CONSCRIPTS OR VOLUNTEERS? ASSESSING THE IMPACT OF ORGANIZATIONAL BEHAVIORS AND ATTITUDES ON KOREAN MILITARY SECTOR PERFORMANCE

by

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I dedicate this dissertation to my beloved Mihye An, Seonho Park, Soyee Park, and my parents.

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Military organizations across the world are faced with challenges in recruiting and retaining high-quality personnel because of increasing inter-sectoral competition, changes in social values, and low unemployment. Although intrinsic motivation, organizational commitment, job satisfaction, and job stress are essential for employee retention and performance, there has been little research into these factors within the military sector. The three separate studies that compose this dissertation were undertaken to investigate the impact of soldiers' behaviors and attitudes on individual's performance and to examine differences in the organizational attitudes and individual performances of conscripts versus volunteer soldiers. The first study examines the relationship between intrinsic motivation and individual performance and explores whether this relationship is mediated by job stress. The second paper explores differences in affective organizational commitment, job satisfaction, and individual performance between conscripts versus volunteer soldiers. This study also investigates the impact of job satisfaction on affective organizational commitment and individual performance in the military sector. The third study investigates whether there are differences in intrinsic motivation, organizational commitment,

and job satisfaction between conscripts and volunteer soldiers. This study investigates the impact of intrinsic motivation on organizational commitment and job satisfaction in the military sector. The results of the three studies note three significant findings: (1) intrinsic motivation has a negative association with job stress, and the relationship between intrinsic motivation and military performance is mediated by job stress; (2) volunteer soldiers have higher job satisfaction and total fitness levels than conscripts, and job satisfaction has a statistically significant positive effect on affective organizational commitment and total fitness levels in military organizations; and (3) volunteer soldiers have higher intrinsic motivation, organizational commitment, and job satisfaction than conscripts. Intrinsic motivation has a statistically significant positive effect on military organizations' organizational commitment and job satisfaction. Implications, limitations, and suggestions for future research are also discussed in the study.

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CHAPTER 1

INTRODUCTION

In an era of cutback management, public organizations across the world have faced challenges in attracting and retaining talented personnel (Carter et al., 2013; Chordiya, Sabharwal, & Goodman, 2017; Levine, 1979; Lewis & Frank, 2002; Lyons, Duxbury, & Higgins, 2006; Pandey, 2010). Public sectors in widespread financial constraints pose direct difficulties to employee motivation and performance and hurt prospects for attracting future employees with vital skills (Ann Feldheim, 2007; Battaglio & Condrey, 2009). Recruiting and retaining high-quality personnel in the military sector is even more challenging due to increased competition between the private market and the military, changing social values, and low unemployment (Bury, 2017; Cohn, 2007; Patrichi, 2015; Tresch, 2008).

The shortage of human resources in the military continues (Coates, Silvernail, Fulton, & Ivanitskaya, 2011). Military service is primarily divided into conscription and voluntary military service (Asch & Warner, 2001; Burk, 1992; Cohen, 2019; Cohn & Toronto, 2017; Flynn, 1998; Kier, 2017; Lee & McKenzie, 1992; Lee, 2011; Varoglu & Bicaksiz, 2005). Conscription is compulsory military service for almost all young people, while voluntary military service is a matter of an individual's private choice to join the military as a career (Pickering, 2011; Safrai, 2019). Starting with Belgium and the Netherlands in the early 1990s, many countries have shifted away from conscription towards an all-volunteer military (Haltiner, 1998; Jehn & Selden, 2002; Leander, 2004). After transitioning to an all-volunteer force, the United States military has had serious problems with the recruitment and retention of capable personnel (Braun, Kennedy,

Sadler, & Dixon, 2015; Cook & Doorenbos, 2017) because of declining motivation to join the military among young adults (Tresch, 2008).

The South Korean military has struggled to attract and retain soldiers of suitable quality due to low birth rates and conscription. Since the 1950s, the Korean army has recruited the majority of soldiers by conscription. Males over the age of 18 living in South Korea are required to serve in the military for at least 18 months. From 317,000 individuals in 2007, by 2025 the male population aged 18 is expected to decline by 26.8% to 232,000 individuals (Kim & Choi, 2010). The Republic of Korea Armed Forces has begun discussing the abolition or transformation of compulsory conscription and the introduction of voluntary military service, the Ministry of National Defense in South Korea has implemented the Defense Reform Basic Plan 2030 since 2005 (Defense, 2012). One of the main objectives of this reform is to reorganize the recruitment system to better prepare the country for future warfare.

Scholars agree that intrinsic motivation, organizational commitment, job satisfaction, and job stress are related to increasing employee performance, turnover, and retention (Baard, Deci, & Ryan, 2004; Caillier, 2013; Chapman et al., 2016; Chordiya et al., 2017; Fried, Ben-David, Tiegs, Avital, & Yeverechyahu, 1998; Giauque, Anderfuhren-Biget, & Varone, 2013; Park & Rainey, 2007; Siu, 2003; Vandenberghe & Bentein, 2009). Understanding the impact of employees' attitudes on attracting and retaining talented employees is important for most organizations. However, little is known about the impact of organizational attitudes on organizational performance in the military sector. Thus far, studies have examined the relationship between organizational attitudes and individual performance in the private, public, and nonprofit sectors. In the military sector, most existing studies have been conducted in

countries with voluntary military services, whereas scholarship on countries with compulsory military service (conscription) is limited. Furthermore, there are no studies comparing the organizational attitudes and individual performances of conscripted versus volunteer soldiers.

Prior studies on the military service have examined the socio-economic efficiency and acquisition costs of the national defense workforce in preparation for the future military service system (White, 1989; Imbens & Klaauw, 1995; Perri, 2010; Rohlfs, 2012; Warner & Negrusa, 2005). Thus, existing literature is mainly focused on estimating the impact of military service on the labor market and deriving implications for military service transition (Angrist, 1995), while empirical studies on the individual performance of voluntary soldiers and conscripts are rare.

In this dissertation, three separate studies examine the impact of soldiers' behaviors and attitudes on individual performance and the impact of military service type (voluntary Vs. conscription) on the performance of military organizations. The first study, presented in Chapter 2, examines the relationship between intrinsic motivation and individual performance in the Republic of Korea Armed Forces. It also explores whether job stress mediates the relationship between intrinsic motivation and individual performance. The second study, presented in Chapter 3 explores differences in affective organizational commitment, job satisfaction, and individual performance between conscripts and volunteer soldiers. This study also investigates the impact of job satisfaction on affective organizational commitment and individual performance in the military sector. The third paper, presented in Chapter 4, focuses on investigating whether there are differences in intrinsic motivation, organizational commitment, and job satisfaction between conscripts and volunteer soldiers. Thus, the dissertation investigates the impact of intrinsic motivation on organizational commitment and job satisfaction within the

military sector. The final chapter of the paper presents the implications of the research and theoretical and practical contributions.

1.1. References

Angrist, J. D. (1995). *Estimating the labor market impact of voluntary military service using social security data on military applicants*. Retrieved from

Ann Feldheim, M. (2007). Public sector downsizing and employee trust. *International Journal of Public Administration, 30*(3), 249-270.

Asch, B. J., & Warner, J. T. (2001). A theory of compensation and personnel policy in hierarchical organizations with application to the United States military. *Journal of Labor Economics, 19*(3), 523-562.

Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. *Journal of applied social psychology, 34*(10), 2045-2068.

Braun, L. A., Kennedy, H. P., Sadler, L. S., & Dixon, J. (2015). Research on US military women: recruitment and retention challenges and strategies. *Military medicine, 180*(12), 1247-1255.

Buchanan, B. (1974). Government managers, business executives, and organizational commitment. *Public administration review*, 339-347.

Burk, J. (1992). The decline of mass armed forces and compulsory military service. *Defense analysis, 8*(1), 45-59.

Bury, P. (2017). Recruitment and retention in British army reserve logistics units. *Armed Forces & Society, 43*(4), 608-631.

Caillier, J. G. (2013). Satisfaction with work-life benefits and organizational commitment/job involvement: Is there a connection? *Review of Public Personnel Administration, 33*(4), 340-364.

Carter, B., Danford, A., Howcroft, D., Richardson, H., Smith, A., & Taylor, P. (2013). Taxing times: Lean working and the creation of (in) efficiencies in HM Revenue and Customs. *Public Administration, 91*(1), 83-97.

Chapman, C., Getha-Taylor, H., Holmes, M. H., Jacobson, W. S., Morse, R. S., & Sowa, J. E. (2016). How public service leadership is studied: An examination of a quarter-century of scholarship. *Public Administration, 94*(1), 111-128.

Chordiya, R., Sabharwal, M., & Goodman, D. (2017). Affective organizational commitment and job satisfaction: A cross-national comparative study. *Public Administration, 95*(1), 178-195.

Coates, H. R., Silvernail, T. S., Fulton, L. V., & Ivanitskaya, L. (2011). The effectiveness of the recent army captain retention program. *Armed Forces & Society, 37*(1), 5-18.

Cohen, E. A. (2019). *Citizens and soldiers: The dilemmas of military service*: Cornell University Press.

Cohn, L. P. (2007). *Who will serve? Education, labor markets, and military personnel policy*: Duke University.

Cohn, L. P., & Toronto, N. W. (2017). Markets and manpower: The political economy of compulsory military service. *Armed Forces & Society, 43*(3), 436-458.

Cook, W. A., & Doorenbos, A. Z. (2017). Indications of recruitment challenges in research with US military service members: a ClinicalTrials. Gov review. *Military medicine, 182*(3-4), e1580-e1587.

Defense, M. o. N. (2012). *Defense White Paper*. Seoul: Ministry of National Defense

Flynn, G. Q. (1998). Conscription and equity in Western democracies, 1940–75. *Journal of Contemporary History, 33*(1), 5-20.

Fried, Y., Ben-David, H. A., Tiegs, R. B., Avital, N., & Yeverechyahu, U. (1998). The interactive effect of role conflict and role ambiguity on job performance. *Journal of occupational and organizational psychology, 71*(1), 19-27.

Giauque, D., Anderfuhren-Biget, S., & Varone, F. (2013). HRM practices, intrinsic motivators, and organizational performance in the public sector. *Public Personnel Management, 42*(2), 123-150.

Haltiner, K. W. (1998). The definite end of the mass army in Western Europe? *Armed Forces & Society, 25*(1), 7-36.

Imbens, G., & Klaauw, W. V. D. (1995). Evaluating the Cost of Conscription in the Netherlands. *Journal of Business & Economic Statistics, 13*(2), 207-215.

Jehn, C., & Selden, Z. (2002). The end of conscription in Europe? *Contemporary Economic Policy, 20*(2), 93-100.

Kier, E. (2017). *Imagining war: French and British military doctrine between the wars* (Vol. 153): Princeton University Press.

Kim, S., & Choi, E. (2010). A study on the social-economic analysis followed by transfer of sufficiency model of human resources for national defense. *Korea public administration quarterly, 22*(1).

Leander, A. (2004). Drafting community: Understanding the fate of conscription. *Armed Forces & Society, 30*(4), 571-599.

Lee, D. R., & McKenzie, R. B. (1992). Reexamination of the relative efficiency of the draft and the all-volunteer army. *Southern Economic Journal*, 644-654.

Lee, S. M. (2011). A study on the economic implications of a voluntary military service and conscription system. *Journal of National Defense Studies, 12*(16).

Levine, C. H. (1979). More on cutback management: Hard questions for hard times. *Public administration review, 39*(2), 179-183.

Lewis, G. B., & Frank, S. A. (2002). Who wants to work for the government? *Public administration review, 62*(4), 395-404.

Lyons, S. T., Duxbury, L. E., & Higgins, C. A. (2006). A comparison of the values and commitment of private sector, public sector, and parapublic sector employees. *Public administration review, 66*(4), 605-618.

Pandey, S. K. (2010). Cutback management and the paradox of publicness. *Public administration review, 70*(4), 564-571.

Park, S. M., & Rainey, H. G. (2007). Antecedents, mediators, and consequences of affective, normative, and continuance commitment: Empirical tests of commitment effects in federal agencies. *Review of Public Personnel Administration, 27*(3), 197-226.

Patrichi, M. E. (2015). General military human resource management and special forces human resource management. A comparative outlook. *Journal of Defense Resources Management (JoDRM), 6*(2), 75-82.

Paul Battaglio Jr, R., & Condrey, S. E. (2009). Reforming public management: Analyzing the impact of public service reform on organizational and managerial trust. *Journal of Public Administration Research and Theory, 19*(4), 689-707.

Perri, T. (2010). Deferments and the relative cost of conscription. *The BE Journal of Economic Analysis & Policy, 10*(1).

Pickering, J. (2011). Dangerous Drafts? A Time-Series, Cross-National Analysis of Conscription and the Use of Military Force, 1946—2001. *Armed Forces & Society, 37*(1), 119-140.

Rohlfs, C. (2012). The economic cost of conscription and an upper bound on the value of a statistical life: Hedonic estimates from two margins of response to the Vietnam draft. *Journal of Benefit-Cost Analysis, 3*(3), 1-37.

Safrai, M. Z. (2019). Legitimizing Military Growth and Conscription: The Yom Kippur Mechanism. *Armed Forces & Society, 45*(3), 491-510.

Siu, O. l. (2003). Job stress and job performance among employees in Hong Kong: The role of Chinese work values and organizational commitment. *International journal of psychology, 38*(6), 337-347.

Tresch, T. S. (2008). Challenges in the recruitment of professional soldiers in Europe. *Strategic Impact:*(3), 76-86.

Vandenberghe, C., & Bentein, K. (2009). A closer look at the relationship between affective commitment to supervisors and organizations and turnover. *Journal of occupational and organizational psychology, 82*(2), 331-348.

Varoglu, A. K., & Bicaksiz, A. (2005). Volunteering for risk: The culture of the Turkish armed forces. *Armed Forces & Society, 31*(4), 583-598.

Warner, J. T., & Negrusa, S. (2005). Evasion costs and the theory of conscription. *Defence and Peace Economics, 16*(2), 83-100.

White, M. (1989). Conscription and the size of armed forces. *Social Science Quarterly, 70*(3), 772.

CHAPTER 2

THE EFFECT OF INTRINSIC MOTIVATION ON INDIVIDUAL PERFORMANCE AND THE MEDIATING ROLE OF JOB STRESS IN THE REPUBLIC OF KOREA ARMY

2.1. Abstract

This study examines the relationship between intrinsic motivation and individuals' performances in the Republic of Korea Armed Forces and also explores whether job stress mediates this relationship. The research questions are as follows: (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 survey data from 350 soldiers in the Special Forces Brigade and Special Assault Commando Regiment of the Republic of Korea's Army. Structural equation modeling (SEM) was used to explore the relationships between intrinsic motivation, job stress, and individual performance. The research findings suggest that intrinsic motivation negatively impacts job stress. Additionally, job stress has a positive effect on firearm skills. Moreover, the study reveals that the relationship between intrinsic motivation and firearm skills is partially mediated by job stress.

2.2. Introduction

Motivation is one of the most studied subjects in the public, nonprofit, and private sectors. Motivation is the process of initiating, guiding, and sustaining goal-oriented behaviors and enabling an individual to act (Nevid, 2012). Several scholars have argued 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 that induce intrinsic motivation. On the other hand, individuals' performance and efficiency will falter if they do not have sufficient intrinsic motivation or exhibit low motivation (La Guardia, Ryan, Couchman, & Deci, 2000; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000).

Most studies regarding the impact of intrinsic motivation on organizational performance have been conducted in the private, public, and nonprofit sectors (Jurkiewicz, Massey Jr, & Brown, 1998; Ryan & Deci, 2000b). Baard, Deci, and Ryan (2004) examined the relationship between intrinsic need satisfaction and individuals' work outcomes in the private sector. The authors collected data from 698 frontline employees at a major investment banking firm and found that intrinsic motivation positively influences work outcomes and job performance. In addition, Giauque, Anderfuhren-Biget, and Varone (2013) explored whether intrinsic motivation in public organizations affects perceived organizational performance. The authors' utilized survey data from 3,131 Swiss civil servants and found that intrinsic motivation positively impacts public employees' organizational efficiency. Borzaga and Tortia (2006) tested whether nonprofit employees' intrinsic motivation influences workers, job satisfaction, and organizational loyalty in the nonprofit sector. They determined that intrinsic motivation has the most significant influence on nonprofit employees' job satisfaction.

