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The Effect of Intrinsic Motivation on Individuals' Performance and the Mediating Role of Job Stress in the Republic of Korea Army

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Abstract

This study examines the relationship between intrinsic motivation and individuals' performance in the Republic of Korea armed forces and explores whether job stress mediates the relationship between intrinsic motivation and individuals' performance. The research questions are: (1) Does intrinsic motivation influence individual performance in military organizations? (2) Does job stress impact individual performance? and (3) Does job stress mediate the relationship between intrinsic motivation and individual performance? The study utilizes data collected from a 350 soldiers survey in the Special Forces Brigade and Special Assault Commando Regiment of the Republic of Korea's Army. We use structural equation modeling (SEM) to explore the mediation role among intrinsic motivation, job stress, and individuals' performance. Research findings suggest that intrinsic motivation negatively impacts job stress. We also find that job stress has a positive effect on firearm skills. Moreover, the study reveals

Keywords: Intrinsic motivation, Job stress, Combat power, Individual performance, Military performance, Structural equation modeling (SEM)

that the relationship between intrinsic motivation and firearm skills is partially mediated by job stress.

1. INTRODUCTION

Motivation is one of the most studied subjects in the public, nonprofit, and private sectors. Motivation is the process that initiates, guides, and maintains goal-oriented behaviors and causes individuals to act [1]. Several scholars and researchers insist that motivation has a significant impact on organizational behavior and performance. According to much of the previous research on motivation,

it is possible to improve individual efficiency and teamwork by fulfilling psychological needs to induce intrinsic motivation (IM). On the other hand, individuals' performance and efficiency will falter if

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individuals do not have sufficient IM or exhibit low motivation [2-3].

Most notable studies on the impact of IM on organizational performance are conducted in the private, public, and nonprofit sectors [4-5]. The research examines the relationship between intrinsic need satisfaction and individuals' work outcomes in the private sector [6]. The authors collected data from 698 frontline employees at a major investment banking firm. The study found that IM positively influences work outcomes and job performance. In addition, another article explores whether IM in public organizations affects perceived organizational performance [7]. The authors' utilized survey data from 3,131 Swiss civil servants and found that IM has a positive impact on public employees' organizational efficiency. The study test whether nonprofit employees' IM influences workers, job satisfaction and organizational loyalty in the nonprofit sector [8]. This study suggests that IM exerts the most significant influence on the job satisfaction of nonprofit employees.

Previous studies have examined IM and individual performance in the private, public, and nonprofit sectors. However, it is hard to find empirical studies on the effect of IM on the individuals' performance of military organizations. To fill this gap, this study conducts an empirical analysis of IM's effects on the individuals' performance of military units. In other words, we put the tried and tested intrinsic motivation theory in the private and public sectors to test in military institutions' unique environment.

IM can play an essential role in subordinate performance in the military sector [9]. In the Republic of Korea (ROK) armed forces, a large portion of military personnel has been recruited by conscription. Conscription is a compulsory military service system. In general, the soldiers recruited through conscription have low intrinsic motivation. There is a significant and positive relationship between the level of IM and organizational outcomes [2-3]. The Republic of Korea (ROK) armed forces have started to discuss compulsory conscription's transformation to voluntary military service. This research's policy relevance lies in its provision of empirical data and assessing the impact of IM and job stress (JS) on individual outcomes. The study results will reduce errors in the process of transitioning the military service system as part of military structure transformation. Furthermore, this study extends the general applicability of intrinsic motivation theory to the ROK Army's unique context.

In the study, we examine the relationship between IM and individuals' performance in the ROK armed forces; we further explore whether JS mediates the relationship between IM and individuals' performance. This paper is organized as follows. Following this introduction, the first section explores the theoretical background and the existing literature review to analyze IM and JS's effects on individuals' performance. The second section provides information on the data and methodology. Finally, the paper concludes with the main findings, policy implications, and limitations of the study.

