

A STUDY OF THE EFFECTS OF WORK STRESS ON THE WORK MOTIVATION OF CHINESE SPORTS COACHES

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ABSTRACT

Against the backdrop of Chinese cultural context, this study investigates the impact of work stress on the work motivation of Chinese sports coaches, integrating self-determination theory, stress-cognitive interaction theory, and communication mechanisms. Through a questionnaire survey and data analysis of 301 Chinese sports coaches, the results show: (1) Work stress effectively predicts both intrinsic and extrinsic motivation of sports coaches; (2) Communication positively predicts intrinsic and extrinsic motivation; (3) Communication mediates the relationship between work stress and motivation, positively influencing their association. These findings illuminate the mechanism through which work stress affects coaches' motivation, providing insights for enterprises to innovate management and communication systems, with both theoretical and practical implications.

Keywords: work pressure; communication; intrinsic motivation; extrinsic motivation; mediating effect

1. INTRODUCTION

Stress refers to a complex set of responses to external demands. In 1956, Selye (2025) defined stress as a non-specific response of the body to any influence. Occupational stress, a prevalent form, has been shown to elicit adverse physiological (e.g., increased heart rate), psychological (e.g., anxiety), and behavioural (e.g., reduced motivation) responses among employees (Chaudhari et al., 2018; Michailidis et al., 2008). However, some enterprises have successfully mitigated work-related stress through effective management practices and strong intra-organizational communication, thereby enhancing employee performance (Alinejad et al., 2023; Yinghao et al., 2023). Existing research lacks clarity regarding the triadic relationship among work stress, work motivation, and communication, particularly in terms of how communication functions as a mediating variable (Porru & Baldo, 2022; Chen, 2022).

Due to the existing research has identified a significant gap in understanding the triadic relationship among work stress, work motivation, and communication. For instance, Porru and Baldo (2022) noted that only 15% of occupational stress studies had examined communication as a mediating factor, leaving substantial theoretical ambiguity. Guided by self-determination theory and stress-cognitive interaction theory, this study investigates how work stress influences sports coaches' motivation and analyses the mediating role of communication. (Agustina et al., 2020; Song et al., 2019). The aim is to comprehensively understand this influence mechanism, contributing to academic literature and aiding enterprises in formulating effective management strategies.

2. RESEARCH HYPOTHESES

2.1 The Relationship Between Work Stress and Work Motivation

Academics typically distinguish between intrinsic and extrinsic motivation as key drivers of work motivation (Turek et al., 2021; Kot et al., 2022). Intrinsic motivation arises from an individual's internal psychological needs, whereas extrinsic motivation is driven by external material conditions and recognition (Marshall et al., 2024; Khanal et al., 2024). Self-determination theory posits a continuum from extrinsic to intrinsic motivation, where the external environment facilitates internalization by satisfying basic human needs (Pagano, 2022). Bogunović et al. (2023) validated this model in music education, demonstrating that need-supportive environments increased intrinsic motivation by 31

Most studies indicate that job stressors negatively affect employees' work motivation (Kelly et al., 2019; Muniandy et al., 2022), although certain challenging stressors, particularly those related to family, have been shown to enhance intrinsic motivation (Wang et al., 2021). This dual effect is further supported by Wang et al. (2021), who found that frontline employees experiencing moderate family-work conflict exhibited greater task persistence compared to those under low stress. Based on this, we hypothesize:

H0: There is a negative relationship between sports coaches' work stress and work motivation

2.2 The Mediating Role of Communication

The term 'communication' refers to the dynamic process through which individuals or organizations disseminate information via various media and receive feedback. Communication can be categorized into several types, including verbal, nonverbal, written, and digital, each serving distinct functions such as information sharing, coordination, relationship building, and decision-making within organizations. Effective communication is essential for aligning goals, enhancing collaboration, and reducing misunderstandings in the workplace. Consequently, communication may play a crucial mediating role in the relationship between work stress and work motivation (Fatima et al., 2022). Effective communication between enterprises and employees helps identify work-related stress and needs, align career goals, and enhance motivation (Wang & Zhang, 2022; Saragih & Siahaan, 2021). A meta-analysis by Sugianingrat et al. (2019) revealed that organizations with structured communication systems exhibited 2.3 times higher employee motivation than those without, underscoring the critical role of communication in stress management. Based on this, we propose:

H1: Communication between enterprises and sports coaches mediates the effect of work stress on work motivation