Intrinsic motivation can play an essential role in performance in the military sector (Raabe, Zakrajsek, Orme, Readdy, & Crain, 2020). Scholars have insisted that there is a significant and positive relationship between intrinsic motivation and organizational outcomes (La Guardia et al., 2000; Reis et al., 2000), and soldiers with high intrinsic motivation tend to feel satisfied with their work and dedicate themselves to the organization (Raabe et al., 2020;

Woodruff, 2017). Military personnel with high intrinsic motivation levels are more likely to join and continue military service (Griffith, 2008; Woodruff, Kelty, & Segal, 2006). Furthermore, Moskos Jr. (1977) found that intrinsically motivated soldiers provide more significant organizational benefit to the military organization.

Although intrinsic motivation and job stress are closely related to military personnel's performance, little is known about the impact of intrinsic motivation and job stress on individuals' performance in the military sector, and there are few empirical studies on the effect of intrinsic motivation on individuals' performances in military organizations. To fill this gap, this study conducts an empirical analysis of intrinsic motivation's effects on the individual performance of military units. In other words, we tested intrinsic motivation theory from the private and public sectors within the unique environment of military institutions. Thus, this study extends the general applicability of intrinsic motivation theory to the Republic of Korea Army's unique context.

The study examines the relationship between intrinsic motivation and individual performance in the Republic of Korea Armed Forces. We also explore whether job stress mediates the relationship between intrinsic motivation and individual performance. This paper is organized as follows. The first section explores the theoretical background and the existing literature on the effects of intrinsic motivation and job stress on individual performance. The second section outlines the data collection and methodology. Finally, the paper concludes with the main findings, policy implications, and limitations of the study.

2.3. Theoretical Background

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

The armed forces of any nation perform a core function in defending the nation against external threats and protecting people's lives and property (Defense, 2016). In South Korea, this role's responsibility lies with the Ministry of National Defense, which has the fourth-largest budget among the South Korean government's 17 departments (Finance, 2017). Since the 1950s, conscription has been the main way in which soldiers are recruited in the Republic of Korea Armed Forces. Males in South Korea over the age of 18 must serve in the military for at least 18 months, regardless of their own desire to join the military. However, conscripts have low intrinsic motivation, which tends to negatively affect organizational commitment and combat power (La Guardia, Ryan, Couchman, & Deci, 2000; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000). High levels of intrinsic motivation positively impact job performance, job satisfaction, and affective commitment to an organization (Karatepe & Tekinkus, 2006).

It is essential to change the current military service system in Korea as there are growing concerns about the devastated defense system and population cliff. Low birth rates combined with conscription could lead to a deterioration in the quality of human resources recruited into the Republic of Korea Armed Force and ultimately to an even weaker national defense system. The male population aged 18 is estimated to fall 26.8% from 317,000 persons in 2007 to 232,000 persons in 2025 (Kim & Choi, 2010). To combat this, the Ministry of National Defense of South Korea began to implement the Defense Reform Master Plan 2030 in 2005 (Defense, 2012). One of the main objectives of the reform is to reorganize the recruitment system of the Republic of Korea Armed Forces to better prepare the nation for future wars. To this end, South Korea has begun to discuss the abolition of compulsory military service in favor of a voluntary military service system. Given the military recruitment challenges in South Korea, this study investigates

the effects of intrinsic motivation and job stress on an individual's performance in the military sector.

2.3.2 Linking Intrinsic Motivation and Performance

As defined by Ryan and Deci (2000a) intrinsic motivation is "doing of an activity for its inherent satisfaction rather than for some separable consequence" (p.56). When people are intrinsically motivated, they perform better without extrinsic rewards (Ryan & Deci, 1985). Intrinsically motivated individuals have better relative performance and well-being than their peers (Ryan & Deci, 2000b).

Individuals' intrinsic motivation and organizational performance are closely related. If individuals do not have sufficient intrinsic motivation, individual performance and efficiency falter (La Guardia, Ryan, Couchman, & Deci, 2000; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000). Burton, Lydon, D'Alessandro, and Koestner (2006) found that intrinsic motivation positively affects students' academic achievement and learners' academic satisfaction. Those with high intrinsic motivation exhibit high academic achievement and a high likelihood of continuing their learning, which stems from a strong desire to solve problems (Morris, Finnegan, & Wu, 2005). A similar relationship was revealed by Joo, Jeung, and Yoon (2010). They investigated intrinsic motivation's effect on employees' perceptions of their in-role job performance within the South Korean context. The authors found that intrinsic motivation is positively related to employees' job performance.

In relation to the armed forces, empirical studies have supported that intrinsic motivation increases individuals' performance in military organizations. Song, Han, and Han (2010) investigated the relationship between intrinsic motivation and individuals' job satisfaction in the

Republic of Korea Marines. They found that soldiers with high intrinsic motivation showed more satisfaction with their careers and had a positive view of their military life. Moreover, Wrzesniewski et al. (2014) examined the correlation between intrinsic motivation and goal achievement using 10,000 cadets at West Point US Military Academy. Their results showed that cadets with higher intrinsic motivation had higher levels of academic achievement, higher chances of becoming professional officers, and higher promotion rates than other cadets with more external motivation. Therefore, most existing studies have supported the positive relationship between intrinsic motivation and individual performance. In this study, we measure military performance in terms of individuals' total fitness and firearm skills. Considering the results of previous studies, we adopt the following hypotheses:

Hypothesis 1: Intrinsic motivation positively affects total fitness levels in military organizations.

Hypothesis 2: Intrinsic motivation positively affects levels of firearm skills in military organizations.

2.3.3 Intrinsic Motivation and Job Stress

Many previous studies have shown that job stress is correlated with intrinsic motivation (Luo, 1999). For example, Baker (2004) examined the relationship between intrinsic motivation and job stress by collecting data from second-year undergraduates from 1998–2001. The results showed that intrinsic motivation is negatively associated with job stress. A similar relationship was found by Davis and Wilson (2000), who examined the effect of teachers' intrinsic motivation on job satisfaction and job stress in public elementary schools. Their findings indicated that teacher's intrinsic motivation is positively related to job satisfaction and negatively

related to job stress. Intrinsic motivation and stress have an inverse relationship (Maddi & Kobasa, 1981). People with high intrinsic motivation are assumed to be less impacted by stressful life events. Based on these points, we hypothesize that

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

2.3.4 Linking Job Stress and Performance

This study specifically focuses on how stress affects individuals' performance (as measured by total fitness and firearm skills) in the military. Numerous studies have demonstrated that job stress is negatively correlated with job performance (Fried, Ben-David, Tiegs, Avital, & Yeverechyahu, 1998; Jex, 1998). Siu (2003) investigated the effect of job stress on job performance among employees, finding that employees who have high job stress levels have lower job performance than those who reported low job stress. Similarly, Jamal (1984) analyzed the relationship between job stress and employee performance among nurses in two hospitals in a metropolitan Canadian city. Jamal (1984) ultimately found an inverse relationship between job stress and job performance.

In the military context, empirical studies have supported that stress is negatively associated with individuals' performance irrespective of gender. For example, Bray, Camlin, Fairbank, Dunteman, and Wheeless (2001) examined the relationships between domains of stress and levels of job performance among people in the United States Armed Forces. They collected survey data on health-related behaviors of military personnel from the Department of Defense in1995, and their results showed that higher levels of work-related stress tend to increase the odds of a lower level of job performance 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 total fitness levels in military organizations.

Hypothesis 5: Job stress negatively affects levels of firearm skills in military organizations.

2.3.5 Mediating Role of Job Stress

Job stress mediates the relationship between intrinsic motivation and individual performance. Intrinsic motivation directly impacts individuals' outcomes (Burton, Lydon, D'Alessandro, & Koestner, 2006; La Guardia, Ryan, Couchman, & Deci, 2000; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000) in terms of performance (Ryan & Deci, 1985) and job stress (Baker, 2004; Davis & Wilson, 2000; Luo, 1999). People with higher intrinsic motivation have lower job stress (Maddi & Kobasa, 1981). Job stress is also negatively correlated with outcomes (Fried, Ben-David, Tiegs, Avital, & Yeverechyahu, 1998; Jex, 1998; Siu, 2003). Given these relationships, it can be assumed that job stress indirectly affects the relationship between intrinsic motivation and organizational performance. Hence, we suggest that job stress mediates the relationship between intrinsic motivation and individual performance. Therefore, we propose that

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

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

2.4. Data and Methodology

The survey used in this study was conducted using the Republic of Korea Army's Special Forces Brigade and the Special Assault Commando Regiment in 2014. The questionnaire contains 45 questions covering a wide array of human resources management topics such as motivation, job satisfaction, job stress, organizational commitment, total fitness, and firearm skills. A total of 432 questionnaires were distributed to the military units, and 361 soldiers completed and returned the questionnaires, with 11 incompletes. The response rate for both groups was 81%. The 350-soldier sample comprised 178 volunteer soldiers from 30 squadrons of two special forces battalions and 172 conscripts from 24 squadrons of two special assault commando battalions. Data was analyzed using SEM. Internal consistency (Cronbach's α) was measured to determine the reliability of the questionnaire items. In addition, confirmatory factor analysis was conducted to confirm the validity of the measures. Causality among the SEM variables, the mediating effect of the parameters, and model fit were analyzed, and the hypotheses were tested. Figure 1 represents the relationships studied.

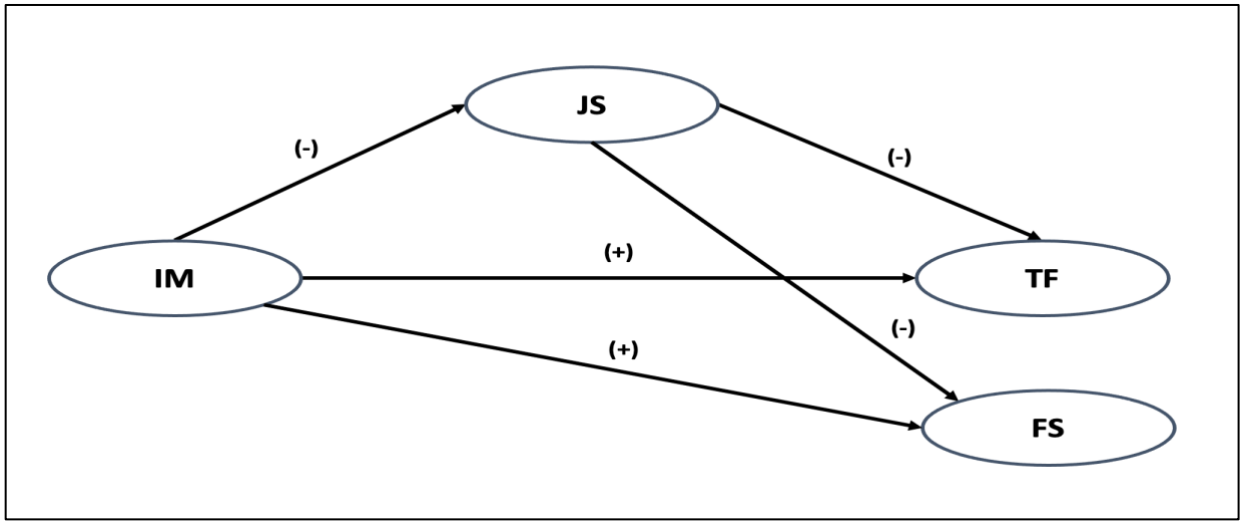


Figure 1. Conceptual Framework and Hypotheses

2.4.1 Dependent Variable

Dependent variables include total fitness and firearm skills. This study's dependent variables focused on primary combat competencies such as firearm skills and physical fitness levels rather than specialized and advanced competencies. Total fitness was measured using results from the Republic of Korea Army physical fitness test (push-ups, sit-ups, and 1.86 miles of running). The scores for each item were summed up to measure total fitness. Firearm skills were measured by a question on the survey that measured firearm accuracy. Firearm skills were asked the respondent to indicate how many hits they would have if shooting at 20 targets.

2.4.2 Independent Variable

The independent variable is intrinsic motivation. Intrinsic motivation was measured using a 5-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). Six items were measured using the intrinsic motivation scale; these items are listed in detail in the appendix and are in line with previous studies (Fortier, Vallerand, & Guay, 1995; Vallerand, Fortier, & Guay, 1997). An example item is "I joined military service because I believe it is important to me." The Cronbach's alpha for the scale is 0.92.

2.4.3 Mediation Variable

The mediation variable is job stress. In this study, job stress was measured using a 5-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). Ten items were used to construct the job stress scale, in line with previous studies using job stress (Sohn, 2001). These items significantly focused on military life and are listed in detail in the appendix. The scale has a Cronbach's alpha of 0.92.

2.4.4 Control Variables

The demographic characteristics of 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 = less than high school, 2 = high school graduate, 3 = community college attendee, 4 = community college graduate, 5 = university graduate, 6 = graduate school) were used as control variables.

2.5. Results

To analyze the data and test the hypothesized model, we used the AMOS 21 as statistical tools. We used the two-step approach proposed by Anderson and Gerbing (1988) to test our hypotheses. After analyzing the 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.

2.5.1 Descriptive Statistic

Table 1 presents the 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 years. The majority of the soldiers were under the age of 24. The sample was evenly distributed in rank between private to master sergeants. Approximately 70% of the total sampled soldiers comprised junior-ranked soldiers who had served for less than three years. Approximately 70% of soldiers had more than a college education.

Additionally, Table 1 reports the reliabilities of all variables. Intrinsic motivation is significantly and negatively correlated with job stress ($r = -0.63$, $p < 0.05$). Intrinsic motivation is significantly and positively correlated with total fitness ($r = 0.27$, $p < 0.05$), firearm skills ($r =$

0.20, $p < 0.05$), age (r = 0.28, $p < 0.05$) and rank (r = 0.39, $p < 0.05$). Job stress is significantly and negatively associated with total fitness (r = -0.21, $p < 0.05$). Total fitness is positively correlated with firearm skills (r = 0.45, $p < 0.05$), and firearm skills are significantly and positively associated with both age (r = 0.35, $p < 0.05$) and rank (r = 0.51, $p < 0.05$).

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

N = 350	Mean	SD	Correlations						
			1	2	3	4	5	6	7
1. Intrinsic Motivation	20.87	5.99	-						
2. Job Stress	25.81	9.83	-0.6328*	-					
3. Total Fitness	8.77	3.03	0.2731*	-0.2092*	-				
4. Firearm Skills	86.25	15.90	0.1955*	-0.0333	0.4550*	-			
5. Age	23.27	2.95	0.2829*	-0.1806*	0.3996*	0.3486*	-		
6. Rank	3.93	1.73	0.3902*	-0.2345*	0.7171*	0.5104*	0.6358*	-	
7. Education	3.50	1.30	-0.0426	0.0664	-0.0377*	0.0202	0.1584*	0.0122	-

Significance: *$p < 0.05$

2.5.2 Confirmatory Factor Analysis

We evaluated the overall goodness of fit in both the CFA and the proposed hypothesized model using recommendations from Arbuckle (2008). We used AMOS 21 and maximum likelihood estimation to confirm the CFA and the hypothesized model. Table 2 shows the overall goodness-of-fit indicators, including absolute fit. In the CFA, several statistical tests were used to determine how well the model fit the data (Suhr, 2006). The results showed that the standardized root mean square residual (SRMR) is 0.0495 in the CFA and 0.0556 in the hypothesized model.

Hu and Bentler (1999) suggested that an SRMR less than 0.08 is considered a good fit. Root mean square error of approximation (RMSEA) is 0.070 in the CFA and 0.075 in the hypothesized model. MacCallum, Browne, and Sugawara (1996) noted that an RMSEA value of 0.08 or less indicates an acceptable model fit. The normed fit index (NFI) is 0.923 in the CFA and 0.883 in the hypothesized model. The relative fit index (RFI) is 0.899 in the CFA and 0.857 in the hypothesized model. The incremental fit measure (IFI) is 0.950 in the CFA and 0.919 in the hypothesized model. The Tucker-Lewis index (TLI) is 0.934 in the CFA and 0.900 in the hypothesized model, and the comparative fit index (CFI) is 0.950 in the CFA and 0.918 in the hypothesized model. All these values met the criteria for a good fit (Bentler & Bonett, 1980).

Table 2. Goodness-of-Fit Indicators

Models	$\chi 2$	SRMR	RMSEA	NFI	RFI	IFI	TLI	CFI
Confirmatory factor analysis	350.30	0.0495	0.070	0.923	0.899	0.950	0.934	0.950
Hypothesized model	621.07	0.0556	0.075	0.883	0.857	0.919	0.900	0.918

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.