2. THEORETICAL BACKGROUND

2.1 Conscription and Low Intrinsic Motivation Issue in the Republic of Korea Armed Forces

The armed forces of any nation perform a core function in defending its nation from external threats and protecting its people's lives and property [10]. In South Korea, this role's responsibility lies with the Ministry of National Defense (MND), which has the fourth-largest budget among the South Korean government's 17 departments [11]. Since the 1950s, the Republic of Korea Armed Forces has recruited a large portion of soldiers by conscription. Males in South Korea over the age of 19 must serve in the military for at least 21 months regardless of their own will under conscription. The conscription, which has been in existence for 70 years, has had many problems. Soldiers who are recruited through conscription have passive military service attitudes and low IM. The IM tends to positively affect organizational commitment and combat power [2-3]; high levels of IM positively impact job performance, job satisfaction, and affective commitment to the organization [12].

Transforming the current military service system is essential because of increasing concern about the nation's dilapidated national defense system and an imminent population cliff, which is shaking the foundation of the military service system's current conscription. The male population aged 19 is estimated to fall 26.8% from 317,000 persons in 2007 to 232,000 persons in 2025 [13]. Low birth rates combined with conscription could lead to a deterioration in the quality of human resources recruited into the ROK military and ultimately to an even weaker national defense system.

Thus, the MND has been implementing the Defense Reform Basic Plan 2030 since 2005. One of the reform's primary purposes is to reorganize the Republic of Korea military's recruitment system to better prepare for future warfare. Thus, the ROK armed forces have started to discuss the abolition of compulsory military service and the introduction of a voluntary military service system. Given the military recruitment challenges in South Korea, this study will investigate both individuals' IM and JS's effect on individuals' performance in the military sector.

2.2 Linking Intrinsic Motivation and Performance

In general, as defined by researchers, IM is "doing of an activity for its inherent satisfaction rather than for some separable consequence (p.56)." [14]. If a person is intrinsically motivated, they will have better performance in the absence of material rewards or external factors [15]. When an individual is motivated internally, their performance and well-being will be relatively better than their peres [4].

IM of individuals and organizational performance are closely related. Several scholars and researchers insist that IM significantly impacts organizational behavior and individuals' performance.

According to much of the previous research on motivation, it is possible to improve individual efficiency and teamwork by fulfilling psychological needs to induce IM. On the other hand, if individuals do not have sufficient IM, individual performance and efficiency will falter [2]. For example, the research found that IM positively affects students' academic achievement and learners' academic satisfaction [16]. Those with high IM exhibit high academic achievement and a high likelihood of continuing their learning stemming from a strong desire to solve problems [17]. A similar relationship was uncovered in another study regarding the influence of intrinsic motivation on academic outcomes [18]. They investigated IM's effect on employees' perceptions of their in-role job performance (in the South Korean context). The authors found that intrinsic motivation is positively related to employees' job performance.

In the armed forces, empirical studies supported that IM increases individuals' performance in actual military organizations. One study explored the relationship between IM and individuals' job satisfaction in the Republic of Korea Marines (ROKM) [19]. They found that military personnel with high IM levels exhibit more satisfaction in their careers and have a positive image of their military life. Besides, another study analyzed the correlation between high intrinsic motivation and goal achievement using 10,000 cadets at West Point (US Military Academy) [20]. Their results showed that cadets with more robust IM indicators had higher academic achievement levels, a greater probability of becoming a professional officer, and had a faster promotion rate than other cadets driven more by external motivation. Therefore, it is evident that most extant studies well support the positive relationship between IM and individuals'

performance. In this study, we measure military performance as individuals' total fitness and firearm skills. Considering the results of previous studies, we adopt hypotheses 1 and 2 as illustrated below:

Hypothesis 1: Intrinsic motivation positively affects levels of total fitness (individuals performance) in military organizations.

Hypothesis 2: Intrinsic motivation positively affects levels of firearm skills (individuals performance) in military organizations.

2.3 Intrinsic Motivation and Job Stress

Many previous studies have shown that job stress is correlated with IM [21]. For example, one study examined the relationship between IM and job stress by collecting data from second-year undergraduates during 1998-2001 [22]. The results showed that IM is negatively associated with levels of JS. In addition, another article examined the effect of teachers' IM on job satisfaction and JS in public elementary schools located in eastern Washington [23]. Their findings show that teacher's IM is positively related to job satisfaction and negatively related to teachers' JS. IM and stress-illness have an inverse relationship [24]. Persons with high IM are assumed to be less weakened by stressful life events. Based on the studies mentioned earlier, we hypothesize that:

Hypothesis 3: Intrinsic motivation negatively affects levels of job stress in military organizations.