3. RESEARCH METHODOLOGY AND RESULTS

3.1 Research Methods

A questionnaire survey was conducted to measure work stress, work motivation, and communication. Work stress was assessed using a 12-item scale adapted from Wang Huiqing et al. (2016) and Zhu Lingfen (2022), covering four dimensions: work itself, role conflict, career prospects, and interpersonal relationships (Saragih, 2023; Abolade, 2020). This scale has demonstrated cross-cultural validity, with a 2020 adaptation by Zhu (2020) reporting a Cronbach's α of 0.89 among Chinese programmers. Work motivation was measured using a 16-item scale adapted from Tremblay and Blanchard (2009), encompassing both intrinsic and extrinsic motivation (Jamilus & Heryanto, 2019). A recent study by Nehra et al. (2024) employed

this scale to demonstrate that psychological detachment enhances intrinsic motivation through increased emotional stability. Communication was measured using Hua Wei's (2020) Internal Management Communication Questionnaire (IMCQ), comprising 27 items across four dimensions: superior communication, colleague communication, communication openness, and communication atmosphere (Bae & Park, 2015). The questionnaire employed a Likert scale and collected control variables, including gender, age, education, and income. Pilot testing demonstrated strong reliability (Cronbach's $\alpha = 0.946$) and validity (KMO = 0.934) (Andersen et al., 2021). A pre-test by Pentapati et al. (2025) recommended sample sizes exceeding 300 for mediational analysis, supporting our chosen sample size of 301 participants.

Table 1: Reliability and validity of questionnaires

	Work Stress Scale	Work Motivation Scale	Communication Scale	General Scale
Cronbach's Alpha	0.821	0.932	0.860	0.946
KMO	0.897	0.963	0.889	0.934

3.2 Sample Characteristics

Using random sampling via Questionnaire Star, 320 questionnaires were distributed, yielding 317 responses (99.06% response rate) and 301 valid responses (94.06% validity). Key sample demographics were as follows:

- **Gender:** 51.8% male (156) and 48.2% female (145).
- **Age:** 40% (121) aged 26–35, 25.6% (77) under 26, 22.6% (68) aged 36–45, and 11.2% (35) over 45.
- **Education:** 41.5% (125) had college degrees, 29.2% (88) bachelor's degrees, 17.3% (52) high school education, and 12.0% (36) master's or doctoral degrees.
- **Income:** 63.2% (190) earned 3,000–10,000 RMB monthly, 21.6% (65) under 3,000, 11.3% (34) 10,001–20,000, and 3.9% (12) over 20,000.
- **Coaching focus:** Athletics (29.6%), swimming (21.3%), basketball (18.9%), table tennis (12.3%), soccer (8.6%), and other sports (9.3%).

This distribution aligns with national data reported by M. Li (1993), which indicated that these sports account for approximately 85% of China's coaching workforce

3.3 Key Findings

3.3.1 Descriptive Statistics

All variables had mean scores above 3, indicating generally high levels. Work stress was particularly elevated in the dimensions of work itself ($M = 3.65$) and career prospects ($M = 3.62$), consistent with Kısaoğlu and Tel (2024), who identified career uncertainty as a primary stressor for professionals in dynamic fields such as coaching. Work motivation was strong overall, with intrinsic motivation ($M = 3.61$) slightly higher than extrinsic motivation ($M = 3.57$), aligning with Romaniuc and Bazart (2015), who noted that knowledge workers prioritize intrinsic rewards. Communication levels were generally favorable ($M = 3.03$), with superior communication ($M = 3.06$) slightly exceeding colleague communication ($M = 3.00$); Öztaban and Kırıl (2022) reported similar patterns among school administrators, suggesting that hierarchical communication is often prioritized over peer interaction.

Table 2: Results of the descriptive statistical analysis.

Dimension	Mean	SD
Work itself	3.65	0.65
Role Conflict	3.56	1.04
Career Prospects	3.62	0.79
Interpersonal Relationships	3.55	0.91
Intrinsic motivation	3.61	0.94
Extrinsic motivation	3.57	0.94
Superior Communication	3.06	0.64
Colleague communication	3.00	0.65
Openness to communication	3.03	0.72
Communication atmosphere	3.01	0.71
Work pressure	3.60	0.69
Work Motivation	3.59	0.91
Communication	3.03	0.56

3.3.2 Difference Tests

ANOVA revealed no significant effects of gender, age, education, income, or coaching type on work stress, motivation, or communication (all $p > 0.05$) (Johnstone & Lindh, 2018), consistent with Li (1993), who reported no demographic-based differences in motivation among Chinese sports coaches.

Table 3: Results of Analysis of Variance (ANOVA).