2.5.3 Hypothesis Testing

Table 3. Regression coefficients for direct relationships between intrinsic motivation and job stress and total fitness and firearm skills for hypothesis testing

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 used SEM to test the hypotheses with maximum likelihood estimation in AMOS 21. The results of the hypothesized model are presented in Table 3 and Figure 2. We found that education has an insignificant impact on total fitness, while age (standardized $\beta = -0.121$, $p < 0.05$) and rank (standardized $\beta = 0.880$, $p < 0.01$) affect total fitness. Furthermore, we confirmed that rank (standardized $\beta = 0.480$, $p < 0.01$) positively affects firearm skills. Hypothesis 1 predicted that intrinsic motivation positively affects total fitness in military organizations. Intrinsic motivation did not significantly affect total fitness, so we were 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 intrinsic motivation and firearm skills. However, we did not find support for Hypothesis 2 (standardized $\beta = 0.092$, $t = 1.399$). Hypothesis 3 tested the causal relationship between intrinsic motivation and job stress in military organizations. As

expected, we found that intrinsic motivation had an inverse relationship with job stress (standardized β = -0.675, t = -9.326, p<0.001). Thus, a soldier's intrinsic motivation is negatively related to job stress. Hypothesis 4 predicted that job stress negatively affects total fitness (standardized β = -0.082, t = -1.342). This hypothesis was rejected. Hypothesis 5 tested the causal relationship between job stress and firearm skills (standardized β = 0.140, t = 2.101, p<0.005) and was supported.

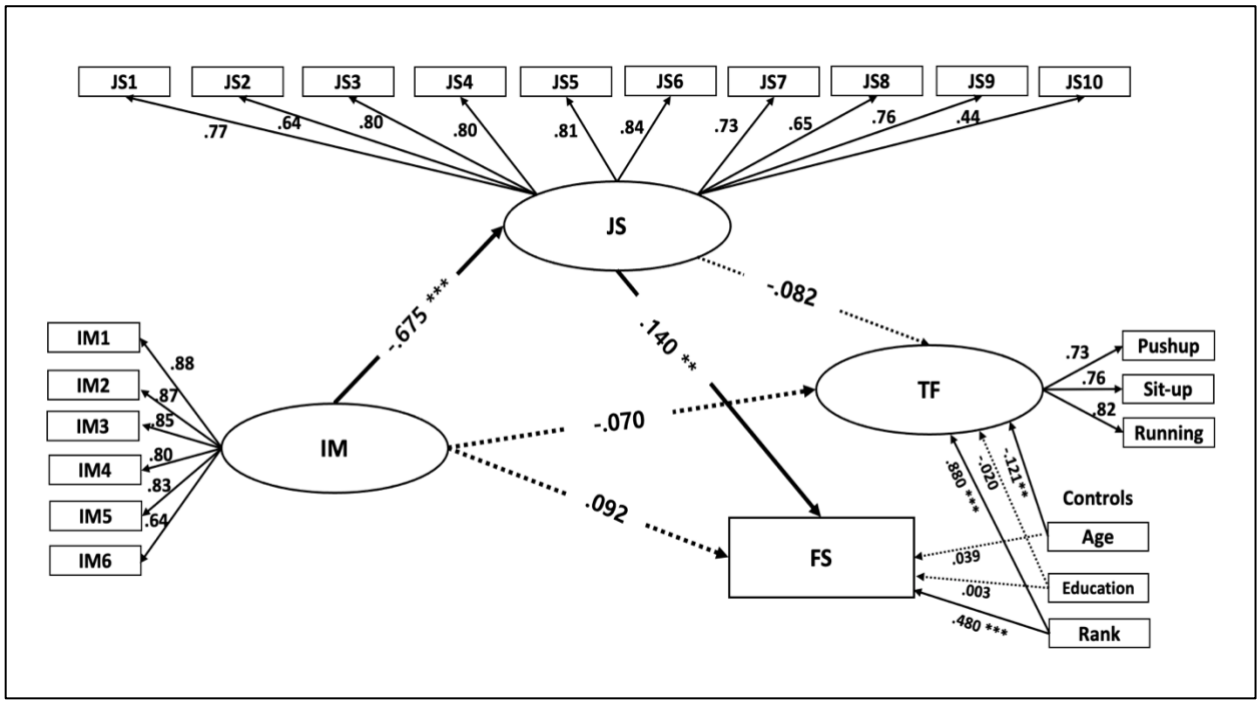


Figure 2. The Results of the Structural Equation Modeling

To examine job stress's mediating role, we used the SEM results and tested Hypotheses 6 and 7. Figure 2 illustrates the results of the SEM. The relationship between intrinsic motivation and job stress (standardized β = -0.675, t = -9.326, p<0.001) and firearm skills (standardized β = 0.140, t = 2.101, p<0.05) is significant. Thus, the relationship between intrinsic motivation and firearm skills is mediated by job stress. However, since the path from job stress to total fitness

(standardized $\beta = -0.082$, $t = -1.342$) is insignificant, the relationship between intrinsic motivation total fitness is not mediated by job stress.

We conducted percentile bootstrapping and bias-corrected bootstrapping at a 95% confidence interval with 5,000 bootstraps from the above result samples (Arnold, Connelly, Walsh, & Martin Ginis, 2015). Table 4 shows the bootstrapping results, including standardized direct, indirect, and total effects. That is recommended by Preacher and Hayes (2008). As seen in Table 4, the indirect effects of job stress on firearm skills is significant (indirect effect = -0.095, $p<0.05$). We determined that job stress mediates the relationship between intrinsic motivation and firearm skills. Thus, Hypothesis 7 was supported.

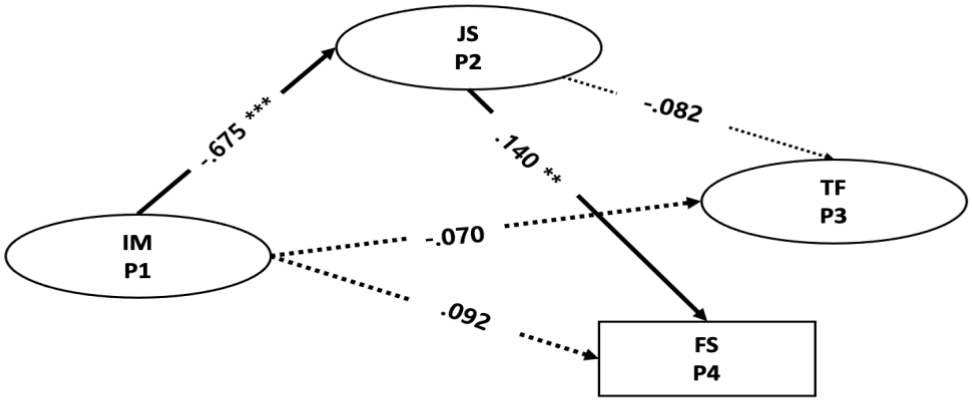
Table 4. Bootstrapping results for standardized direct, indirect, and total effects

	β	Bootstrapping				
		95% CI		Bias-corrected 95% CI		Two-tailed significance
		LLCI	ULCI	LLCI	ULCI	
Standardized direct 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
IM → JS → FS	-0.095	-0.190	-0.005	-0.189	-0.004	0.037(**)
Standardized 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 to determine the impact of intrinsic motivation on individual performance. Figure 3 shows the results of the covariance decomposition, which has two different pathways. In the first path (IM → JS → TF), we analyzed the mediating effects by dividing them into direct effect, indirect effect, and total effect through covariance decomposition. According to the covariance decomposition, job stress has no indirect effect on total fitness. Thus, the relationship between intrinsic motivation and total fitness is not mediated by job stress, and Hypothesis 6 is rejected. In the second path (IM → JS → FS), job stress partially mediated the relationship between intrinsic motivation and firearm skills, supporting Hypothesis 7.



Path	Direct Effect	Indirect Effect	Total Effect
IM → JS → TF	-.070	P21(-.675) × P32(-.082) = **N/A**	**N/A**
IM → JS → FS	.092	P21(-.675) × P42(.140) = **-.0945**	0.092 + (-.0945) = -.002

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

Figure 3. Covariance Decomposition Results for the Impact of Intrinsic Motivation on Individual Performance

Regarding the research question of whether intrinsic motivation affects individuals' performances in the Republic of Korea Army and whether job stress mediates this relationship, the SEM analysis shows that intrinsic motivation negatively impacts job stress. Additionally, job stress mediated the relationship between intrinsic motivation and firearm skills. However, the relationship between intrinsic motivation and total fitness is not mediated by job stress. Additionally, we found that rank is positively associated with both total fitness and firearm skills.

2.6. Discussion

This study examined how intrinsic motivation affects individuals' performance in military organizations and explored whether job stress mediates the relationship between intrinsic motivation and individual performance. The findings are partially supported by existing studies (Baard, Deci, & Ryan, 2004; Giauque, Anderfuhren-Biget, & Varone, 2013). Analysis of the SEM shows that intrinsic motivation negatively impacts soldiers' job stress. Additionally, we found that job stress has a positive effect on firearm skills. The findings confirm previous studies in which job stress partially mediated the relationship between intrinsic motivation and individual performance (Chen, Lin, & Lien, 2011; Tyagi & Lochan Dhar, 2014). We also found that as soldiers' ranks increase, total fitness and firearm skills increase as well.

The findings of this study are valuable for several reasons. Firstly, the study confirms that intrinsic motivation theory can be applied to the unique environment of military institutions. The findings provide empirical evidence that soldiers' intrinsic motivation impacts their performance. Many existing studies have demonstrated that the higher individuals' intrinsic motivation, the better their performance (Burton, Lydon, D'Alessandro, & Koestner, 2006; La Guardia, Ryan, Couchman, & Deci, 2000), but, as noted, there are few empirical studies exploring the

relationship between intrinsic motivation and individual performance in the military. Thus, this research is theoretically significant because it extends the general applicability of the motivation theory to the military sectors.

Secondly, this study has important practical implications. The study found that intrinsic motivation is negatively associated with job stress and that job stress partially mediates the relationship between intrinsic motivation and firearm skills, which demonstrates that intrinsic motivation and job stress are crucial in improving soldiers' performance. This study has been confirmed that soldiers who have higher intrinsic motivation exhibit less job stress. It is revealed that intrinsic motivation is negatively associated with job stress. Practitioners seeking to recruit and retain talented soldiers should focus on the intrinsic motivation of the military. In the recruitment process, the intrinsic motivation of all enlisted persons should be measured, and the results should be utilized to recruit excellent soldiers. Moreover, leaders should create a work environment that reduces stress among employees.

South Korea has recruited a large portion of soldiers by conscription for 70 years; however, conscripted military personnel have low intrinsic motivation. This study's results confirm the value of the Republic of Korea Armed Forces' current reforms to the conscription system to restructure the military into a high-performance organization. The study furnishes empirical data on South Korea's military recruitment system to policymakers tasked with designing a new recruitment system. This data can be used to inform future military reforms and recruitment. Thus, the study significantly contributes to military sector literature on motivation and organizational performance. Given that we obtained data and analyzed the proposed model

in the context of South Korean military organizations, the results should be interpreted with caution. The results of this study should be applied cross-culturally as a future project.

2.7. References

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, *103*(3), 411.

Arbuckle, J. (2008). *Amos 17.0 user's guide*: SPSS Inc.

Arnold, K. A., Connelly, C. E., Walsh, M. M., & Martin Ginis, K. A. (2015). Leadership styles, emotion regulation, and burnout. *Journal of Occupational Health Psychology, 20*(4), 481.

Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. *Journal of applied social psychology, 34*(10), 2045-2068.

Baker, S. R. (2004). Intrinsic, extrinsic, and motivational orientations: Their role in university adjustment, stress, well-being, and subsequent academic performance. *Current Psychology, 23*(3), 189-202.

Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological bulletin, 88*(3), 588.

Borzaga, C., & Tortia, E. (2006). Worker motivations, job satisfaction, and loyalty in public and nonprofit social services. *Nonprofit and voluntary sector quarterly, 35*(2), 225-248.

Bray, R. M., Camlin, C. S., Fairbank, J. A., Dunteman, G. H., & Wheeless, S. C. (2001). The effects of stress on job functioning of military men and women. *Armed Forces & Society, 27*(3), 397-417.

Burton, K. D., Lydon, J. E., D'Alessandro, D. U., & Koestner, R. (2006). The differential effects of intrinsic and identified motivation on well-being and performance: prospective, experimental, and implicit approaches to self-determination theory. *Journal of personality and social psychology, 91*(4), 750.

Chen, M.-F., Lin, C.-P., & Lien, G.-Y. (2011). Modeling job stress as a mediating role in predicting turnover intention. *The Service Industries Journal, 31*(8), 1327-1345.

Davis, J., & Wilson, S. M. (2000). Principals' efforts to empower teachers: Effects on teacher motivation and job satisfaction and stress. *The clearing house, 73*(6), 349-353.

Defense, M. o. N. (2012). *Defense White Paper*. Seoul: Ministry of National Defense.

Defense, M. o. N. (2016). *Defense White Paper*. Seoul: Ministry of National Defense.

Finance, M. o. S. a. (2017). *2018 Government Budget*. Sejong-si, Korea Retrieved from http://www.mosf.go.kr/nw/mosfnw/detailInfograpView.do?searchNttId1=MOSF_000000000010572&menuNo=4040500

Fortier, M. S., Vallerand, R. J., & Guay, F. (1995). Academic motivation and school performance: Toward a structural model. *Contemporary educational psychology, 20*(3), 257-274.

Fried, Y., Ben-David, H. A., Tiegs, R. B., Avital, N., & Yeverechyahu, U. (1998). The interactive effect of role conflict and role ambiguity on job performance. *Journal of occupational and organizational psychology, 71*(1), 19-27.

Giauque, D., Anderfuhren-Biget, S., & Varone, F. (2013). HRM practices, intrinsic motivators, and organizational performance in the public sector. *Public Personnel Management, 42*(2), 123-150.

Griffith, J. (2008). Institutional motives for serving in the U.S. Army National Guard: Implications for recruitment, retention, and readiness. *Armed Forces & Society, 34*(2), 230-258.

Hu, L. t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal, 6*(1), 1-55.

Jamal, M. (1984). Job stress and job performance controversy: An empirical assessment. *Organizational behavior and human performance, 33*(1), 1-21.

Jex, S. M. (1998). *Stress and job performance: theory, research, and implications for managerial practice—advanced topics in organizational behavior*: Sage Publications Ltd, California.

Joo, B. K., Jeung, C. W., & Yoon, H. J. (2010). Investigating the influences of core self-evaluations, job autonomy, and intrinsic motivation on in-role job performance. *Human Resource Development Quarterly, 21*(4), 353-371.

Jurkiewicz, C. L., Massey Jr, T. K., & Brown, R. G. (1998). Motivation in public and private organizations: A comparative study. *Public productivity & Management review*, 230-250.

Karatepe, O. M., & Tekinkus, M. (2006). The effects of work-family conflict, emotional exhaustion, and intrinsic motivation on job outcomes of front-line employees. *International Journal of Bank Marketing*.

Kim, S., & Choi, E. (2010). A study on the social economic analysis followed by transfer of sufficiency model of human resources for national defense. *Korea public administration quarterly, 22*(1).

La Guardia, J. G., Ryan, R. M., Couchman, C. E., & Deci, E. L. (2000). Within-person variation in security of attachment: a self-determination theory perspective on attachment, need fulfillment, and well-being. *Journal of personality and social psychology, 79*(3), 367.

Luo, L. (1999). Work motivation, job stress and employees' well-being. *Journal of applied management studies, 8*, 61-72.

MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological methods, 1*(2), 130.

Maddi, S. R., & Kobasa, S. C. (1981). Intrinsic motivation and health. In *Advances in intrinsic motivation and aesthetics* (pp. 299-321): Springer.

Morris, L. V., Finnegan, C., & Wu, S.-S. (2005). Tracking student behavior, persistence, and achievement in online courses. *The Internet and Higher Education, 8*(3), 221-231.

Moskos Jr, C. C. (1977). From institution to occupation: Trends in military organization. *Armed Forces & Society, 4*(1), 41-50.

Nevid, J. S. (2012). *Psychology: Concepts and applications*: Nelson Education.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods, 40*(3), 879-891.