2.4 Linking Job Stress and Performance

This study specifically focuses on how stress affects individuals' performance(measured by total fitness and firearm skills) in the military. Numerous studies have demonstrated that JS is negatively correlated with job performance [25, 29]. According to previous research, we predict that stress has a negative impact on total fitness (TF) and firearm skills(FS). One study investigated the effect of JS on job performance among Hong Kong employees [26]. The findings show that employees who have high JS levels have lower job performance than those who reported low JS. Besides, another research analyzed the relationship between JS and employees' performance among nurses in two hospitals in a metropolitan Canadian city. The study found an inverse relationship between JS and job performance.

Moreover, in the military context, empirical studies have supported that stress is negatively associated with individuals' performance irrespective of gender. For example, the study examined the relationships between domains of stress and levels of job functioning among women and men in the US armed forces [28]. They collected data from the 1995 department of Defense survey of health-related behaviors among military personnel. Their results showed that higher levels of work-related stress tend to increase the odds of a lower level of job functioning for both genders of military personnel. Thus, the negative relationship between stress and individuals' performance is well supported by most previous studies. We thus hypothesize that:

Hypothesis 4: Job stress negatively affects levels of total fitness (individuals' performance) in military organizations.

Hypothesis 5: Job stress negatively affects levels of firearm skills (individuals' performance) in military organizations.

2.5 Mediating Role of Job Stress

JS mediates the relationship between IM and individuals' performance. IM directly impacts individuals' outcomes like performance and JS [21-23]. People with higher IM have lower JS [24]. Also, JS is negatively correlated with outcomes [25, 26, 29]. Given these relationships, it can be assumed that the JS can indirectly affect the relationship between IM and organizational performance. For example, researchers analyzed the mediating role of JS on the relationship between IM and individuals' performance [30-31]. Their findings show that JS mediates the relationship between IM and individuals' perceptions and performance. Hence, we suggest that JS mediates the relationship between IM and individuals' performance. Therefore, we infer that JS plays a mediating role:

Hypothesis 6: Job stress mediates the relationship between intrinsic motivation and total fitness (individuals performance) in military organizations.

Hypothesis 7: Job stress mediates the relationship between intrinsic motivation and levels of firearm skills (individuals performance) in military organizations.

3. DATA AND METHODOLOGY

The survey used in this study was conducted using the ROK army's Special Forces Brigade and Special Assault Commando Regiment in 2014. The questionnaire contains 45 questions entailing a wide array of human resources management topics such as motivation, JS, organizational commitment, TF, and FS. A total of 432 questionnaires were distributed in the military units, of which 361 soldiers filled and returned the questionnaires with 11 incompletes. The response rate for both groups was 81 percent. The sample comprises 178 soldiers recruited through volunteers from 30 squadrons of two Special Forces Battalions and 172 soldiers recruited through conscription from 24 squadrons of two Special Assault Commando Battalions, for a total of 350 soldiers.

Data were analyzed by structural equation modeling (SEM). Internal consistency (Cronbach's α) was analyzed to examine the reliability of the questionnaire items. In addition, confirmatory factor analysis was conducted to confirm the validity of the measures. The causality among the structural equation modeling variables, the mediating effect of the parameters, and the model fit was analyzed, and the hypotheses were tested. Figure 1 represents the relationships studied in our research.



Figure 1. Conceptual framework and Hypotheses

3.1 Dependent Variable

Dependent variables include TF and FS. This study focuses on primary combat competencies such as firearm skills or physical fitness level rather than specialized and advanced competency, as reflected in the choice of dependent variables. TF was measured using results from the Republic of Korea Army physical fitness test (push-ups, sit-ups, and 1.86 miles of running). According to the Republic of Korea Army's criteria, the number of push-ups, sit-ups, and running is a total fitness measure. The scores on each item were summed to measure TF. FS was measured by a question on the survey that measured firearm accuracy. This was operationalized using points allocated to the number of hits among 20 targets, with a hit counting for 5 points, with a possible maximum score of 100.

