized Root Mean Square Residual (SRMR)	0.056	0.072
Root Mean Square Theta (RMS Theta)		0.055

An SRMR value below 0.10, or below 0.08 in a more conservative interpretation, indicates good model fit. RMS_theta values below 0.12 indicate an acceptable model, whereas higher values indicate poor fit.

To evaluate the hypotheses, path coefficients and their associated statistics were used.

Table 4. Direct Effects Indices of the Hypotheses

Path	Path coefficient	R^2	SD	t-statistic	p-value
Job affects → Human resource productivity	0.395	0.156	0.082	4.811	0.001
Job affects → Sustainable employee performance	0.300	0.090	0.115	2.623	0.001
Basic psychological needs → Human resource productivity	0.514	0.264	0.078	6.575	0.001
Basic psychological needs → Sustainable employee performance	0.381	0.145	0.115	3.314	0.001
Basic psychological needs → Job affects	0.603	0.363	0.059	10.251	0.001

The path coefficient between basic psychological needs and employee productivity was 0.514, with an R^2 value of 0.264. The estimated t-statistic was 6.575, which exceeds 1.96, and the estimated error value was 0.001, which is below the acceptable threshold of 0.05. Therefore, at the 0.95 confidence level, the research hypothesis was confirmed, indicating a significant relationship between psychological needs and employee productivity.

The path coefficient between basic psychological needs and sustainable employee performance was 0.381, with an R^2 value of 0.145. The estimated t-statistic was 3.314, which exceeds 1.96, and the estimated error value was 0.001, which is below 0.05. Accordingly, at the 0.95 confidence level, this hypothesis was confirmed, indicating a significant relationship between psychological needs and sustainable employee performance.

To evaluate indirect effects, the bootstrap method for indirect effects was employed.

Table 5. Indirect Effects Indices

Path	Indirect effect size	t-statistic	p-value	Lower bound	Upper bound
Basic psychological needs → Job affects → Human resource productivity	0.238	5.118	0.002	0.146	0.329
Basic psychological needs → Job affects → Sustainable employee performance	0.181	2.719	0.002	0.043	0.304

The indirect effect size (mediating effect) of basic psychological needs on human resource productivity through job affects was 0.238, with an estimated t-statistic of 5.118, which exceeds 1.96. The estimated error value was 0.001, which is below 0.05. Therefore, at the 0.95 confidence level, the hypothesis was confirmed, indicating that job affects play a mediating role in the relationship between psychological needs and employee productivity.

Similarly, the indirect effect size of basic psychological needs on sustainable employee performance through job affects was 0.181, with an estimated t-statistic of 2.719, which exceeds 1.96. The estimated error value was 0.007, which is below 0.05. Thus, at the 0.95 confidence level, the hypothesis was confirmed, indicating that job affects mediate the relationship between psychological needs and sustainable employee performance.

Discussion and Conclusion

The present study examined the relationships among basic psychological needs, job affects, human resource productivity, and sustainable employee performance in the sports sector of Basra Province, with a particular focus on the mediating role of job affects. Overall, the findings provide strong empirical support for the proposed structural model and are largely consistent with contemporary theories and empirical evidence in management, organizational psychology, and sustainability-oriented performance research. All hypothesized direct paths were significant, and the indirect effects through job affects further clarified the psychological mechanisms through which need satisfaction translates into both productivity and sustainable performance outcomes.

The results demonstrated a significant and positive relationship between basic psychological needs and human resource productivity. This finding aligns closely with the core assumptions of Basic Psychological Need Theory,

which posits that satisfaction of autonomy, competence, and relatedness enhances autonomous motivation, self-regulation, and task engagement, thereby improving performance quality and efficiency (1, 8). Similar empirical patterns have been reported in organizational and public-sector contexts, where employees who experience higher levels of need satisfaction show greater task performance and engagement (9, 10). In sport-related and public service organizations, where work often involves coordination, stakeholder interaction, and nonroutine problem-solving, the ability to feel competent, self-directed, and socially supported appears particularly critical for sustaining productive effort. The present findings also resonate with evidence from the Ministry of Sport and Youth and other organizational settings showing that human resource development and psychological empowerment are key predictors of employee productivity (23, 24). Together, these results reinforce the view that productivity is not solely a function of technical skills or external incentives but is deeply embedded in employees' psychological experiences at work.