Raabe, J., Zakrajsek, R. A., Orme, J. G., Readdy, T., & Crain, J. A. (2020). Perceived cadre behavior, basic psychological need satisfaction, and motivation of US Army ROTC cadets: A self-determination theory perspective. *Military Psychology, 32*(5), 398-409.

Reis, H. T., Sheldon, K. M., Gable, S. L., Roscoe, J., & Ryan, R. M. (2000). Daily well-being: The role of autonomy, competence, and relatedness. *Personality and social psychology bulletin, 26*(4), 419-435.

Ryan, R. M., & Deci, E. L. (1985). Intrinsic motivation and self-determination in human behavior. *New York and London: Plenum*.

Ryan, R. M., & Deci, E. L. (2000a). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology, 25*(1), 54-67.

Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist, 55*(1), 68.

Siu, O. l. (2003). Job stress and job performance among employees in Hong Kong: The role of Chinese work values and organizational commitment. *International journal of psychology, 38*(6), 337-347.

Song, K.-J., Han, M., & Han, S.-Y. (2010). The influence of the enlistment-motivation on the South Korea military life. *Korea Journal of Psychology, 16*(4), 469-485.

Suhr, D. D. (2006). Exploratory or confirmatory factor analysis?

Tyagi, A., & Lochan Dhar, R. (2014). Factors affecting health of the police officials: Mediating role of job stress. *Policing: An International Journal of Police Strategies & Management, 37*(3), 649-664.

Vallerand, R. J., Fortier, M. S., & Guay, F. (1997). Self-determination and persistence in a real-life setting: toward a motivational model of high school dropout. *Journal of personality and social psychology, 72*(5), 1161.

Woodruff, T., Kelty, R., & Segal, D. R. (2006). Propensity to serve and motivation to enlist among American combat soldiers. *Armed Forces & Society, 32*(3), 353-366.

Woodruff, T. D. (2017). Who should the military recruit? The effects of institutional, occupational, and self-enhancement enlistment motives on soldier identification and behavior. *Armed Forces & Society, 43*(4), 579-607.

Wrzesniewski, A., Schwartz, B., Cong, X., Kane, M., Omar, A., & Kolditz, T. (2014). Multiple types of motives don't multiply the motivation of West Point cadets. *Proceedings of the National Academy of Sciences, 111*(30), 10990-10995.

CHAPTER 3

AFFECTIVE ORGANIZATIONAL COMMITMENT, JOB SATISFACTION, AND INDIVIDUAL PERFORMANCE: COMPARING CONSCRIPTS AND VOLUNTEERS

3.1 Abstract

Military organizations worldwide face challenges in recruiting and retaining high-quality personnel because of increasing inter-sectoral competition, changes in social values, and low unemployment rates. Although job satisfaction and affective organizational commitment are essential for employee retention and performance, there has been little research on the impact of job satisfaction on affective organizational commitment and individual performance in the military sector. This study examines differences between conscripts and volunteer soldiers in affective organizational commitment, job satisfaction, and individual performance. The study utilizes survey data collected from 292 soldiers in the Special Forces Brigade and Special Assault Commando Regiment of the Republic of Korea's Army. The results indicate that volunteer soldiers had higher job satisfaction and total fitness levels than conscripts. Additionally, job satisfaction has a statistically significant positive effect on affective organizational commitment and total fitness levels in military organizations.

3.2 Introduction

Attracting and retaining talented employees has become an important challenge for many organizations (Buchanan, 1974). Scholars have argued that around the world the public sector is faced with challenges in recruiting and retaining high-quality employees and sustaining employees' motivation and performance due to widespread financial constraints (Carter et al.,

2013; Chordiya, Sabharwal, & Goodman, 2017; Lewis & Frank, 2002; Lyons, Duxbury, & Higgins, 2006; Pandey, 2010). These challenges are even greater for military organizations because of increasing inter-sectoral competition, changing social values, and low unemployment rates (Cohn, 2007; Patrichi, 2015; Tresch, 2008). Many countries have replaced conscription with all-volunteer military forces (Jehn & Selden, 2002). Starting with Belgium and the Netherlands in the early 1990s, France, Portugal, and Italy have all removed conscription (Haltiner, 1998; Leander, 2004). In the case of the United States, after transitioning to an all-volunteer forces, the U.S. Armed Forces has encountered significant problems with the recruitment and retention of capable personnel (Braun, Kennedy, Sadler, & Dixon, 2015; Cook & Doorenbos, 2017).

Military service is primarily divided into conscription and voluntary military recruitment (Asch & Warner, 2001; Burk, 1992; Cohen, 2019; Cohn & Toronto, 2017; Flynn, 1998; Kier, 2017; Lee & McKenzie, 1992; Lee, 2011; Varoglu & Bicaksiz, 2005). Conscription is mandatory military service for almost all young men of a given age, and voluntary military service consists of voluntary professional forces (Pickering, 2011; Safrai, 2019). After replacing conscription with all-volunteer forces in the U.S. and across Europe (Haltiner, 1998; Jehn & Selden, 2002; Leander, 2004; Sorensen, 2000), there have been significant problems in recruiting and retaining enough capable soldiers for future wars (Braun et al., 2015; Cook & Doorenbos, 2017; Griffith, 2008; Pickering, 2011; Tresch, 2008).

Previous studies have revealed that job satisfaction and affective organizational commitment are negatively associated with employees' turnover intentions and positively related to organizational performance (Chordiya et al., 2017; Park & Rainey, 2007; Somers, 1995;

Vandenberghe & Bentein, 2009; Vandenberghe, Bentein, & Stinglhamber, 2004; Wasti, 2003). Employees with high affective organizational commitment and job satisfaction tend to dedicate themselves to the organization, are more satisfied with their jobs, and show more commitment to remaining with their organizations. Given that affective organizational commitment and job satisfaction are critical to recruiting and retaining high-quality personnel, it is crucial to understand the impact of job satisfaction and affective organizational commitment in the military sector to combat the shortage of human resources in the military (Coates, Silvernail, Fulton, & Ivanitskaya, 2011).

Scholars have agreed that public employees' affective organizational commitment is related to employees' behaviors, attitudes, and job performance (Chordiya et al., 2017; Park & Rainey, 2007; Somers, 1995). Job satisfaction is likewise a critical contributor to employee attitudes and job performance (Vandenberghe & Bentein, 2009; Vandenberghe et al., 2004; Wasti, 2003). Job satisfaction is related to income, job security, autonomy, and promotional opportunities (Ting, 1997; West & Berman, 2009). Job satisfaction is considered the most important antecedent to affective organizational commitment (Boles, Madupalli, Rutherford, & Wood, 2007). Previous studies suggest that individuals with higher job satisfaction have higher affective organizational commitment (Chordiya et al., 2017). This study mainly examines the relationship between affective organizational commitment and job satisfaction (Vandenberg & Lance, 1992; Williams & Hazer, 1986).

In the military context, empirical studies have supported that job satisfaction is related to individuals' attitudes and performances (Harrington, Bean, Pintello, & Mathews, 2001; Holtom, Smith, Lindsay, & Burton, 2014). Indeed, military personnel with low job satisfaction exhibit

more intention to leave their organizations (Harrington et al., 2001). For example, Holtom et al. (2014) investigated the relationship between job satisfaction and turnover in the U.S. Air Force Academy. They discovered that job satisfaction and affective commitment are negatively associated with turnover intention in the military.

Although affective organizational commitment and job satisfaction are critical to recruiting and retaining high-quality military personnel, little is known about the impact of job satisfaction on affective organizational commitment and individual performance in the military sector. Furthermore, the links between job satisfaction, affective organizational commitment, and individual performance in the military sector have not received much attention.

The study examines whether there are differences in affective organizational commitment, job satisfaction, and individual performance between conscripts and volunteer soldiers. This study also investigates the impact of job satisfaction on affective organizational commitment and individual performance in the military sector. Overall, this study addresses the following three research questions: (1) What are the differences in affective organizational commitment, job satisfaction, and individual performance among conscripts and volunteer soldiers? (2) Does job satisfaction influence affective organizational commitment among conscripts and volunteer soldiers? (3) Does job satisfaction influence individual performance among conscripts and volunteer soldiers? The answers to these questions contribute to the understanding of differences in soldiers' attitudes and individual performances. This study reveals that job satisfaction and total fitness vary for conscripts versus volunteer soldiers. This study also offers insight to the Republic of Korea Armed Forces regarding the transition from conscription to an all-volunteer force or a hybrid recruitment model. Furthermore, this study

extends the general applicability of job satisfaction and affective organizational commitment to the military context.

3.3 Theoretical Background

3.3.1 Dissimilarities Among Conscripts and Volunteer Soldiers

Military service is primarily divided into conscription and voluntary service, and countries approach recruitment with consideration for various factors, such as the intensity of external threats, GDP, political systems, values, and historical experiences (Lee, 2011). Table 5 compares conscription and voluntary military service. Voluntary service and conscription are like mirror images as one's merit is a demerit of the other, and vice versa. A volunteer-based military can utilize socially efficient human resources. Specialized and skilled soldiers can be trained but maintaining troops' preparedness elevates the financial burden and the difficulty of securing adequate military reserves in case of emergency.

Table 5. Comparison of conscription and voluntary service

Classification	Advantage	Disadvantage
Conscription	• Easy to meet the quantitative and qualitative demands of the military • Low costs to retaining and recruiting military personnel • Ensures adequate military reserves war power and immediate combat power in case of emergency	• Difficult to secure obtain skilled soldiers in for specialized positions • Constraints on people's rights and burden imposition • Low motivation
Voluntary Service	• Fairness in military service and efficient allocation of human resources • High motivation, active military service attitude • Able to secure skilled soldiers and high-tech field personnel	• Increased financial burden to maintain military personnel • Concerns the high costs • Difficult to secure adequate reserves war power in case of emergency

Existing research has noted that when a person is intrinsically motivated, they perform better without material rewards or external factors (Ryan & Deci, 1985). When individuals are intrinsically motivated, their performance and well-being are better than those of their peers (Ryan & Deci, 2000). Lower levels of intrinsic motivation tend to negatively affect organizational and individual performance (La Guardia, Ryan, Couchman, & Deci, 2000; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000).

Males in South Korea over the age of 18 are obligated to serve in the military for at least 18 months. Soldiers recruited through conscription have low motivation and performance (La Guardia et al., 2000; Reis et al., 2000). Song, Han, and Han (2010) explored the relationship between intrinsic motivation and individuals' job satisfaction in the Republic of Korea Marines. They found that military personnel with high intrinsic motivation exhibited greater satisfaction with their careers and had a positive image of their military life.

Considering the results of previous studies, we adopt Hypotheses 1, 2, and 3:

Hypothesis 1: Volunteer soldiers have higher job satisfaction than conscripts.

Hypothesis 2: Volunteer soldiers have higher affective organizational commitment than conscripts.

Hypothesis 3: Volunteer soldiers have higher total fitness than conscripts.

3.3.2 Job Satisfaction and Affective Organizational Commitment

Park and Rainey (2007) defined affective organizational commitment as "an individual's attitude towards the organization, consisting of a strong belief in and acceptance of the organization's goals, willingness to exert considerable effort on behalf of the organization, and a strong desire to maintain membership in the organization" (p.199). Existing literature has collected significant evidence that affective organizational commitment is strongly related to critical organizational outcomes such as performance, lower employee absenteeism, and turnover (Blau & Boal, 1987; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Tett & Meyer, 1993). Individual employees with high affective organizational commitment are more likely to retain their jobs in the long run and also show high levels of job performance.

Job satisfaction and affective organizational commitment are critical to understanding employee performance, motivation, retention, and turnover (Caillier, 2013; Chordiya, Sabharwal, & Goodman, 2017; Meyer et al., 2002; Tett & Meyer, 1993). This study examines the relationship between job satisfaction and affective organizational commitment. Past studies have yielded mixed results regarding the causal relationship between organizational commitment and job satisfaction (Bateman & Strasser, 1984; Glisson & Durick, 1988; Park & Rainey, 2007; Vandenberg & Lance, 1992). However, job satisfaction has been identified as the most important

antecedent of affective organizational commitment (Chordiya et al., 2017; Randall, 1993; Vandenberg & Lance, 1992; Williams & Hazer, 1986). Scholars have argued that if employees have high satisfaction with important determinants such as income, security, autonomy, and promotions, they exhibit a more substantial affective commitment to their organization (Chordiya et al., 2017). Job characteristics influence employee job satisfaction. Job satisfaction affects determinants of affective organizational commitment such as organizational goals and values and maintaining membership in the organization (Chordiya et al., 2017; Vandenberg & Lance, 1992; Williams & Hazer, 1986).

Therefore, we adopt Hypothesis 4 as follows:

Hypothesis 4: Job satisfaction positively affects affective organizational commitment among conscripts and volunteer soldiers.

3.3.3 Job Satisfaction and Individual Performance

Job satisfaction is considered a central topic in organizational studies and has been studied extensively (Cantarelli, Belardinelli, & Belle, 2016); however, researchers have struggled to agree on the meaning and definition of job satisfaction and how to measure its various dimensions (Rainey, 2009). Smith (1969) defined job satisfaction as "the feeling a worker has about his job" (p.100). In the public sector, Rainey (2009) expanded the term to cover "how an individual feels about his or her job and various aspects of it, usually in the sense of how favorable—how positive or negative—those feelings are" (p.298). Gordon (2011) also defined job satisfaction as an "employee's reaction to what he or she receives from the job, that is, the work environment" (p.191). This study adopts Gordon's (2011) definition of job satisfaction.

Past research indicates that job satisfaction is associated with various organizational factors, such as organizational commitment, work ethic, leadership style, supportive management, absenteeism, turnover intention, and turnover rate (Chapman et al., 2016; Fu, Deshpande, & Zhao, 2011; Gould-Williams, 2004; Park & Rainey, 2007; Rainey, 2009). Our second research question examines the relationship between job satisfaction and individual performance in military organizations for conscripts and volunteer soldiers. Given the results of previous studies, we adopt the following hypothesis:

Hypothesis 5: Job satisfaction positively affects individual performance among conscripts and volunteer soldiers.

3.4 Data and Methodology

This study used data from Republic of Korea Army's Special Forces Brigade and Special Assault Commando Regiment soldiers in 2014. The survey contained 45 questions covering a wide array of human resources management topics, including motivation, job satisfaction, organizational commitment, job stress, total fitness, and firearm accuracy. A total of 432 questionnaires were distributed to the military units, and a total of 361 soldiers returned the questionnaires; 11 of these questionnaires were discarded as incomplete. The response rate for both conscripts and volunteer soldiers was 81%. The 292-soldier sample comprised 120 volunteer soldiers from 30 squadrons of two special forces battalions and 172 conscripts from 24 squadrons of two special assault commando battalions.

This study employed standardized ordinary least squares (OLS) regression for data analysis.

3.4.1 Dependent Variables

The dependent variables in this study are affective organizational commitment and total fitness. Affective organizational commitment was measured using six survey items, including the following: “I feel like a family member on my team," "I have strong affection for my team," "I do not feel a sense of belonging to my team," "I am proud of working in my team," "I would like to continue working in my team," and "I feel like it is my problem if my team faces a problem." All six items were measured on a 5-point Likert-type scale ranging from 1 ("strongly disagree”) to 5 (“strongly agree "). The Cronbach’s alpha for the affective organizational commitment scale was approximately 0.86.

The second dependent variable is total fitness. This study focused on primary combat competencies such as physical fitness level rather than specialized and advanced competencies. Total fitness was measured using results from the Republic of Korea Army physical fitness test (push-ups, sit-ups, and 1.86 miles of running). The scores for each item were summed up to measure total fitness. The Cronbach’s alpha for the total fitness was approximately 0.85.

3.4.2 Independent Variable

The independent variable in this study is job satisfaction. A single-item measurement of job satisfaction was used, namely “I am satisfied with my job." The item was measured on a 5-point Likert scale ranging from 1 ("strongly disagree”) to 5 (“strongly agree "). Scholars have noted that using a single-item measurement of job satisfaction is more valuable than a multi-item measure of job satisfaction (Wanous, Reichers, & Hudy, 1997), and several studies on job

satisfaction have used single-item measures (Caillier, 2013; Chordiya, Sabharwal, & Goodman, 2017; Lee & Sabharwal, 2016; Moynihan & Pandey, 2007; West & Berman, 2009).