3.2 Independent Variable

The independent variable is IM. IM is measured by using a 5-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). Six items were used to construct the intrinsic motivation scale; these items are listed in detail in the appendix and are in line with previous studies that use this measure[32-33]. An example item for this study is: "Military service is because I believe it is important to me." The Cronbach Alpha for the scale is 0.92.

3.3 Mediation Variable

The mediation variable is JS. In this study, attempts are made to measure stress stemming from restrictions on fundamental rights such as 'personal freedom,' 'residential freedom,' and 'freedom of privacy' among soldiers. Therefore, survey items related to barracks life used by Sohn Hee-Rak (2001) to measure stress were adapted. These measures of job stress significantly focused on restrictions on fundamental rights. Ten items were used to construct the JS scale; these items are listed in detail in the appendix and have a Cronbach Alpha score of 0.92.

3.4 Control Variables

Age, rank, and education level are sued in this study as control variables. The control variables are comprised of demographic characteristics: age, rank (1 = private, 2 = private first class, 3 = corporal, 4 = sergeant, 5 = staff sergeant, 6 = sergeant first class, 7 = master sergeant), and education level (1 = under high-school graduate, 2 = high school graduate, 3 = community college attendee, 4 = community college graduate, 5 = university graduate, 6 = graduate school).

4. RESULTS

For analyzing data and testing the hypothesized model, we used AMOS 21 as statistical tools. We conducted a 2-step approach to confirm hypotheses[39]. After analyzing descriptive statistics, we conducted a confirmatory factor analysis (CFA) to evaluate the overall goodness of model fit. Next, we proceeded with SEM to test all hypotheses.

4.1 Descriptive Statistic

Table 1 provides descriptive statistics of the sample, including data for age, rank, and education level. The sampled soldiers' ages ranged from 19 to 36 years, with an average age of 23.3. The majority of the soldiers are under the age of 24. The sample was evenly distributed in rank from

private to master sergeants. Approximately 70% of the total sampled soldiers comprise junior ranked soldiers who have served for less than three years. Approximately 70% of soldiers had more than a college education.

Also, Table 1 reports the reliabilities of all variables. IM is significantly and negatively correlated with JS (r = -0.63, p < 0.05). IM is significantly and positively correlated with TF (r = 0.27, p < 0.05), FS (r = 0.20, p < 0.05), Age (r = 0.28, p < 0.05) and Rank (r = 0.39, p < 0.05). JS is significantly and negatively associated with TF (r = -0.21, p < 0.05). TF is positively correlated with FS (r = 0.45, p < 0.05) and Rank (r = 0.35, p < 0.05) and Rank (r = 0.51, p < 0.05).

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	N = 350	Mean	SD	Correlations						
1. Intrinsic 20.87 5.99 - Motivation - - 2. Job Stress 25.81 9.83 -0.633* - 3. Total 8.77 3.03 0.273* -0.209* - Fitness - - - - 4. Firearm 86.25 15.9 0.196* -0.033 0.455* - Skills 0 - - - - - 5. Age 23.27 2.95 0.283* -0.181* 0.399* 0.349 -				1	2	3	4	5	6	7
Motivation 2. Job Stress 25.81 9.83 -0.633* - 3. Total 8.77 3.03 0.273* -0.209* - Fitness - - - - - 4. Firearm 86.25 15.9 0.196* -0.033 0.455* - Skills 0 - - - - 5. Age 23.27 2.95 0.283* -0.181* 0.399* 0.349 -	1. Intrinsic	20.87	5.99	-						
2. Job Stress 25.81 9.83 -0.633* - 3. Total 8.77 3.03 0.273* -0.209* - Fitness - - - - 4. Firearm 86.25 15.9 0.196* -0.033 0.455* - Skills 0 - - - - - 5. Age 23.27 2.95 0.283* -0.181* 0.399* 0.349 -	Motivation									
3. Total 8.77 3.03 0.273* -0.209* - Fitness - - - - 4. Firearm 86.25 15.9 0.196* -0.033 0.455* - Skills 0 - - - - - 5. Age 23.27 2.95 0.283* -0.181* 0.399* 0.349 -	2. Job Stress	25.81	9.83	-0.633*	-					
Fitness 4. Firearm 86.25 15.9 0.196* -0.033 0.455* - Skills 0 0 - <th>3. Total</th> <th>8.77</th> <th>3.03</th> <th>0.273*</th> <th>-0.209*</th> <th>-</th> <th></th> <th></th> <th></th> <th></th>	3. Total	8.77	3.03	0.273*	-0.209*	-				
4. Firearm 86.25 15.9 0.196* -0.033 0.455* - Skills 0 -	Fitness									
Skills 0 5. Age 23.27 2.95 0.283* -0.181* 0.399* 0.349 -	4. Firearm	86.25	15.9	0.196*	-0.033	0.455*	-			
5. Age 23.27 2.95 0.283* -0.181* 0.399* 0.349 -	Skills		0							
*	5. Age	23.27	2.95	0.283*	-0.181*	0.399*	0.349	-		
							*			
6. Rank 3.93 1.73 0.390* -0.235* 0.717* 0.510 0.636* -	6. Rank	3.93	1.73	0.390*	-0.235*	0.717*	0.510	0.636*	-	
*							*			
7. Education 3.50 1.30 -0.043 0.066 -0.038* 0.020 0.158* 0.012	7. Education	3.50	1.30	-0.043	0.066	-0.038*	0.020	0.158*	0.012	-