In addition to productivity, basic psychological needs were found to have a significant direct effect on sustainable employee performance. Sustainable performance emphasizes the capacity to maintain effective functioning over time without depleting personal or organizational resources, and the present findings suggest that need satisfaction is a foundational condition for such durability. This result is consistent with sustainability-oriented performance models that highlight the role of psychological and motivational resources in long-term effectiveness (2, 4). Employees whose basic needs are satisfied are more likely to exhibit resilience, adaptability, and persistence, which are essential for sustaining performance in dynamic and resource-constrained environments. Prior research has similarly shown that psychological empowerment, optimism, and resilience contribute to sustainable work performance across service and hospitality sectors (4, 5). Moreover, studies linking basic psychological needs to resilience and human agency further support the argument that need satisfaction strengthens employees' capacity to cope with stress and change, thereby promoting sustained performance (30). In the context of sport-sector organizations, where employees often face fluctuating workloads, public scrutiny, and emotional labor, the direct contribution of need satisfaction to sustainable performance is theoretically coherent and practically meaningful.

A central contribution of this study lies in demonstrating the mediating role of job affects in the relationships between basic psychological needs and both productivity and sustainable performance. The significant indirect effects indicate that psychological needs do not influence performance outcomes solely through cognitive or motivational pathways, but also through employees' affective experiences at work. This finding is consistent with affective theories of work behavior, which emphasize that emotions shape attention, decision-making, energy regulation, and persistence. Prior research has shown that job-related affective well-being is closely linked to job satisfaction and stress, and that affective states can transmit the influence of psychological antecedents to work outcomes (14). The present results extend this line of inquiry by positioning job affects as a key explanatory mechanism between need satisfaction and both short-term (productivity) and long-term (sustainable performance) outcomes.

The mediating role of job affects is also supported by broader psychological evidence indicating that positive affect enhances cognitive flexibility, creativity, and proactive behavior, while negative affect can undermine self-regulation and increase withdrawal or counterproductive tendencies. Studies in organizational and educational contexts have shown that positive and negative affect mediate the effects of psychological resources on well-being and functioning, reinforcing the plausibility of affective mediation (15). In sport and performance domains, need satisfaction has been associated with more adaptive emotional profiles, partly through emotion regulation strategies

such as cognitive reappraisal (16). Conversely, controlling environments that frustrate psychological needs tend to generate maladaptive affective responses, including anxiety and fear of failure, which can impair performance (17). The present findings suggest that when sport-sector employees experience satisfaction of autonomy, competence, and relatedness, they are more likely to experience positive job affects and fewer negative emotions, which in turn facilitate higher productivity and more sustainable performance patterns.

The significant path from basic psychological needs to job affects further underscores the emotional consequences of need satisfaction. This result aligns with a substantial body of literature showing that need satisfaction is positively associated with well-being and affective balance across diverse contexts, including workplaces, gig economy settings, and physical activity environments (7, 36). When employees perceive that their work environment supports choice, skill utilization, and meaningful social connection, they are more likely to experience enthusiasm, vitality, and satisfaction, rather than frustration or emotional exhaustion. Such affective states are particularly important in service-oriented and people-centered sectors, where emotional labor and interpersonal interactions are integral to job roles. Evidence from hospitality and travel industries similarly indicates that psychological empowerment and supportive climates enhance resilience and positive affect, which can buffer employees against stress and sustain functioning (21).

The present findings also align with research emphasizing the detrimental impact of negative workplace experiences on affect and performance. Studies on workplace ostracism, bullying, and psychological contract breach demonstrate that threats to relational needs and perceived fairness generate negative affect, which can erode commitment, satisfaction, and productivity (18-20). By contrast, environments that support psychological needs appear to mitigate these risks by fostering positive affective climates and psychological capital. Research on psychological empowerment, organizational citizenship behavior, and social intelligence further suggests that affective and social processes jointly shape performance outcomes (13, 25). In this sense, job affects operate as a psychological “bridge” connecting structural and relational features of the work environment with observable performance indicators.

The strong explanatory power of the model also reflects the relevance of integrating productivity and sustainable performance within a single framework. Much of the prior literature has examined these outcomes separately, yet the present study shows that both are influenced by a common set of psychological antecedents and affective mechanisms. This integrated perspective is consistent with sustainability-oriented management research, which argues that long-term organizational effectiveness requires alignment between performance systems and human well-being (3, 27). By demonstrating that job affects mediate the impact of need satisfaction on both productivity and sustainable performance, the findings suggest that organizations do not need to choose between efficiency and sustainability; rather, both can be enhanced by creating psychologically supportive work environments.