3.4.3 Control Variables

Several control variables that may be related to the dependent variables were included, namely age, length of service (1 = 6 months, 2 = 12 months, 3 = < 18 months, 4 = > 18 months, 5 = 3–4 years), and education level (1 = less than high school, 2 = high school graduate, 3 = community college attendee, 4 = community college graduate, 5 = university, 6 = graduate school).

3.5 Results

Table 6 provides descriptive statistics of the variables of age, length of service, and education level for both groups. The sampled soldiers' ages ranged from 19 to 30 years, with an average age of 22.27 years. The majority of the soldiers were under 23 years of age (82.9%). Approximately 62% of the total sampled soldiers had served for less than 18 months. A majority of respondents (65.4%) had a college education.

There seems to be no visible difference between conscripts and volunteer soldiers with respect to affective organizational commitment. The mean values of total fitness differ, with volunteer soldiers achieving a higher average score (10.57) than conscripts (6.79). Concerning job satisfaction, volunteer soldiers presented a higher mean value than conscripts.

These rough descriptive statistics of the variables suggest that there may be significant differences in values of total fitness and job satisfaction between conscripts and volunteer soldiers.

Table 6. Descriptive statistics

	Conscripts (N = 172)				Volunteers (N = 120)				All (N = 292)			
	M	SD	Min.	Max.	M	SD	Min.	Max.	M	SD	Min.	Max.
Affective Commitment	25.05	4.12	10	30	25.875	3.58	13	30	25.39	3.92	10	30
Total Fitness	6.79	2.86	0	14	10.57	1.59	6.4	16.6	8.34	3.05	0	16.6
Job Satisfaction	2.87	1.14	1	5	3.41	1.16	1	5	3.09	1.17	1	5
Age	21.84	1.14	20	29	22.89	1.59	19	30	22.27	1.44	19	30
Length of Service	2.20	1.18	1	4	3.87	1.03	1	5	2.88	1.39	1	5
Education	3.64	1.30	1	6	3.09	1.26	2	6	3.41	1.31	1	6

We used a t-test to measure significant differences in affective organizational commitment, individual performance, and job satisfaction between conscripts and volunteer soldiers. The findings are presented in Table 7. The differences in mean for the affective organizational commitment of conscripts versus volunteer soldiers was not statistically significant. Additionally, volunteer soldiers had a significantly higher mean value for total fitness levels (t-value < 0.000) than conscripts. Lastly, volunteer soldiers scored a higher mean value than conscripts on job satisfaction (t-value < 0.001).

Table 7. Comparing mean differences between conscripts and volunteer soldiers

	Conscripts	Volunteers	T-value	Sig.
Affective Commitment	25.05	25.88	1.78	.07
Total Fitness	6.79	10.57	13.13	.00***
Job Satisfaction	2.87	3.41	3.98	.001**

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

We estimated the standardized results of the OLS regression analysis to measure the impact of job satisfaction on affective organizational commitment and individual performance for conscripts and volunteer soldiers. The results are presented in Table 8. We predicted that job satisfaction positively affects an individual's performance, and we examined this hypothesis by testing the model separately. The conscription (1.445, $p < .001$, R-squared = .17), volunteers (1.243, $p < .001$, R-squared = .17), and combined model (1.360, $p < .001$, R-squared = .18) results confirmed that job satisfaction is statistically significant and positively impacted soldiers' affective organizational commitment. Thus, we able to support Hypothesis 4. Hypothesis 5 predicted that there would be a significant and positive relationship between job satisfaction and total fitness for conscripts, volunteer soldiers, and combined model. The combined model results confirmed that job satisfaction is statistically significant and positively impacted soldiers' total fitness (.261, $p < .05$, R-squared = .39). Length of service had a statistically significant positive relationship with total fitness for conscripts and volunteer soldiers. In contrast, age and education levels did not have a significant relationship with affective organizational commitment and total fitness in the conscription, volunteer, or combined models.

Table 8. Standardized ordinary least squares regression analysis; dependent variables = affective organizational commitment, total fitness level

Affective organizational commitment	**Conscripts**	**Volunteers**	**Combined model**
Job satisfaction	1.445***	1.243***	1.360***
	(0.255)	(0.273)	(0.182)
Age	0.282	0.278	0.237
	(0.283)	(0.232)	(0.177)
Length of Service	0.124	-0.00857	0.0434
	(0.277)	(0.342)	(0.182)
Education	0.0949	-0.170	0.0317
	(0.228)	(0.261)	(0.164)
Constant	14.12**	15.83***	15.68***
	(6.033)	(4.809)	(3.715)
Observations	172	120	292
R-squared	0.170	0.171	0.176
Total fitness	**Conscripts**	**Volunteers**	**Combined model**
Job satisfaction	0.202	-0.0717	0.261**
	(0.172)	(0.130)	(0.122)
Age	0.221	-0.0638	0.101
	(0.190)	(0.111)	(0.119)
Length of Service	1.026***	0.363**	1.256***
	(0.186)	(0.163)	(0.122)
Education	-0.0960	0.0580	-0.174
	(0.153)	(0.124)	(0.110)
Constant	-0.509	10.69***	2.251
	(4.055)	(2.289)	(2.490)
Observations	172	120	292
R-squared	0.221	0.053	0.389

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

3.6 Discussion

This study examined whether there are significant differences in affective organizational commitment, job satisfaction, and individual performance between conscripts and volunteer soldiers. This study also investigated the relationship between job satisfaction, affective organizational commitment, and individual performance in the military. The results support existing studies (Chordiya, Sabharwal, & Goodman, 2017; Park & Rainey, 2007; Somers, 1995; Vandenberghe & Bentein, 2009; Vandenberghe, Bentein, & Stinglhamber, 2004; Wasti, 2003) and show that volunteer soldiers had higher job satisfaction and total fitness levels compared to conscripts. Additionally, job satisfaction has a statistically significant positive effect on affective organizational commitment and total fitness levels in military organizations. In relation to the control variables, the findings indicate that soldiers' length of service has a statistically significant positive relationship with affective organizational commitment and total fitness levels for both conscripts and volunteer soldiers.

These findings are important for several reasons. Firstly, the results empirically prove that there are differences in attitudes and individual performance among conscripts versus volunteer soldiers. This study also highlights that job satisfaction and total fitness levels vary between conscripts and volunteers. The Ministry of National Defense of South Korea needs data to understand which conscripts and volunteer soldiers perform well. Currently, the Ministry of National Defense of South Korea is trying to switch from conscription-based recruitment to an all-volunteer force or hybrid system to solve low-birth rate problems. However, as noted, soldiers recruited through conscription exhibit lower motivation and poorer performance (La

Guardia, Ryan, Couchman, & Deci, 2000; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000). Thus, this study's results have policy implications.

Secondly, from the practitioner's perspective, these results indicate that enhancing job satisfaction through various institutional mechanisms helps to increase employees' affective organizational commitment and performance. In the current era of cutback management (Carter et al., 2013; Chordiya et al., 2017; Lewis & Frank, 2002; Lyons, Duxbury, & Higgins, 2006; Pandey, 2010), countless organizations face challenges in attracting and retaining talented employees (Buchanan, 1974), and these challenges are particularly great for military organizations due to high competition and low unemployment rates (Cohn, 2007; Patrichi, 2015; Tresch, 2008). Existing literature has shown that job satisfaction and affective organizational commitment are essential determinants of employee success (Buchanan, 1974; Mowday, 1998). Job satisfaction and affective organizational commitment are instrumental in reducing organizations' costs and increasing performance through encouraging lower turnover rates, lower absenteeism, and lower costs of employee attraction and retention (Chordiya et al., 2017; Park & Rainey, 2007; Somers, 1995).

Finally, the study confirms that job satisfaction and organizational commitment theories can be applied to the unique environment of military organizations. Major themes in job satisfaction and affective organizational commitment literature have long been studied in the private, public, and nonprofit sectors (Chordiya et al., 2017; Randall, 1993; Vandenberg & Lance, 1992; Williams & Hazer, 1986). Affective organizational commitment and job satisfaction are critical to recruiting and retaining high-quality personnel in the military context. This research extends the general applicability of existing theories to the military sector.

Although this article advances the job satisfaction and affective organizational commitment literature to the military sector, it has a few limitations. Notably, the sample is only drawn from the South Korean military; the findings of this study therefore might not apply to Western military contexts. The results should be interpreted with caution, and future research should be conducted cross-nationally.

3.7 References

Asch, B. J., & Warner, J. T. (2001). A theory of compensation and personnel policy in hierarchical organizations with application to the United States military. *Journal of Labor Economics, 19*(3), 523-562.

Bateman, T. S., & Strasser, S. (1984). A longitudinal analysis of the antecedents of organizational commitment. *Academy of management journal, 27*(1), 95-112.

Blau, G. J., & Boal, K. B. (1987). Conceptualizing how job involvement and organizational commitment affect turnover and absenteeism. *Academy of management review, 12*(2), 288-300.

Boles, J., Madupalli, R., Rutherford, B., & Wood, J. A. (2007). The relationship of facets of salesperson job satisfaction with affective organizational commitment. *Journal of Business & Industrial Marketing*.

Braun, L. A., Kennedy, H. P., Sadler, L. S., & Dixon, J. (2015). Research on US military women: recruitment and retention challenges and strategies. *Military medicine, 180*(12), 1247-1255.

Buchanan, B. (1974). Government managers, business executives, and organizational commitment. *Public administration review*, 339-347.

Burk, J. (1992). The decline of mass armed forces and compulsory military service. *Defense analysis, 8*(1), 45-59.

Caillier, J. G. (2013). Satisfaction with work-life benefits and organizational commitment/job involvement: Is there a connection? *Review of Public Personnel Administration, 33*(4), 340-364.

Cantarelli, P., Belardinelli, P., & Belle, N. (2016). A meta-analysis of job satisfaction correlates in the public administration literature. *Review of Public Personnel Administration, 36*(2), 115-144.

Carter, B., Danford, A., Howcroft, D., Richardson, H., Smith, A., & Taylor, P. (2013). Taxing times: Lean working and the creation of (in) efficiencies in HM Revenue and Customs. *Public Administration, 91*(1), 83-97.

Chapman, C., Getha-Taylor, H., Holmes, M. H., Jacobson, W. S., Morse, R. S., & Sowa, J. E. (2016). How public service leadership is studied: An examination of a quarter-century of scholarship. *Public Administration, 94*(1), 111-128.

Chordiya, R., Sabharwal, M., & Goodman, D. (2017). Affective organizational commitment and job satisfaction: A cross-national comparative study. *Public Administration, 95*(1), 178-195.

Coates, H. R., Silvernail, T. S., Fulton, L. V., & Ivanitskaya, L. (2011). The effectiveness of the recent army captain retention program. *Armed Forces & Society, 37*(1), 5-18.

Cohen, E. A. (2019). *Citizens and soldiers: The dilemmas of military service*: Cornell University Press.

Cohn, L. P. (2007). *Who will serve? Education, labor markets, and military personnel policy*: Duke University.

Cohn, L. P., & Toronto, N. W. (2017). Markets and manpower: The political economy of compulsory military service. *Armed Forces & Society, 43*(3), 436-458.

Cook, W. A., & Doorenbos, A. Z. (2017). Indications of recruitment challenges in research with US military service members: a ClinicalTrials. Gov review. *Military medicine, 182*(3-4), e1580-e1587.

Flynn, G. Q. (1998). Conscription and equity in Western democracies, 1940–75. *Journal of Contemporary History, 33*(1), 5-20.

Fu, W., Deshpande, S. P., & Zhao, X. (2011). The impact of ethical behavior and facets of job satisfaction on organizational commitment of Chinese employees. *Journal of business ethics, 104*(4), 537-543.

Glisson, C., & Durick, M. (1988). Predictors of job satisfaction and organizational commitment in human service organizations. *Administrative science quarterly*, 61-81.

Gordon, V. (2011). Exploring the job satisfaction of municipal clerks. *Review of Public Personnel Administration, 31*(2), 190-208.

Gould-Williams, J. (2004). The effects of 'high commitment'HRM practices on employee attitude: The views of public sector workers. *Public Administration, 82*(1), 63-81.

Griffith, J. (2008). Institutional motives for serving in the US Army National Guard: Implications for recruitment, retention, and readiness. *Armed Forces & Society, 34*(2), 230-258.

Haltiner, K. W. (1998). The definite end of the mass army in Western Europe? *Armed Forces & Society, 25*(1), 7-36.

Harrington, D., Bean, N., Pintello, D., & Mathews, D. (2001). Job satisfaction and burnout: Predictors of intentions to leave a job in a military setting. *Administration in Social Work, 25*(3), 1-16.

Holtom, B. C., Smith, D. R., Lindsay, D. R., & Burton, J. P. (2014). The relative strength of job attitudes and job embeddedness in predicting turnover in a US military academy. *Military Psychology, 26*(5-6), 397-408.

Jehn, C., & Selden, Z. (2002). The end of conscription in Europe? *Contemporary Economic Policy, 20*(2), 93-100.

Kier, E. (2017). *Imagining war: French and British military doctrine between the wars* (Vol. 153): Princeton University Press.

La Guardia, J. G., Ryan, R. M., Couchman, C. E., & Deci, E. L. (2000). Within-person variation in security of attachment: a self-determination theory perspective on attachment, need fulfillment, and well-being. *Journal of personality and social psychology, 79*(3), 367.

Leander, A. (2004). Drafting community: Understanding the fate of conscription. *Armed Forces & Society, 30*(4), 571-599.

Lee, D. R., & McKenzie, R. B. (1992). Reexamination of the relative efficiency of the draft and the all-volunteer army. *Southern Economic Journal*, 644-654.

Lee, S. M. (2011). A study on the economic implications of a voluntary military service and conscription system. *Journal of National Defense Studies, 12*(16).

Lee, Y.-j., & Sabharwal, M. (2016). Education–job match, salary, and job satisfaction across the public, non-profit, and for-profit sectors: Survey of recent college graduates. *Public Management Review, 18*(1), 40-64.

Lewis, G. B., & Frank, S. A. (2002). Who wants to work for the government? *Public administration review, 62*(4), 395-404.

Lyons, S. T., Duxbury, L. E., & Higgins, C. A. (2006). A comparison of the values and commitment of private sector, public sector, and parapublic sector employees. *Public administration review, 66*(4), 605-618.

Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of vocational behavior, 61*(1), 20-52.

Mowday, R. T. (1998). Reflections on the study and relevance of organizational commitment. *Human resource management review, 8*(4), 387-401.

Moynihan, D. P., & Pandey, S. K. (2007). Finding workable levers over work motivation: Comparing job satisfaction, job involvement, and organizational commitment. *Administration & Society, 39*(7), 803-832.

Pandey, S. K. (2010). Cutback management and the paradox of publicness. *Public administration review, 70*(4), 564-571.

Park, S. M., & Rainey, H. G. (2007). Antecedents, mediators, and consequences of affective, normative, and continuance commitment: Empirical tests of commitment effects in federal agencies. *Review of Public Personnel Administration, 27*(3), 197-226.

Patrichi, M. E. (2015). General military human resource management and special forces human resource management. A comparative outlook. *Journal of Defense Resources Management (JoDRM), 6*(2), 75-82.

Pickering, J. (2011). Dangerous Drafts? A Time-Series, Cross-National Analysis of Conscription and the Use of Military Force, 1946—2001. *Armed Forces & Society, 37*(1), 119-140.

Rainey, H. G. (2009). *Understanding and managing public organizations*: John Wiley & Sons.

Randall, D. M. (1993). Cross-cultural research on organizational commitment: A review and application of Hofstede's Value Survey Module. *Journal of Business Research*.

Reis, H. T., Sheldon, K. M., Gable, S. L., Roscoe, J., & Ryan, R. M. (2000). Daily well-being: The role of autonomy, competence, and relatedness. *Personality and social psychology bulletin, 26*(4), 419-435.

Ryan, R. M., & Deci, E. L. (1985). Intrinsic motivation and self-determination in human behavior. *New York and London: Plenum*.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist, 55*(1), 68.

Safrai, M. Z. (2019). Legitimizing Military Growth and Conscription: The Yom Kippur Mechanism. *Armed Forces & Society, 45*(3), 491-510.

Smith, P. C. (1969). The measurement of satisfaction in work and retirement: A strategy for the study of attitudes.

Somers, M. J. (1995). Organizational commitment, turnover and absenteeism: An examination of direct and interaction effects. *Journal of organizational Behavior, 16*(1), 49-58.