Table 1. Descriptive Statistics: Military soldiers in the Republic of Korea

Significance: **p* < 0.05

4.2 Confirmatory Factor Analysis

We evaluated the overall goodness of fit in both the confirmatory factor analysis(CFA) and the proposed hypothesized model(HM) with established recommendations by Arbuckle [34]. We used AMOS 21 and the maximum likelihood estimation to confirm CFA and HM. Table 2 shows the overall goodness-of-fit indicators, including absolute fit. In CFA, several statistical tests are used to determine how well the model fits the data [35]. The results show that Standardized Root Mean Square Residual(SRMR) is 0.0495 in the CFA and 0.0556 in the HM. Researchers suggested that SRMR less than 0.08 is considered a good fit[37]. Root Mean Square Error of Approximation(RMSEA) is 0.070 in the CFA and 0.075 in the HM. The previous research recommended that an RMSEA value of 0.08 or less indicates an acceptable model fit. Normed Fit Index(NFI) is 0.923 in the CFA and 0.883 in the HM. Relative Fit Index(RFI) is 0.899 in the CFA and 0.857 in the HM [38]. Incremental Fit Measures(IFI) is 0.950 in the CFA and 0.919 in the HM. Tucker-Lewis Index(TLI) is 0.934 in the CFA and 0.900 in the HM), and Comparative Fit Index(CFI) is 0.950 in the CFA and 0.918 in the HM. All these values surpassed the good fit criteria [36].

Table 2. Goodness-of-Fit Indicators									
Models	χ2	SRMR	RMSEA	NFI	RFI	IFI	TLI	CFI	
Confirmatory	350.300	0.0495	0.070	0.923	0.899	0.950	0.934	0.950	
factor analysis									
Hypothesized	621.073	0.0556	0.075	0.883	0.857	0.919	0.900	0.918	
model									

SRMR = standardized root mean square residual; RMSEA = root mean square error of approximation; NFI = normed fit index; RFI = relative fit index; IFI = incremental fit measures; TLI = tucker-lewis index; CFI = comparative fit index.

5. HYPOTHESIS TESTING

We used a structural equation model for the test of hypotheses using maximum likelihood estimation in AMOS 21. The results of the HM are presented in Table 3 and Figure 2.

Table 3. Regression coefficients for direct relationships of intrinsic motivation and jobstress with total fitness and firearm skills for testing Hypotheses 1-5

Path	Standardized β	SE	t	Significance
Intrinsic motivation Total Fitness	-0.070	0.57	-1.079	0.280
Intrinsic motivation Firearm Skills	0.092	1.399	1.306	0.191
Intrinsic motivation Job Stress	-0.675	0.083	-9.326	<0.01 (***)
Job Stress Total Fitness	-0.082	0.046	-1.342	0.180
Job Stress Firearm Skills	0.140	1.143	2.101	<0.036 (**)