Contextually, the study contributes valuable evidence from the sports sector of an emerging economy, where institutional constraints, resource limitations, and organizational change may intensify psychological demands on employees. Prior research in emerging and public-sector contexts highlights the importance of psychological safety, employee voice, and empowerment for performance and learning (26, 41). The present findings extend this evidence by showing that even in such contexts, fundamental psychological processes proposed by BPNT remain relevant and predictive of key outcomes. Moreover, as organizations increasingly adopt digital technologies and new work arrangements, the experience of autonomy, competence, and relatedness may change, influencing affective

experiences and performance outcomes (6). Understanding these dynamics is essential for designing human resource practices that sustain productivity and performance over time.

Taken together, the discussion of results suggests that basic psychological needs function as distal but powerful antecedents of both productivity and sustainable performance, while job affects serve as a proximal psychological mechanism translating need satisfaction into behavioral and performance outcomes. This interpretation is consistent with theoretical models emphasizing the interplay of motivation, affect, and performance, and it is supported by a broad range of empirical findings across sectors and cultural contexts (1, 5, 32). The present study thus contributes to the literature by empirically validating an integrated, affect-mediated model of sustainable performance in the sports sector.

Despite its contributions, this study has several limitations that should be acknowledged. First, the cross-sectional design limits the ability to draw strong causal inferences among psychological needs, job affects, productivity, and sustainable performance. Second, data were collected using self-report questionnaires, which may increase the risk of common method bias and socially desirable responding. Third, the study focused on employees within the sports sector of a single province, which may limit the generalizability of the findings to other sectors, regions, or cultural contexts. Fourth, although the model explained a substantial proportion of variance in the outcome variables, other relevant psychological, organizational, and contextual factors were not included and may also influence productivity and sustainable performance.

Future studies could build on the present findings by employing longitudinal or experimental designs to better establish causal relationships and examine changes in psychological needs, affect, and performance over time. Researchers are also encouraged to test the proposed model in different organizational sectors and cultural settings to assess its generalizability and contextual sensitivity. Incorporating additional mediators or moderators, such as leadership styles, organizational culture, job demands, or digital work characteristics, may provide a more nuanced understanding of when and for whom psychological needs most strongly influence performance outcomes. Moreover, the use of multi-source data, including supervisor ratings or objective performance indicators, could help reduce common method bias and strengthen the robustness of future findings.

From a practical perspective, managers and policymakers in the sports sector should prioritize creating work environments that actively support employees' autonomy, competence, and relatedness. This can be achieved through participative decision-making, opportunities for skill development, constructive feedback, and fostering respectful and supportive interpersonal relationships. Attention should also be given to employees' emotional experiences at work by promoting positive affective climates, addressing sources of chronic stress, and providing resources for emotional regulation and resilience. By simultaneously supporting psychological needs and job affects, organizations can enhance both productivity and sustainable performance, contributing to long-term organizational effectiveness and employee well-being.

Acknowledgments

We would like to express our appreciation and gratitude to all those who helped us carrying out this study.

Authors' Contributions

All authors equally contributed to this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

All ethical principles were adheried in conducting and writing this article.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