Song, K.-J., Han, M., & Han, S.-Y. (2010). The influence of the enlistment-motivation on the South Korea military life. *Korea Journal of Psychology, 16*(4), 469-485.

Sorensen, H. (2000). Conscription in Scandinavia during the last quarter century: Developments and arguments. *Armed Forces & Society, 26*(2), 313-334.

Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: path analyses based on meta-analytic findings. *Personnel psychology, 46*(2), 259-293.

Ting, Y. (1997). Determinants of job satisfaction of federal government employees. *Public Personnel Management, 26*(3), 313-334.

Tresch, T. S. (2008). Challenges in the recruitment of professional soldiers in Europe. *Strategic Impact:*(3), 76-86.

Vandenberg, R. J., & Lance, C. E. (1992). Examining the causal order of job satisfaction and organizational commitment. *Journal of management, 18*(1), 153-167.

Vandenberghe, C., & Bentein, K. (2009). A closer look at the relationship between affective commitment to supervisors and organizations and turnover. *Journal of occupational and organizational psychology, 82*(2), 331-348.

Vandenberghe, C., Bentein, K., & Stinglhamber, F. (2004). Affective commitment to the organization, supervisor, and work group: Antecedents and outcomes. *Journal of vocational behavior, 64*(1), 47-71.

Varoglu, A. K., & Bicaksiz, A. (2005). Volunteering for risk: The culture of the Turkish armed forces. *Armed Forces & Society, 31*(4), 583-598.

Wanous, J. P., Reichers, A. E., & Hudy, M. J. (1997). Overall job satisfaction: how good are single-item measures? *Journal of applied Psychology, 82*(2), 247.

Wasti, S. A. (2003). Organizational commitment, turnover intentions and the influence of cultural values. *Journal of occupational and organizational psychology, 76*(3), 303-321.

West, J. P., & Berman, E. M. (2009). Job satisfaction of public managers in special districts. *Review of Public Personnel Administration, 29*(4), 327-353.

Williams, L. J., & Hazer, J. T. (1986). Antecedents and consequences of satisfaction and commitment in turnover models: A reanalysis using latent variable structural equation methods. *Journal of applied Psychology, 71*(2), 219.

CHAPTER 4

COMPARISON OF CONSCRIPTS AND VOLUNTEER SOLDIERS: INTRINSIC MOTIVATION, ORGANIZATIONAL COMMITMENT, AND JOB SATISFACTION

4.1 Abstract

Public organizations around the world have faced challenges in attracting and retaining talented personnel. These challenges are more prominent for the military because of increasing competition with the private market and changing social values. Understanding the impact of intrinsic motivation on commitment and job satisfaction is important for organizations in recruiting and retaining employees. However, little is known about the impact of intrinsic motivation on organizational commitment and job satisfaction within the military. This study examines whether there are differences between conscripts and volunteer soldiers regarding intrinsic motivation, organizational commitment, and job satisfaction. This study utilized survey data collected from 292 soldiers in the Special Forces Brigade (volunteer) and Special Assault Commando Regiment (conscription) of the Republic of Korea Army. We found that volunteer soldiers had higher intrinsic motivation, organizational commitment, and job satisfaction than conscripts. Additionally, intrinsic motivation has a statistically significant positive effect on military organizations' organizational commitment and job satisfaction.

4.2 Introduction

In an era of cutback management, public organizations around the world are having difficulty attracting and retaining talented personnel (Carter et al., 2013; Chordiya, Sabharwal, & Goodman, 2017; Levine, 1979; Lewis & Frank, 2002; Lyons, Duxbury, & Higgins, 2006; Pandey, 2010) due to widespread financial constraints, the difficulty in motivating employees

and improving performance, and weakened prospects for future employees with vital skills (Feldheim, 2007; Battaglio & Condrey, 2009). These challenges are even greater for the military. Tresch (2008) argued that military organizations have struggled to attract and retain soldiers of the right quality because young people's interest in joining the military has declined. Additionally, the military faces competition with the private sector for human resources because the military often offers less alluring financial and non-financial incentives (Cohn, 2007). This competition is heightened by low unemployment rates and a strong economy (Bury, 2017; Cohn, 2007; Patrichi, 2015; Tresch, 2008).

Motivation is a central topic in the public, nonprofit, and private sectors (Jurkiewicz, Massey Jr, & Brown, 1998; Perry & Wise, 1990; Ryan & Deci, 2000b). Ryan and Deci (2000a) defined intrinsic motivation as doing "doing of an activity for its inherent satisfaction rather than for some separable consequence" (p.56). Intrinsic motivation is considered the most important antecedent of job satisfaction (Vansteenkiste et al., 2007), and it is a critical performance determinant (Deci, 1976; Sansone & Harackiewicz, 2000). Empirical evidence has shown that intrinsic motivation is related to important outcomes such as employees' behavior, work-related attitudes, commitment, job satisfaction, performance, and turnover (Baard, Deci, & Ryan, 2004; Black & Deci, 2000; Deci, Connell, & Ryan, 1989; Gagné, Koestner, & Zuckerman, 2000; Ilardi, Leone, Kasser, & Ryan, 1993; Vansteenkiste et al., 2007).

In addition, scholars have agreed that employees' organizational commitment and job satisfaction are related to increased job performance (Chordiya et al., 2017; Park & Rainey, 2007; Somers, 1995) and lower turnover intention (Vandenberghe & Bentein, 2009; Vandenberghe, Bentein, & Stinglhamber, 2004; Wasti, 2003). Job satisfaction and organizational

commitment are critical to understanding employee performance, retention, and turnover rates (Caillier, 2013; Chordiya et al., 2017; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Tett & Meyer, 1993).

Intrinsic motivation is also critical in the military sector. Empirical studies have demonstrated that intrinsic motivation has a significant and positive relationship with organizational outcomes in the military sector (La Guardia, Ryan, Couchman, & Deci, 2000; Raabe, Zakrajsek, Orme, Readdy, & Crain, 2020; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000). For example, military personnel with high intrinsic motivation levels are more likely to join and continue military service (Griffith, 2008; Woodruff, Kelty, & Segal, 2006) because they are satisfied with their work and committed to the organization (Raabe et al., 2020; Woodruff, 2017).

Previous studies have revealed that intrinsic motivation is positively related to organizational commitment and job satisfaction in the public, nonprofit, and private sectors. However, little is known about the impact of intrinsic motivation on organizational commitment and job satisfaction in the military sector. Most existing research in the military context has been conducted in countries with voluntary military service, and studies in countries with conscription are limited. There are no studies comparing the intrinsic motivation, organizational commitment, and job satisfaction of conscripts versus volunteers.

This study examines differences between conscripts and volunteer soldiers in relation to intrinsic motivation, organizational commitment, and job satisfaction and the impact of intrinsic motivation on organizational commitment and job satisfaction in the military sector. The research questions are as follows: (1) What are the differences in intrinsic motivation,

organizational commitment, and job satisfaction among conscripts and volunteers? (2) Does intrinsic motivation influence organizational commitment among conscripts and volunteers? (3) Does intrinsic motivation influence job satisfaction among conscripts and volunteers?

4.3 Theoretical Background

Ryan and Deci (2000a) described intrinsic motivation as doing "an activity for its inherent satisfaction rather than for some separable consequence" (p.56). Existing studies have suggested that intrinsic motivation is closely associated with organizational outcomes (Borzaga & Tortia, 2006; Giauque, Anderfuhren-Biget, & Varone, 2013). If individuals are intrinsically motivated, they perform well even in the absence of material rewards or external factors (Ryan & Deci, 1985). Organizational commitment has received attention from human resources management researchers in the public, nonprofit, and private sectors (Lyons et al., 2006; Park & Rainey, 2007; Potipiroon & Ford, 2017). Allen and Meyer (1990) defined organizational commitment as the attitude that members of an organization have towards their organization's goals and values and their loyalty to their organization. Within the public sector, Chordiya et al. (2017) described job satisfaction as an individual's positive or negative feelings toward their work. Previous studies have suggested that individuals with higher job satisfaction have higher organizational commitment (Cooper-Hakim & Viswesvaran, 2005), lower turnover rates (Carsten & Spector, 1987; Cotton & Tuttle, 1986; Lambert, Hogan, & Barton, 2001; Mobley, Griffeth, Hand, & Meglino, 1979), and better performance (Judge, Thoresen, Bono, & Patton, 2001).

4.3.1 The South Korean Context

The military has a core function within a nation: to defend the country from external threats and protect citizens' lives and property (Defense, 2016). In South Korea, the Ministry of National Defense (MND) has the fourth largest budget among 17 government departments (Finance, 2017). For males over the age of 18, South Korea has conscription of 18 (army, marines), 20 (navy), and 21 (air force and civil service) months. Women are not obligated to serve in the military, but they may enlist voluntarily.

The MND began implementing the Defense Reform Basic Plan 2030 in 2005 (Defense, 2012). One of the reform's primary purposes is to reorganize the military's recruitment system to better prepare for future warfare. The Republic of Korea Armed Forces has started to discuss the abolition of compulsory military service and the introduction of a strictly voluntary military service. The 18-year-old male population is expected to decline 26.8% from 317,000 in 2007 to 232,000 in 2025 (Kim & Choi, 2010). The Republic of Korea Armed Forces has faced challenges in attracting and retaining suitable soldiers because of low birth rates combined with conscription.

4.3.2 Conscripts and Volunteer Soldiers

Military service is primarily divided into conscription and voluntary service. Volunteer soldiers have higher intrinsic motivation than conscripts. In South Korea, the Special Assault Commando Regiment recruit soldiers via conscription. Conversely, some soldiers join the military voluntarily. Voluntary military service involves individuals making a contract with the nation based on their choices. Soldiers in the South Korean Special Forces Brigade are volunteers who serve in the military for four years. Song, Han, and Han (2010) found that

volunteer soldiers in the Republic of Korea Navy showed higher levels of intrinsic motivation than army conscripts. Furthermore, soldiers recruited via conscription have low motivation (La Guardia et al., 2000; Reis et al., 2000). Griffith (2008) claimed that soldiers who view military service as a profession have higher intrinsic motivation and perform better on missions.

Previous studies have shown intrinsic motivation to be associated with employees' behaviors, work-related attitudes, commitment, job satisfaction, performance, and turnover (Baard et al., 2004; Black & Deci, 2000; Deci et al., 1989; Gagné et al., 2000; Ilardi et al., 1993; Vansteenkiste et al., 2007). Employees who have high intrinsic motivation are more satisfied with their jobs (Borzaga & Tortia, 2006; Giauque et al., 2013).

In the military context, volunteers are more intrinsically motivated and focus more on their organizational goals than soldiers recruited through conscription. Furthermore, soldiers with high intrinsic motivation tend to be satisfied with their work and committed to their organization (Moskos Jr, 1977; Raabe et al., 2020; Woodruff, 2017).

Considering the results of previous studies, we propose Hypotheses 1, 2, and 3 as follows:

Hypothesis 1: Volunteer soldiers have higher intrinsic motivation than conscripts.

Hypothesis 2: Volunteer soldiers have higher organizational commitment than conscripts.

Hypothesis 3: Volunteer soldiers have higher job satisfaction than conscripts.

4.3.3 Organizational Commitment and Intrinsic Motivation

Organizational commitment has attracted attention from human resources management researchers in the public, nonprofit, and private sectors (Lyons et al., 2006; Park & Rainey, 2007;

Potipiroon & Ford, 2017). Allen and Meyer (1990) defined organizational commitment as the degree to which a member of an organization contributes to their organization's performance and identifies with their organization. Mowday, Steers, and Porter (1979) also described organizational commitment as "the relative strength of an individual's identification with and involvement in a particular organization" (p.4). Porter, Steers, Mowday, and Boulian (1974) defined organizational commitment as "(1) a strong belief in and acceptance of the organization's goals and values; (2) a willingness to exert a considerable amount of effort on behalf of the organization; and (3) a desire to remain within the organization" (p.603).

Allen and Meyer (1990) conceptualized an organizational commitment model with affective, normative, and continuance dimensions. In this study, we measured organizational commitment using affective and normative commitment. Affective commitment is one's emotional attachment to an organization (Mowday, Porter, & Steers, 2013) and can be defined as "an individual's attitude towards the organization, consisting of a strong belief in, and acceptance of the organization's goals, willingness to exert considerable effort on behalf of the organization, and a strong desire to maintain membership in the organization" (Park & Rainey, 2007, p.199). Normative commitment refers to obligation-based commitment (Park & Rainey, 2007). Wiener (1982) defined normative commitment as the "totality of internalized normative pressures to act in a way which meets organizational goals and interests" which "employees believe . . . is the right and moral thing to do" (p.471).

Existing literature has presented significant evidence that intrinsic motivation is strongly related to organizational commitment (Alnıaçık, Alnıaçık, Akçin, & Erat, 2012; Choong, Lau, & Wong, 2011; Ingram, Lee, & Skinner, 1989; Potipiroon & Ford, 2017). For example, Park and

Rainey (2007) found that the more public employees are intrinsically motivated, the more likely they are to have a significant commitment to remain in their organization. Eby, Freeman, Rush, and Lance (1999) investigated the relationship between intrinsic motivation and work attitudes (affective organizational commitment and general job satisfaction). They revealed that intrinsic motivation positively affects employees' commitment. Furthermore, scholars have argued that employees' intrinsic motivation increases organizational commitment (Bono & Judge, 2003; Eby et al., 1999; Galletta, Portoghese, & Battistelli, 2011; Kim, Kim, & Holland, 2020; Lam & Gurland, 2008).

In the military context, empirical studies have supported that intrinsic motivation is related to individuals' attitudes toward their work. For instance, Wrzesniewski et al. (2014) analyzed the correlation between high intrinsic motivation and goal achievement and retention using a sample of 10,000 cadets at West Point U.S. Military Academy. Their results demonstrated that cadets with more robust intrinsic motivation indicators had higher academic achievement levels, a greater probability of becoming a professional officer (commitment), and a faster promotion rate than cadets driven more by external motivations. Moreover, Griffith (2008) found that the intrinsically motivated soldiers are more strongly committed to the military and their unit and more likely to accomplish the unit mission.

Therefore, most extant studies support the positive relationship between intrinsic motivation and organizational commitment. Based on this, we propose Hypothesis 4 as follows:

Hypothesis 4: Intrinsic motivation positively affects organizational commitment among conscripts and volunteer soldiers.

4.3.4 Job Satisfaction and Intrinsic Motivation

In this study, we adopt Gordon's (2011) definition of job satisfaction as an "employee's reaction to what he or she receives from the job, that is, the work environment" (p.191) to measure overall job satisfaction among soldiers and to investigate the impact of intrinsic motivation on job satisfaction. Previous research indicates that intrinsic motivation is associated with employee job satisfaction. Cho and Perry (2012) showed that intrinsic motivation is statistically associated with employee satisfaction and turnover intention in the public sector. A similar relationship was found by Borzaga and Tortia (2006), who examined the impact of intrinsic motivation on job satisfaction in public, nonprofit, and for-profit organizations. Their findings support that intrinsic motivation is a crucial factor in increasing job satisfaction.

Previous studies also support the positive relationship between intrinsic motivation and job satisfaction in the military context, and soldiers with high intrinsic motivation tend to be satisfied with their work (Raabe et al., 2020; Woodruff, 2017). Song et al. (2010) explored the relationship between intrinsic motivation and individual job satisfaction in the Republic of Korea Marines (ROKM). They found that military personnel with high intrinsic motivation felt more satisfaction with their careers and had a positive view of their military life. In light of the results of previous studies, we propose Hypothesis 5 as follows:

Hypothesis 5: Intrinsic motivation positively affects job satisfaction among conscripts and volunteer soldiers.

4.4 Data and Methodology

The research used data from the Republic of Korea Army's Special Forces Brigade (voluntary) and Special Assault Commando Regiment (conscription) soldiers in 2014. The

survey contained 45 questions covering a wide array of human resources management topics such as motivation, job satisfaction, organizational commitment, job stress, total fitness, and firearm accuracy. A total of 432 questionnaires were distributed to the military units, and 361 soldiers returned the questionnaires; 11 of these responses were discarded as incomplete. The response rate for both groups was 81%. The sample comprised 120 soldiers recruited through volunteer soldiers 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 292 soldiers. A standardized OLS regression analysis was conducted to examine the data.