We found that education has an insignificant impact on TF, while age (standardized $\beta = -0.121$, p < 0.05) and rank (standardized $\beta = 0.880$, p < 0.01) affect TF. Furthermore, we confirmed rank (standardized $\beta = 0.480$, p < 0.01) positively affects FS. Hypothesis 1 predicted that IM positively affects TF in military organizations. IM did not significantly affect TF, thus we unable to support Hypothesis 1 (standardized $\beta = -0.070$, t = -1.079). Hypothesis 2 predicted that there would be a significant and positive relationship between IM and FS. However, we didn't find support for Hypothesis 2 (standardized $\beta = 0.092$, t = 1.399). Hypothesis 3 tested the causal relationship between IM and JS in military organizations. As expected, we found that IM had an inverse relationship with JS (standardized $\beta = -0.675$, t = -9.326, p<0.001). Thus, a soldier's IM is negatively related to JS. Hypothesis 4 predicted that JS negatively affects TF (standardized $\beta = -0.082$, t = -1.342). Hypothesis 5 tested the causal relationship between JS and FS (standardized $\beta = 0.140$, t = 2.101, p<0.005), which was supported.



Figure 2. The results of Structural Equation Modeling

To examine JS's mediating role, we used the SEM results. We tested Hypothesis 6 and 7. Figure 2 illustrates the results of structural equation modeling. Path from IM to JS (standardized $\beta = -0.675$, t = -9.326, p<0.001) and FS (standardized $\beta = 0.140$, t = 2.101, p<0.05) are significant. Thus, the relationship between IM and FS is mediated by JS. However, since the path from JS to TF (standardized $\beta = -0.082$, t = -1.342) is insignificant, there is no indirect effect.

We conducted percentile bootstrapping and bias-corrected bootstrapping at a 95% confidence interval with 5,000 bootstraps with the above result's samples [40]. Table 4 shows the bootstrapping results included standardized direct, indirect, and total effects. That is recommended by Preacher and Hayes [41].

As seen in Table 4, the indirect effects of JS on FS (indirect effect = -0.095, p<0.05). We find that JS mediates the relationship between IM and FS. Thus, we able to support Hypothesis 7.

	β	Bootstrap						
		95% CI		Bias-corrected 95% CI		Two-tailed significance		
		LLCI	ULCI	LLCI	ULCI	-		
Standardized d	irect effects							
IM TF	-0.070	-0.216	0.075	-0.213	0.076	0.351		
IM FS	0.092	-0.039	0.230	-0.041	0.227	0.193		
IM JS	-0.675	-0.752	-0.584	-0.752	-0.584	0.000(***)		
JS TF	-0.082	-0.222	0.058	-0.219	0.060	0.250		
JS FS	0.140	0.030	0.341	0.004	0.272	0.041(**)		
Standardized indirect effects								
IM JS TF	0.055	-0.040	0.149	-0.040	0.149	0.238		

Table 4. Bootstrapping results for standardized direct, indirect, and total effects

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IM JS FS	-0.095	-0.190	-0.005	-0.189	-0.004	0.037(**)
Standardize	d total effects					
IM TF	-0.015	-0.117	0.085	-0.114	0.088	0.800
IM FS	-0.002	-0.089	0.086	-0.090	0.086	0.958
IM JS	-0.675	-0.752	-0.584	-0.752	-0.584	0.000(***)
JS TF	-0.082	-0.222	0.058	-0.219	0.060	0.250
JS FS	0.140	0.007	0.276	0.004	0.272	0.041(**)

IM, Intrinsic Motivation; TF, Total Fitness; FS, Firearm Skills; JS, Job Stress

Significance: **p* < 0.10; ***p* < 0.05; ****p* < 0.001

Finally, we used covariance decomposition results on the impact of intrinsic motivation on individuals' performance. Figure 3 shows the results of covariance decomposition, which has two different pathways. In the first path (IM \rightarrow JS \rightarrow TF), we analyzed the mediating effects by dividing them into direct effect, indirect effect, and total effect through covariance decomposition. As a result of covariance decomposition, there is no indirect effect between JS and TF. Thus, we concluded that the relationship between IM and TF is not mediated by JS, thus not supporting H6. In the second path (IM \rightarrow JS \rightarrow FS), JS partially mediated IM and FS's relationship, supporting H7.