References

1. Vansteenkiste M, Ryan RM, Soenens B. Basic Psychological Need Theory: Advancements, Critical Themes, and Future Directions. Motivation and Emotion. 2020;44(1):1-31.
2. Mokhtarpour Asl H, Kameli M. A Model for Evaluating the Sustainable Performance of Human Resources. JMDP. 2022;35(1):81-115.
3. Afrin S, Asyraf Bin Mohd Kassim M, Yusof MF, Hassan MS, Islam MA, Khairuddin KNB. Investigating the Determinants of Employee Performance for Sustainability: A Study on the Bangladesh Insurance Industry. Sustainability. 2023;15(7).
4. Bharti T, Ojha SC, Tiwari AK. Interplay of Workplace Sustainability, Sustainable Work Performance, Optimism, and Resilience: The Moderating Role of Green Creativity in Luxury Hotels. Sustainability. 2022;14(22):15097.
5. Ewe SY, Ho HHP. Psychological Capabilities for Salespeople's Sustainable Work Performance in Financial Services Sector. Journal of Financial Services Marketing. 2023:1-11.
6. Peng Y, Lorenzo LC. Corporate Sales in the Digital Era: The Relationship Between Human Resource Technology Integration and Organizational Performance. Frontiers in Business, Economics and Management. 2023;14(10):289-303.
7. Wu J, Zhou J. Basic Psychological Need Satisfaction and Well-Being for Gig Workers: A Fuzzy Set QCA Approach in DiDi of China. Current Psychology. 2023;42(32):28820-32.
8. Van den Broeck A, Carpini JA, Diefendorff JM. How Much Effort Will I Put Into My Work? It Depends on Your Type of Motivation: Belgium: John Wiley & Sons; 2019. 354-72 p.
9. Hoxha S, Çetin F. The Effect of Psychological Needs on Task Performance with the Mediating Role of Work Engagement: A Sample from a Public Organization in Kosovo. İş Ve İnsan Dergisi. 2020;7(1):1-11.
10. Battaglio RP, Belle N, Cantarelli P. Self-Determination Theory Goes Public: Experimental Evidence on the Causal Relationship Between Psychological Needs and Job Satisfaction. Public Management Review. 2022;24(9):1411-28.
11. Kaabomeir N, Arshadi N, Harizavi A. The Relationship of Supervisor Support for Basic Psychological Needs and Need Satisfaction with Work Motivation in Staff and Line Employees in Marun Oil and Gas Producing Company. Knowledge & Research in Applied Psychology. 2023;24(3):72-89.
12. Bojovic I, Jovanovic SS. Transformational Leadership and Psychological Needs of Employees. Technium Social Sciences Journal. 2020;7:226.
13. Elche D, Ruiz-Palomino P, Linuesa-Langreo J. Servant Leadership and Organizational Citizenship Behavior: The Mediating Effect of Empathy and Service Climate. International Journal of Contemporary Hospitality Management. 2020;32(6):2035-53.
14. Farrokhi N, Ahmadrad F. The Relationship of Job-Related Affective Well-Being and Job Stress with Job Satisfaction: The Mediating Role of Job Self-Efficacy. Journal of Industrial and Organizational Psychology Studies. 2020;21(7):283-300.

15. Kouchi T, Ahmadi V, Mami S, Nademi A. The Role of Mediating Positive and Negative Affect in the Relationship Between Mindfulness and Psychological Well-Being of Ilam Students. Journal of Applied Psychological Research. 2021;12(1):351-68.
16. Robazza C, Morano M, Bortoli L, Ruiz MC. Athletes' Basic Psychological Needs and Emotions: The Role of Cognitive Reappraisal. Frontiers in Psychology. 2023;14.
17. Hu Q, Li P, Jiang B, Liu B. Impact of a Controlling Coaching Style on Athletes' Fear of Failure: Chain Mediating Effects of Basic Psychological Needs and Sport Commitment. Frontiers in Psychology. 2023;14:1106916.
18. Nasir S, Nasir N, Khan S, Khan W, Akyürek SS. Exclusion or Insult at the Workplace: Responses to Ostracism Through Employee's Efficacy and Relational Needs with Psychological Capital. Journal of Organizational Change Management. 2024;37(3):659-82.
19. Lomotey SAA. The Impact of Workplace Bullying in Employee Well-Being: Investigating the Effects of Workplace Bullying on Employees Mental Health, Job Satisfaction and Productivity. (Ijhrsss). 2025;02(09). doi: 10.55677/ijhrsss/01-2025-vol02i9.
20. Faizan M, Yousaf A, Khan SM. Psychological Contract Breach and Its Consequences on Employee Turnover Intentions, Job Satisfaction, and Organizational Commitment: Insights From Human Resource Management and Workplace Psychology. Ijss. 2025;4(3):262-73. doi: 10.63544/ijss.v4i3.164.
21. Alshiha AA, Alkhozaim SM, Alnasser EM, Khairy HA, Al-Romeedy BS. Psychological Empowerment and Employee Resilience in Travel Agencies and Hotels. Tourism Review. 2024;30.
22. Susanto PC, Supardi S, Parmenas NH, Tannady H, Soehaditama JP. Mini Review: Work-Life Balance, Psychological Structure, Employee Resilience, and Organization Commitment to Employee Wellbeing: Human Resource Management. International Journal of Psychology and Health Science. 2023;1(2):56-64.
23. Gholami AN, Khatibi A, Heydarinejad S. The Consequences of Human Resource Development (HRD) on Employee's Productivity in the Ministry of Sport and Youth. Applied Research in Sport Management. 2022;11(2):40-9.
24. Moosavi Z, Moheby N, Oreyzi H, Asgharzadeh M. The Analysis of the Role of Psychological Empowerment, Happiness at Workplace and Job Engagement in the Productivity of Employees of Isfahan Province Gas Company. Strategic Studies in the Oil and Energy Industry. 2021;12(46):219-40.
25. Saeedi S, Zoghi L. Predicting Psychological Well-Being Based on Psychological Empowerment and Organizational Citizenship Behavior with the Mediation of Social Intelligence in Employees. Journal of Development of Logistics and Human Resource Management. 2022;18(70):163-92.
26. Hosseini E, Saeida Ardekani S, Sabokro M, Salamzadeh A. The Study of Knowledge Employee Voice Among the Knowledge-Based Companies: The Case of an Emerging Economy. Revista de Gestão. 2022;29(2):117-38.
27. Agyabeng-Mensah Y, Tang L, Afum E, Baah C, Dacosta E. Organisational Identity and Circular Economy: Are Inter and Intra Organisational Learning, Lean Management and Zero Waste Practices Worth Pursuing. Sustainable Production and Consumption. 2021;28:648-62.
28. Dhahir Mohammed H, Hayati Bahadorani Z, Fallah N, Seyyedi E, Mahmood Salman H, Morabbi Heravi H. The Most Effective Functioning of Competitive Supply Chain Pricing Based on Social Responsibility Dimensions: A Case Study of Oil Products of Knowledge-Based Companies. Discrete Dynamics in Nature and Society. 2023.
29. Apendi DAO, Li K, Pea-Assounga JBB, Bambi PDR. Investigating the impact of e-banking, employee job security, innovativeness, and productivity on organizational performance: Perspectives from South Africa. Sustainable Futures. 2025;9:100605. doi: 10.1016/j.sftr.2025.100605.
30. Liu Y, Huang X. Effects of Basic Psychological Needs on Resilience: A Human Agency Model. Frontiers in Psychology. 2021;12:700035.
31. Valeh M, Shokri O, Asadzadeh H. Effectiveness of Mental Empowerment Training Program on Increasing Teachers' Psychological Capital and Job-Related Affective Well-Being. Journal of Psychological Science. 2021;20(100):579-96.
32. Kundi YM, Aboramadan M, Elhamalawi EM, Shahid S. Employee Psychological Well-Being and Job Performance: Exploring Mediating and Moderating Mechanisms. International Journal of Organizational Analysis. 2020.
33. de Oliveira C, Saka M, Bone L, Jacobs R. The Role of Mental Health on Workplace Productivity: A Critical Review of the Literature. Applied Health Economics and Health Policy. 2022.
34. Dehghanizadeh M, Kheirandish M, Kheirandish H. Factors Affecting the Counterproductive Behaviors of Employees in the Organization; Emphasizing the Role of Organizational Embeddedness, Emotional Intelligence and Psychological Ownership. The Journal of Productivity Management. 2025;72(19):245-73.