4.4.1 Dependent Variables

The dependent variables are organizational commitment and job satisfaction. Organizational commitment was measured using 11 survey items. Affective commitment was measured using the following items: “I feel like a family member on my team,” “I have strong affection for my team," "I do not feel a sense of belonging to my team," "I am proud of working in my team," "I would like to continue working on my team," and "I feel like it is my problem if my team faces a problem.” Normative commitment was measured using the following items: “when serving people, I always keep in mind the goals that my team pursues,” “I am always committed to doing my best for the development of my team,” “I think it is my mission to dedicate to my team,” “I want to discover the meaning of my military service by doing my best in the task given to my team,” and “I feel bad when people around us criticize my team.” All 11 items were measured on a 5-point Likert scale ranging from 1 ("strongly disagree”) to 5 (“strongly agree"). The Cronbach’s alpha for the organizational commitment scale was approximately 0.920.

A single-item measurement of job satisfaction was used in this study, namely “I am satisfied with my job." The item was measured on a 5-point Likert scale ranging from 1 ("strongly disagree”) to 5 (“strongly agree"). Because we investigate the relationship between intrinsic motivation and soldiers’ overall job satisfaction, we measured job satisfaction with a single item. Several studies on job satisfaction have been used single-item measure of job satisfaction (Caillier, 2013; Chordiya et al., 2017; Lee & Sabharwal, 2016; Moynihan & Pandey, 2007; West & Berman, 2009). Scholars insist that using a single-item measurement of job satisfaction is valuable (Wanous, Reichers, & Hudy, 1997).

4.4.2 Independent Variable

The independent variable is intrinsic motivation and was measured using a 5-point Likert scale ranging from "strongly disagree” (1) to “strongly agree” (5). Five items were used to construct the intrinsic motivation scale, in line with previous studies (Fortier, Vallerand, & Guay, 1995; Vallerand, Fortier, & Guay, 1997). The motivation scale developed by Vallerand et al. (1992) was modified to be used in the context of the Korean military. The survey items included "military service feels interesting," "military service is exciting and challenging," "military service is for my future and happiness," "military service is important to me," "enlistment in the army is my own choice." The Cronbach’s alpha for the scale is 0.890.

4.4.3 Control Variables

We included several control variables that may be related to the dependent variables. The control variables addressed the following demographic characteristics: age, length of service (1 = 6 months, 2 = 12 months, 3 = < 18 months, 4 = > 18 months, 5 = 3–4 years), and education level

(1 = less than high school, 2 = high school graduate, 3 = community college attendee, 4 = community college graduate, 5 = university, 6 = graduate school).

4.5 Results

Table 9 presents the descriptive statistics of the variables from each of the two groups, including data for age, length of service, and education level. The sampled soldiers' ages ranged from 19 to 30 years, with an average age of 22.27 years. The majority of the soldiers were under 23 years of age (82.9%). Approximately 62% of the total sampled soldiers had served for less than 18 months. A majority of respondents (65.4%) had a college education.

The results highlighted substantial differences between conscripts and volunteers regarding intrinsic motivation, organizational commitment, and job satisfaction. The mean values of intrinsic motivation differ, with volunteer soldiers exhibiting a higher average (19.14) than conscripts (15.53). Volunteers also had a higher mean value of organizational commitment (47.28) and job satisfaction (3.41) than conscripts (45.36 and 2.87, respectively).

Table 9. Descriptive statistics

	Conscripts (N = 172)				Volunteers (N = 120)				All (N = 292)			
	M	SD	Min.	Max.	M	SD	Min.	Max.	M	SD	Min.	Max.
Intrinsic Motivation	15.53	4.89	5	25	19.14	4.08	9	25	17.01	4.90	5	25
Organizational Commitment	45.35	7.37	15	55	47.28	6.10	24	55	46.14	6.93	15	55
Job Satisfaction	2.87	1.14	1	5	3.41	1.16	1	5	3.09	1.17	1	5
Age	21.84	1.14	20	29	22.89	1.59	19	30	22.27	1.44	19	30
Length of Service	2.20	1.18	1	4	3.87	1.03	1	5	2.88	1.39	1	5
Education	3.64	1.30	1	6	3.09	1.26	2	6	3.41	1.31	1	6

We used a t-test to determine whether there are significant differences in intrinsic motivation, organizational commitment, and job satisfaction between conscripts and volunteers. The findings are presented in Table 10. The difference in means for intrinsic motivation was statistically significant, and volunteers had a significantly higher mean value (t-value < 0.001) than conscripts for organizational commitment. We also found that volunteers had a higher mean value for job satisfaction than conscripts (t-value < 0.000).

Table 10. Comparing means between conscripts and volunteer soldiers

	Conscripts	Volunteer soldiers	T-value	Sig.
Intrinsic Motivation	15.53	19.14	6.64	.000***
Organizational Commitment	45.36	47.28	2.35	.001**
Job Satisfaction	2.87	3.41	3.98	.000***

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

We estimated the standardized results of the OLS regression analysis to measure the impact of intrinsic motivation on organizational commitment and job satisfaction among conscripts and volunteers. The results are presented in Table 11. We predicted that intrinsic motivation positively impacted organizational commitment and job satisfaction among conscripts and volunteers and tested this hypothesis. The combined model results confirmed 1) that intrinsic motivation had a statistically significant positive impact on soldiers' organizational commitment (.775, p < .001, R-squared = .302) and 2) that intrinsic motivation has a significant positive association with organizational commitment for conscripts (.840, p < .001, R-squared = .316), and volunteers (.782, p < .001, R-squared = .270).

Furthermore, we tested the relationship between intrinsic motivation and job satisfaction among conscripts and volunteer soldiers. We hypothesized that there would be a significant and positive relationship between intrinsic motivation and job satisfaction in the military sector when controlling for age, length of service, and education. The results in the combined model illustrate that intrinsic motivation has a significant positive association with job satisfaction (.189, p < .001, R-squared = .630). Additionally, intrinsic motivation positively affects job satisfaction among both conscripts (.181, p < .001, R-squared = .601) and volunteers (.225, p < .001, R-

squared = .655). We confirmed that age has a statistically significant positive relationship with organizational commitment for the combined model (.503, $p < .1$) and for volunteers (.696, $p < .1$). In contrast, length of service and education level do not have a significant relationship with organizational commitment. In the combined model, education level has a statistically significant negative relationship with job satisfaction (-.070, $p < .05$) and volunteers (-.114, $p < .05$).

Table 11. Standardized ordinary least squares regression analysis; dependent variables = affective organizational commitment, total fitness level

Organizational Commitment	Conscripts	Volunteers	Combined model
Intrinsic Motivation	0.840*** (0.071)	0.782*** (0.124)	0.775*** (0.071)
Age	0.515 (0.460)	0.696* (0.374)	0.503* (0.288)
Length of Service	0.133 (0.449)	0.074 (0.550)	-0.180 (0.300)
Education	0.152 (0.371)	-0.330 (0.412)	0.119 (0.265)
Constant	20.21** (9.940)	17.10*** (8.233)	21.87*** (6.147)
Observations	172	120	292
R-squared	0.316	0.270	0.302
Job Satisfaction	Conscripts	Volunteers	Combined model
Intrinsic Motivation	0.181*** (0.011)	0.225*** (0.016)	0.189*** (0.001)
Age	0.052 (0.054)	0.045 (0.049)	0.028 (0.036)
Length of Service	0.001 (0.053)	-0.001 (0.072)	-0.043 (0.037)
Education	-0.060 (0.044)	-0.114** (0.054)	-0.0701** (0.033)
Constant	-0.875 (1.173)	-1.580 (1.072)	-0.385 (0.759)
Observations	172	120	292
R-squared	0.601	0.655	0.630

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

4.6 Discussion

This study examined differences in intrinsic motivation, organizational commitment, and job satisfaction among conscripts and volunteers. The study also investigated the relationship between intrinsic motivation, organizational commitment, and job satisfaction in the military sector. Although understanding the impact of intrinsic motivation, organizational commitment, and job satisfaction on recruitment and retention of high-quality military personnel is essential for most organizations, previous studies have only examined the relationship between intrinsic motivation and organizational attitudes in the private, public, and nonprofit sectors (Chordiya et al., 2017; Randall, 1993; Vandenberg & Lance, 1992; Williams & Hazer, 1986). This study therefore addresses a gap in knowledge of the intrinsic motivation, organizational commitment, and job satisfaction of conscripts versus volunteers.

The research results support existing studies (Baard et al., 2004; Black & Deci, 2000; Deci et al., 1989; Gagné et al., 2000; Ilardi et al., 1993; Vansteenkiste et al., 2007). Volunteer soldiers had higher intrinsic motivation, organizational commitment, and total job satisfaction than conscripts. Additionally, intrinsic motivation has a statistically significant positive effect on military organizations' organizational commitment and job satisfaction. Concerning the control variables, the findings indicate that soldiers' age in the volunteer and combined models had a statistically significant positive relationship with organizational commitment. However, education levels are negatively associated with job satisfaction in the volunteer and combined models.

The results of this research are useful for several reasons. Firstly, they confirm that intrinsic motivation, organizational commitment, and job satisfaction theories can be applied to

the unique environment of military organizations. Given the limited research on intrinsic motivation, organizational commitment, and job satisfaction in the military sector, this study helps to expand the general applicability of existing theories in the military field and sheds light on the relationships between these factors.

Secondly, the empirical results reveal that there are empirical differences between conscripts and volunteer soldiers regarding intrinsic motivation, organizational commitment, and job satisfaction. Currently, South Korea is considering switching the conscription-based military service system to an all-volunteer force or hybrid system. Thus, policymakers in South Korea can use the empirical data from this study on which types of conscripts and volunteers perform well to redesign military recruitment.

Finally, from a practitioner's perspective, military organizations have struggled to attract and retain soldiers of the right quality (Cohn, 2007; Tresch, 2008). This study shows that intrinsic motivation is positively correlated with increased organizational commitment and job satisfaction among soldiers. Enhanced intrinsic motivation, organizational commitment, and job satisfaction can be essential tools to reduce organizations' costs and increase organizations' performance through lower turnover rates, lower absenteeism, and lower costs for employee attraction and retention (Baard et al., 2004; Black & Deci, 2000; Chordiya et al., 2017; Deci et al., 1989; Gagné et al., 2000; Ilardi et al., 1993; Park & Rainey, 2007; Somers, 1995; Vansteenkiste et al., 2007).

4.7 References

Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of occupational and organizational psychology, 63*(1), 1-18.

Alnıaçık, Ü., Alnıaçık, E., Akçin, K., & Erat, S. (2012). Relationships between career motivation, affective commitment and job satisfaction. *Procedia-Social and Behavioral Sciences, 58*, 355-362.

Ann Feldheim, M. (2007). Public sector downsizing and employee trust. *International Journal of Public Administration, 30*(3), 249-270.

Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: a motivational basis of performance and well-being in two work settings 1. *Journal of applied social psychology, 34*(10), 2045-2068.

Black, A. E., & Deci, E. L. (2000). The effects of instructors' autonomy support and students' autonomous motivation on learning organic chemistry: A self-determination theory perspective. *Science education, 84*(6), 740-756.

Bono, J. E., & Judge, T. A. (2003). Self-concordance at work: Toward understanding the motivational effects of transformational leaders. *Academy of management journal, 46*(5), 554-571.

Borzaga, C., & Tortia, E. (2006). Worker motivations, job satisfaction, and loyalty in public and nonprofit social services. *Nonprofit and voluntary sector quarterly, 35*(2), 225-248.

Buchanan, B. (1974). Government managers, business executives, and organizational commitment. *Public administration review*, 339-347.

Bury, P. (2017). Recruitment and retention in British army reserve logistics units. *Armed Forces & Society, 43*(4), 608-631.

Caillier, J. G. (2013). Satisfaction with work-life benefits and organizational commitment/job involvement: Is there a connection? *Review of Public Personnel Administration, 33*(4), 340-364.

Carsten, J. M., & Spector, P. E. (1987). Unemployment, job satisfaction, and employee turnover: A meta-analytic test of the Muchinsky model. *Journal of applied Psychology, 72*(3), 374.

Carter, B., Danford, A., Howcroft, D., Richardson, H., Smith, A., & Taylor, P. (2013). Taxing times: Lean working and the creation of (in) efficiencies in HM Revenue and Customs. *Public Administration, 91*(1), 83-97.

Cho, Y. J., & Perry, J. L. (2012). Intrinsic motivation and employee attitudes: Role of managerial trustworthiness, goal directedness, and extrinsic reward expectancy. *Review of Public Personnel Administration, 32*(4), 382-406.

Choong, Y.-O., Lau, T.-C., & Wong, K.-L. (2011). Intrinsic motivation and organizational commitment in the Malaysian private higher education institutions: An empirical study. *Researchers World, 2*(4), 91.

Chordiya, R., Sabharwal, M., & Goodman, D. (2017). Affective organizational commitment and job satisfaction: A cross-national comparative study. *Public Administration, 95*(1), 178-195.

Cohn, L. P. (2007). *Who will serve? Education, labor markets, and military personnel policy*: Duke University.

Cooper-Hakim, A., & Viswesvaran, C. (2005). The construct of work commitment: Testing an integrative framework. *Psychological bulletin, 131*(2), 241.

Cotton, J. L., & Tuttle, J. M. (1986). Employee turnover: A meta-analysis and review with implications for research. *Academy of management review, 11*(1), 55-70.

Deci, E. L. (1976). The hidden costs of rewards. *Organizational Dynamics, 4*(3), 61-72.

Deci, E. L., Connell, J. P., & Ryan, R. M. (1989). Self-determination in a work organization. *Journal of applied Psychology, 74*(4), 580.

Defense, M. o. N. (2012). *Defense White Paper*. Seoul: Ministry of National Defense.

Defense, M. o. N. (2016). *Defense White Paper*. Seoul: Ministry of National Defense.

Eby, L. T., Freeman, D. M., Rush, M. C., & Lance, C. E. (1999). Motivational bases of affective organizational commitment: A partial test of an integrative theoretical model. *Journal of occupational and organizational psychology, 72*(4), 463-483.

Finance, M. o. S. a. (2017). *2018 Government Budget*. Sejong-si, Korea Retrieved from http://www.mosf.go.kr/nw/mosfnw/detailInfograpView.do?searchNttId1=MOSF_000000000010572&menuNo=4040500

Fortier, M. S., Vallerand, R. J., & Guay, F. (1995). Academic motivation and school performance: Toward a structural model. *Contemporary educational psychology, 20*(3), 257-274.

Gagné, M., Koestner, R., & Zuckerman, M. (2000). Facilitating acceptance of organizational change: The importance of self-determination 1. *Journal of applied social psychology, 30*(9), 1843-1852.

Galletta, M., Portoghese, I., & Battistelli, A. (2011). Intrinsic motivation, job autonomy and turnover intention in the Italian healthcare: The mediating role of affective commitment.

Giauque, D., Anderfuhren-Biget, S., & Varone, F. (2013). HRM practices, intrinsic motivators, and organizational performance in the public sector. *Public Personnel Management, 42*(2), 123-150.

Gordon, V. (2011). Exploring the job satisfaction of municipal clerks. *Review of Public Personnel Administration, 31*(2), 190-208.

Griffith, J. (2008). Institutional motives for serving in the US Army National Guard: Implications for recruitment, retention, and readiness. *Armed Forces & Society, 34*(2), 230-258.

Ilardi, B. C., Leone, D., Kasser, T., & Ryan, R. M. (1993). Employee and supervisor ratings of motivation: Main effects and discrepancies associated with job satisfaction and adjustment in a factory setting 1. *Journal of applied social psychology, 23*(21), 1789-1805.

Ingram, T. N., Lee, K. S., & Skinner, S. J. (1989). An empirical assessment of salesperson motivation, commitment, and job outcomes. *Journal of Personal Selling & Sales Management, 9*(3), 25-33.

Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological bulletin, 127*(3), 376.

Jurkiewicz, C. L., Massey Jr, T. K., & Brown, R. G. (1998). Motivation in public and private organizations: A comparative study. *Public productivity & Management review*, 230-250.

Kim, S., & Choi, E. (2010). A study on the social economic analysis followed by transfer of sufficiency model of human resources for national defense. *Korea public administration quarterly, 22*(1).

Kim, S.-H., Kim, M., & Holland, S. (2020). Effects of intrinsic motivation on organizational citizenship behaviors of hospitality employees: The mediating roles of reciprocity and organizational commitment. *Journal of Human Resources in Hospitality & Tourism, 19*(2), 168-195.