Significance: **p* < 0.10; ***p* < 0.05; ****p* < 0.001

Figure 3. Covariance Decomposition Results on the Impact of Intrinsic Motivation on Individuals' Performance

In sum, the research question proposed in this study is whether IM affects individuals' performance and whether JS mediates the relationship between IM and individuals' performance in the Republic of Korea Army. Analysis of SEM shows that IM negatively impacts JS. Also, we found that JS mediated the relationship between IM and FS. However, the relationship between IM and TF is not mediated by JS. Additionally, we found that rank is positively associated with both TF and FS.

6. DISCUSSION

This study examined how IM affects individuals' performance in military organizations and explores whether JS mediates the relationship between IM and individuals' performance. The findings are partially supported by existing studies [6-7]. Analysis of the structural equation modeling shows that IM negatively impacts soldiers' JS. Additionally, we find that JS has a positive effect on FS. Moreover, our findings confirm previous studies in which JS partially mediated the relationship between IM and individuals' performance [30-31]. We also found that as the ranks of soldiers increase, TF and FS increase.

The findings of this research are essential for several reasons. First, the study confirms that intrinsic motivation theory can be applied to military institutions' unique environments. It empirically provides evidence that IM of soldiers impacts their performance. Many existing studies have demonstrated that the higher the IM among individuals, the higher is their performance [2, 16]. Although previous studies have examined the relationship between IM and organizational performance in the private and public

sectors, it is hard to find empirical studies exploring the IM on individuals' performance in the military. Thus, this research has theoretical significance in that it extends the general applicability of the motivation theory to a closed military system.

Second, this study provides practical implications. The study found that IM is negatively associated with JS. Our study also confirmed that JS partially mediates the relationship between IM and FS, which also demonstrates that IM and JS roles are crucial in military personnel to improve employees' performance. It has been confirmed that soldiers who have higher IM will exhibit less JS. This study confirmed that IM is negatively associated with JS. Leaders who want to improve soldiers' work performance in the military sector must focus on increasing employees' IM. The person in charge of recruiting should screen for soldiers with high intrinsic motivation. Moreover, leaders should try to create a work environment that can reduce stress on employees.

The Republic of Korea Armed Forces has recruited a large portion of soldiers by conscription for 70 years. Conscription is a compulsory military service system. In conscription, military personnel has low intrinsic motivation. We assume that this study's results will provide value to the Republic of Korea Armed forces, currently working on reforming the conscription system and restructuring its military into a high-performance organization. The policy relevance of this research lies in its provision of empirical data on South Korea's military recruitment system to policymakers tasked with designing a new military recruitment system. This empirical data can thus be used in preparation for future military organization reform and human resources recruitment. We believe that the study significantly contributes to military sector literature on motivation and organizational performance. However, we obtained data and analyzed the proposed model in the context of South Korean military organizations. Therefore, we should interpret the results with caution, and the results of this study should be applied cross-culturally as a future project.

7. CONCLUSION

This research delves into the impact of intrinsic motivation (IM) on performance within military settings, also investigating the mediating role of job stress (JS) in this relationship. It was discovered that IM tends to reduce JS among soldiers, which in turn, can enhance their firearm skills (FS). A novel aspect of this study is its focus on the military, a domain where empirical research on IM's effects is scarce. The findings underscore the applicability of intrinsic motivation theory in the distinctive context of military organizations, revealing that higher IM corresponds with improved performance, a trend

consistent across various sectors but less explored within the military.

Significantly, the study sheds light on practical measures for military leadership, emphasizing the importance of fostering an environment that enhances soldiers' intrinsic motivation and manages stress levels effectively. These insights are crucial for improving overall performance and satisfaction among military personnel. Moreover, the research holds particular relevance for the Republic of Korea Armed Forces, which has primarily relied on conscription. The findings offer valuable guidance for ongoing reforms aimed at transforming the military into a high-performance organization through more strategic recruitment and personnel management practices focused on motivation and stress reduction.

While the results are promising, the study acknowledges its limitation to the South Korean military context, suggesting a need for cautious interpretation and proposing cross-cultural research in the future. This contribution is significant to the literature on military motivation and performance, providing a foundation for further investigation into the dynamics of intrinsic motivation within this unique organizational framework.

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