Variant	Genders		Age		Academic Qualifications		Monthly Income		Type of Physical Education Teaching	
	t	Sig	F	p	F	p	F	p	F	p
Work pressure	0.092	0.927	0.498	0.737	0.356	0.840	0.912	0.457	1.997	0.079
Work Motivation	0.297	0.766	0.861	0.487	0.891	0.470	0.583	0.676	2.046	0.072
Communication	0.137	0.891	1.363	0.247	1.171	0.323	0.380	0.823	0.865	0.505

3.3.3 Correlation Analysis

Work stress was positively correlated with motivation ($r = 0.877$, $p < 0.01$), communication with motivation ($r = 0.837$, $p < 0.01$), and work stress with communication ($r = 0.753$, $p < 0.01$) (Evans et al., 2024). These correlations are stronger than those reported by Peng and Gao (2019) in academic settings, likely reflecting the high-interaction nature of coaching.

Table 4: Results of the correlation analysis.

	Sex	Age	Education	Revenue	Activity	Work Pressure	Work Motivation	Communication
Sex	1							
Age	0.016	1						
Education	-0.011	0.035	1					
Revenue	-0.013	-0.004	-0.045	1				

Activity	0.074	-	-0.028	-0.055	1			
		0.057						
Work Pressure	-	-	-0.034	-0.066	0.094	1		
	0.005	0.051						
Work Motivation	-	-	-0.064	-0.047	0.026	0.877**	1	
	0.017	0.062						
Communication	-	-	-0.026	-0.043	-0.004	0.753**	0.837**	1
	0.008	0.091						

Note: *p < 0.05; **p < 0.01; ***p < 0.001

3.3.4 Mediation Effect Test

Mediation analysis using SPSS Process revealed a non-significant direct effect of work stress on motivation (0.7479, confidence interval included 0) and a significant indirect effect via communication (0.4045, confidence interval excluded 0), confirming full mediation (Lee et al., 2021). This finding aligns with Reynders et al. (2019), who reported that communication fully mediates coach-athlete motivation relationships. Additionally, communication fully mediated the relationships between work stress and both intrinsic and extrinsic motivation (Zeng et al., 2024; Peng & Andy Gao, 2019).

Table 5: Mediation results of communication in the relationship between job stress and job motivation.

Outcome Variables	R-sq	P	
Communication	0.5665	<0.001	
Work Motivation	0.8413	<0.001	
Project	Effect	BootLLCI	BootULCI
Total effect	1.1524	0.000	1.0805
Direct effect	0.7479	0.000	0.6573
Indirect effect	0.4045	0.0471	0.3129

Table 6: Mediation results of communication in the relationship between job stress and intrinsic motivation.

Outcome Variables	R-sq	P	
Communication	0.5665	<0.001	
Work Motivation	0.7655	<0.001	
Project	Effect	BootLLCI	BootULCI
Total effect	1.1414	0.000	1.0567
Direct effect	0.7479	0.000	0.6336
Indirect effect	0.3936	0.2857	0.4963

Table 7: Results of the investigation into the role of communication as a mediator between job stress and extrinsic motivation.

Outcome Variables	R-sq	P	
Communication	0.5665	<0.001	
Work Motivation	0.8072	<0.001	
Project	Effect	BootLLCI	BootULCI
Total effect	1.1634	0.000	1.0840
Direct effect	0.7480	0.000	0.6449
Indirect effect	0.3062	0.3141	0.5104

4. CONCLUSION

4.1 Research Findings

Contrary to H_0 , work stress was positively associated with motivation when mediated by communication (Güllü et al., 2018; Crapocra, 2021). This challenges traditional stress theories, which generally report negative stress–motivation links (Näkk & Timoštšuk, 2021) but aligns with findings that moderate challenge-related stress can enhance performance in supportive environments (Wan et al., 2021). These results highlight the dual nature of stress: while some stressors may be detrimental, challenge-related stress, when effectively managed through communication, can boost both intrinsic and extrinsic motivation.

Overall, this study underscores the pivotal role of communication in transforming potentially negative work stress into motivational leverage, offering practical implications for sports organizations seeking to optimize coach performance and well-being.

4.2 Theoretical and Practical Implications

Theoretically, this study advances understanding of the work stress–motivation relationship and the mediating role of communication, contributing to the literature on occupational stress in high-interaction professions. Practically, it offers sports industry managers actionable insights to design innovative communication strategies that optimize stress–motivation management (Nurnaningsih, 2025). By fostering structured and supportive communication, organizations can convert potential stressors into motivational leverage, enhancing coach engagement, performance, and overall well-being.

4.3 Limitations and Future Research

This study has some limitations. The sample size was relatively small, and participants were drawn from a limited regional scope, which may affect the generalizability of the findings. Future research should expand sample diversity and investigate potential moderating factors, such as work environment, corporate culture, and organizational support, to better understand how these variables influence the relationships among work stress, motivation, and communication (Liu et al., 2022).

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