35. Aslani F. The Effect of Psychological Ownership on Employee Retention, with the Mediating Role of Commitment and Engagement of Employees of the Oil Engineering and Development Company 2023.

36. Dunton GF, Do B, Crosley-Lyons R, Naya CH, Hewus M, Kanning M. Assessing Basic and Higher-Level Psychological Needs Satisfied Through Physical Activity. Frontiers in Psychology. 2023;14:1023556.

37. Nieto-Casado FJ, Vansteenkiste M, Brenning K, Oliva A, Rodríguez-Meirinhos A, Antolín-Suárez L. Basic Psychological Needs and Suicidal Ideation: Testing an Integrative Model in Referred and Non-Referred Adolescents. Current Psychology. 2023:1-12.

38. Martinez Kercher VM, Watkins JM, Goss JM, Phillips LA, Roy BA, Blades K, et al. Psychological Needs, Self-Efficacy, Motivation, and Resistance Training Outcomes in a 16-Week Barbell Training Program for Adults. Frontiers in Psychology. 2024;15:1439431.

39. Hesami M, Samiee R, Azma F, Mostaghimi MR. Investigating the Effect of Psychological Factors and Organizational Intelligence on People's Competence. RJMS. 2021;28(4):75-83.

40. Behbahanian B, Aminipour Z, Apernak AF, Hamedani K, editors. The Effect of Psychological Factors on Individuals' Productivity in the Workplace2024.

41. Alqudah IH, Carballo-Penela A, Ruzo-Sanmartín E. High-Performance Human Resource Management Practices and Readiness for Change: An Integrative Model Including Affective Commitment, Employees' Performance, and the Moderating Role of Hierarchy Culture. European Research on Management and Business Economics. 2022;28(1):100177.

42. Eliyana A, Sridadi A. Workplace Spirituality and Job Satisfaction Toward Job Performance: The Mediation Role of Workplace Deviant Behavior and Workplace Passion. Management Science Letters. 2020;10(11):2507-20.