La Guardia, J. G., Ryan, R. M., Couchman, C. E., & Deci, E. L. (2000). Within-person variation in security of attachment: a self-determination theory perspective on attachment, need fulfillment, and well-being. *Journal of personality and social psychology, 79*(3), 367.

Lam, C. F., & Gurland, S. T. (2008). Self-determined work motivation predicts job outcomes, but what predicts self-determined work motivation? *Journal of research in personality, 42*(4), 1109-1115.

Lambert, E. G., Hogan, N. L., & Barton, S. M. (2001). The impact of job satisfaction on turnover intent: a test of a structural measurement model using a national sample of workers. *The Social Science Journal, 38*(2), 233-250.

Lee, Y.-j., & Sabharwal, M. (2016). Education–job match, salary, and job satisfaction across the public, non-profit, and for-profit sectors: Survey of recent college graduates. *Public Management Review, 18*(1), 40-64.

Levine, C. H. (1979). More on cutback management: Hard questions for hard times. *Public administration review, 39*(2), 179-183.

Lewis, G. B., & Frank, S. A. (2002). Who wants to work for the government? *Public administration review, 62*(4), 395-404.

Lyons, S. T., Duxbury, L. E., & Higgins, C. A. (2006). A comparison of the values and commitment of private sector, public sector, and parapublic sector employees. *Public administration review, 66*(4), 605-618.

Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of vocational behavior, 61*(1), 20-52.

Mobley, W. H., Griffeth, R. W., Hand, H. H., & Meglino, B. M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological bulletin, 86*(3), 493.

Moskos Jr, C. C. (1977). From institution to occupation: Trends in military organization. *Armed Forces & Society, 4*(1), 41-50.

Mowday, R. T., Porter, L. W., & Steers, R. M. (2013). *Employee—organization linkages: The psychology of commitment, absenteeism, and turnover*: Academic press.

Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of vocational behavior, 14*(2), 224-247.

Moynihan, D. P., & Pandey, S. K. (2007). Finding workable levers over work motivation: Comparing job satisfaction, job involvement, and organizational commitment. *Administration & Society, 39*(7), 803-832.

Pandey, S. K. (2010). Cutback management and the paradox of publicness. *Public administration review, 70*(4), 564-571.

Park, S. M., & Rainey, H. G. (2007). Antecedents, mediators, and consequences of affective, normative, and continuance commitment: Empirical tests of commitment effects in federal agencies. *Review of Public Personnel Administration, 27*(3), 197-226.

Patrichi, M. E. (2015). General military human resource management and special forces human resource management. A comparative outlook. *Journal of Defense Resources Management (JoDRM), 6*(2), 75-82.

Paul Battaglio Jr, R., & Condrey, S. E. (2009). Reforming public management: Analyzing the impact of public service reform on organizational and managerial trust. *Journal of Public Administration Research and Theory, 19*(4), 689-707.

Perry, J. L., & Wise, L. R. (1990). The motivational bases of public service. *Public administration review,* 367-373.

Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of applied Psychology, 59*(5), 603.

Potipiroon, W., & Ford, M. T. (2017). Does public service motivation always lead to organizational commitment? Examining the moderating roles of intrinsic motivation and ethical leadership. *Public Personnel Management, 46*(3), 211-238.

Raabe, J., Zakrajsek, R. A., Orme, J. G., Readdy, T., & Crain, J. A. (2020). Perceived cadre behavior, basic psychological need satisfaction, and motivation of US Army ROTC cadets: A self-determination theory perspective. *Military Psychology, 32*(5), 398-409.

Randall, D. M. (1993). Cross-cultural research on organizational commitment: A review and application of Hofstede's Value Survey Module. *Journal of Business Research*.

Reis, H. T., Sheldon, K. M., Gable, S. L., Roscoe, J., & Ryan, R. M. (2000). Daily well-being: The role of autonomy, competence, and relatedness. *Personality and social psychology bulletin, 26*(4), 419-435.

Ryan, R. M., & Deci, E. L. (1985). Intrinsic motivation and self-determination in human behavior. *New York and London: Plenum*.

Ryan, R. M., & Deci, E. L. (2000a). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology, 25*(1), 54-67.

Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist, 55*(1), 68.

Sansone, C., & Harackiewicz, J. M. (2000). *Intrinsic and extrinsic motivation: The search for optimal motivation and performance*: Elsevier.

Smith, P. C. (1969). The measurement of satisfaction in work and retirement: A strategy for the study of attitudes.

Somers, M. J. (1995). Organizational commitment, turnover and absenteeism: An examination of direct and interaction effects. *Journal of organizational Behavior, 16*(1), 49-58.

Song, K.-J., Han, M., & Han, S.-Y. (2010). The influence of the enlistment-motivation on the South Korea military life. *Korea Journal of Psychology, 16*(4), 469-485.

Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: path analyses based on meta-analytic findings. *Personnel psychology, 46*(2), 259-293.

Tresch, T. S. (2008). Challenges in the recruitment of professional soldiers in Europe. *Strategic Impact:*(3), 76-86.

Vallerand, R. J., Fortier, M. S., & Guay, F. (1997). Self-determination and persistence in a real-life setting: toward a motivational model of high school dropout. *Journal of personality and social psychology, 72*(5), 1161.

Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C., & Vallieres, E. F. (1992). The Academic Motivation Scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and psychological measurement, 52*(4), 1003-1017.

Vandenberg, R. J., & Lance, C. E. (1992). Examining the causal order of job satisfaction and organizational commitment. *Journal of management, 18*(1), 153-167.

Vandenberghe, C., & Bentein, K. (2009). A closer look at the relationship between affective commitment to supervisors and organizations and turnover. *Journal of occupational and organizational psychology, 82*(2), 331-348.

Vandenberghe, C., Bentein, K., & Stinglhamber, F. (2004). Affective commitment to the organization, supervisor, and work group: Antecedents and outcomes. *Journal of vocational behavior, 64*(1), 47-71.

Vansteenkiste, M., Neyrinck, B., Niemiec, C. P., Soenens, B., De Witte, H., & Van den Broeck, A. (2007). On the relations among work value orientations, psychological need satisfaction and job outcomes: A self-determination theory approach. *Journal of occupational and organizational psychology*, *80*(2), 251-277.

Wanous, J. P., Reichers, A. E., & Hudy, M. J. (1997). Overall job satisfaction: how good are single-item measures? *Journal of applied Psychology*, *82*(2), 247.

Wasti, S. A. (2003). Organizational commitment, turnover intentions and the influence of cultural values. *Journal of occupational and organizational psychology*, *76*(3), 303-321.

West, J. P., & Berman, E. M. (2009). Job satisfaction of public managers in special districts. *Review of Public Personnel Administration*, *29*(4), 327-353.

Wiener, Y. (1982). Commitment in organizations: A normative view. *Academy of management review*, *7*(3), 418-428.

Williams, L. J., & Hazer, J. T. (1986). Antecedents and consequences of satisfaction and commitment in turnover models: A reanalysis using latent variable structural equation methods. *Journal of applied Psychology*, *71*(2), 219.

Woodruff, T., Kelty, R., & Segal, D. R. (2006). Propensity to serve and motivation to enlist among American combat soldiers. *Armed Forces & Society*, *32*(3), 353-366.

Woodruff, T. D. (2017). Who should the military recruit? The effects of institutional, occupational, and self-enhancement enlistment motives on soldier identification and behavior. *Armed Forces & Society*, *43*(4), 579-607.

Wrzesniewski, A., Schwartz, B., Cong, X., Kane, M., Omar, A., & Kolditz, T. (2014). Multiple types of motives don't multiply the motivation of West Point cadets. *Proceedings of the National Academy of Sciences*, *111*(30), 10990-10995.

CHAPTER 5

CONTRIBUTIONS AND IMPLICATIONS

Organizational behaviors and employees' intrinsic motivation, commitment, job satisfaction, and job stress are related to increasing employee performance, turnover, and retention (Baard, Deci, & Ryan, 2004a; Caillier, 2013; Chapman et al., 2016; Chordiya et al., 2017; Fried et al., 1998; Giauque et al., 2013; Park & Rainey, 2007; Siu, 2003; Vandenberghe & Bentein, 2009). Although organizational behavior and attitudes are critical to organizational performance and the recruitment and retention of high-quality military personnel, little is known about the impact of these factors on organizational performance in the military sector, and past empirical studies on military service have examined socio-economic efficiency and focused on estimating military service's labor market impact and deriving implications for changes to recruitment (Angrist, 1995). To fill this gap, this dissertation examined the effects of organizational behaviors and attitudes on organizational performance and investigated whether there are differences between conscripts and volunteers in organizational behaviors and performance.

This dissertation makes significant contributions to the body of literature on military management. Three separate studies address the impact of soldiers' behaviors and attitudes on individual performance and examine the role of military service type in the performance of military organizations. The first study examined the relationship between intrinsic motivation and individual performance in the Republic of Korea Armed Forces and explored whether job stress mediates the relationship between intrinsic motivation and individual performance. The findings suggest that intrinsic motivation negatively impacts job stress, while job stress has a

positive effect on firearm skills. Moreover, the study revealed that the relationship between intrinsic motivation and firearm skills is partially mediated by job stress. However, the relationship between intrinsic motivation and total fitness is not mediated by job stress. Additionally, rank is positively associated with both total fitness and firearm skills.

The second study measured the differences between conscripts and volunteer soldiers in affective organizational commitment, job satisfaction, and individual performance and also investigated the impact of job satisfaction on affective organizational commitment and individual performance in the military sector. We found that volunteer soldiers had higher job satisfaction and total fitness levels than conscripts. Additionally, job satisfaction has a statistically significant positive effect on affective organizational commitment and total fitness level. The results indicate that the length of service of soldiers has a statistically significant positive relationship with affective organizational commitment and total fitness levels for both conscripts and volunteers.

The third paper investigated differences in intrinsic motivation, organizational commitment, and job satisfaction between conscripts and volunteer soldiers and the impact of intrinsic motivation on organizational commitment and job satisfaction in the military sector. Our findings show that volunteer soldiers had higher intrinsic motivation, organizational commitment, and total job satisfaction than conscripts. In addition, intrinsic motivation has a statistically significant positive effect on organizational commitment and job satisfaction. The findings supported that the age of soldiers in the volunteer and combined models has a statistically significant positive relationship with organizational commitment. However,

education levels are negatively associated with job satisfaction in the volunteer and combined models.

These findings offer empirical and practical contributions to military organizations. Firstly, the dissertation confirms that intrinsic motivation, organizational commitment, job stress, and job satisfaction theories can be applied to military organizations. These studies empirically prove that the higher the intrinsic motivation among conscripts and volunteer soldiers, the higher their performance. The second research objective was to examine the impact of job satisfaction on affective organizational commitment and individual performance in the military sector. The results indicate that job satisfaction has a statistically significant positive effect on affective organizational commitment and total fitness levels in military organizations. Thus, the dissertation has theoretical significance in that it extends the general applicability of motivation, organizational commitment, job satisfaction, and job stress theories to the military sector.

Secondly, the dissertation has practical implications for military recruitment. In the first study, the results found that intrinsic motivation is negatively associated with job stress. The first study also confirmed that intrinsic motivation and job stress have crucial roles in military personnel's performance. The third study revealed that intrinsic motivation is positively associated with organizational commitment and job satisfaction. Previous literature indicates that intrinsic motivation is closely related to organizational outcomes (Borzaga & Tortia, 2006; Giauque, Anderfuhren-Biget, & Varone, 2013). Practitioners who aim to recruit and retain talented soldiers must focus on soldiers' intrinsic motivation by measuring the intrinsic motivation of all enlisted persons during the recruitment process.

In the public sector, the relationship between public service motivation (PSM) and job performance has received increased attention over the past decade (Alonso & Lewis, 2001; Bellé, 2013). Public service motivation explains why individuals are willing to serve the public sector and the overall public interest (Andersen, Jensen, & Kjeldsen, 2020), and PSM uses a multidimensional scale to measure four components: attraction to policymaking, commitment to public interest, compassion, and self-sacrifice (Perry, 1996). Public service motivation is an important topic to consider to attract and retain talented personnel. Future research should use the PSM scale for the military in the recruitment process of soldiers.

The second and third studies' results empirically prove that there are variations in the intrinsic motivation, organizational commitment, affective organizational commitment, job stress, and job satisfaction of conscripts versus volunteer soldiers. The MND needs data on which of conscripts and volunteer soldiers perform well. This study's results provide empirical data on military service that policymakers can use to redesign military recruitment.

Lastly, for organizations themselves, the dissertation's results indicate that encouraging intrinsic motivation through various institutional mechanisms can help increase employees' commitment, job satisfaction, and performance. Understanding the impact of employees' attitudes can be instrumental in reducing organizations' costs and increasing performance through lower turnover rates, lower absenteeism, and lower costs of attraction and retention to the military among both conscripts and volunteers (Baard, Deci, & Ryan, 2004b; Black & Deci, 2000; Chordiya et al., 2017; Deci, Connell, & Ryan, 1989; Gagné, Koestner, & Zuckerman, 2000; Ilardi, Leone, Kasser, & Ryan, 1993; Park & Rainey, 2007; Somers, 1995; Vansteenkiste et al., 2007).

5.1 References

Alonso, P., & Lewis, G. B. (2001). Public service motivation and job performance: Evidence from the federal sector. *The American Review of Public Administration, 31*(4), 363-380.

Andersen, L. B., Jensen, U. T., & Kjeldsen, A. M. (2020). Public Service Motivation and Its Implications for Public Service. *The Palgrave Handbook of the Public Servant*, 1-18.

Angrist, J. D. (1995). *Estimating the labor market impact of voluntary military service using social security data on military applicants*. Retrieved from

Baard, P. P., Deci, E. L., & Ryan, R. M. (2004a). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. *Journal of applied social psychology, 34*(10), 2045-2068.

Baard, P. P., Deci, E. L., & Ryan, R. M. (2004b). Intrinsic need satisfaction: a motivational basis of performance and well-being in two work settings 1. *Journal of applied social psychology, 34*(10), 2045-2068.

Bellé, N. (2013). Experimental evidence on the relationship between public service motivation and job performance. *Public Administration Review,* 143-153.

Black, A. E., & Deci, E. L. (2000). The effects of instructors' autonomy support and students' autonomous motivation on learning organic chemistry: A self-determination theory perspective. *Science education, 84*(6), 740-756.

Borzaga, C., & Tortia, E. (2006). Worker motivations, job satisfaction, and loyalty in public and nonprofit social services. *Nonprofit and voluntary sector quarterly, 35*(2), 225-248.

Buchanan, B. (1974). Government managers, business executives, and organizational commitment. *Public administration review*, 339-347.

Caillier, J. G. (2013). Satisfaction with work-life benefits and organizational commitment/job involvement: Is there a connection? *Review of Public Personnel Administration, 33*(4), 340-364.

Carter, B., Danford, A., Howcroft, D., Richardson, H., Smith, A., & Taylor, P. (2013). Taxing times: Lean working and the creation of (in) efficiencies in HM Revenue and Customs. *Public Administration, 91*(1), 83-97.

Chapman, C., Getha-Taylor, H., Holmes, M. H., Jacobson, W. S., Morse, R. S., & Sowa, J. E. (2016). How public service leadership is studied: An examination of a quarter century of scholarship. *Public Administration, 94*(1), 111-128.

Chordiya, R., Sabharwal, M., & Goodman, D. (2017). Affective organizational commitment and job satisfaction: A cross-national comparative study. *Public Administration*, *95*(1), 178-195.

Deci, E. L., Connell, J. P., & Ryan, R. M. (1989). Self-determination in a work organization. *Journal of applied Psychology*, *74*(4), 580.

Fried, Y., Ben-David, H. A., Tiegs, R. B., Avital, N., & Yeverechyahu, U. (1998). The interactive effect of role conflict and role ambiguity on job performance. *Journal of occupational and organizational psychology*, *71*(1), 19-27.

Gagné, M., Koestner, R., & Zuckerman, M. (2000). Facilitating acceptance of organizational change: The importance of self-determination 1. *Journal of applied social psychology*, *30*(9), 1843-1852.

Giauque, D., Anderfuhren-Biget, S., & Varone, F. (2013). HRM practices, intrinsic motivators, and organizational performance in the public sector. *Public Personnel Management*, *42*(2), 123-150.

Ilardi, B. C., Leone, D., Kasser, T., & Ryan, R. M. (1993). Employee and supervisor ratings of motivation: Main effects and discrepancies associated with job satisfaction and adjustment in a factory setting 1. *Journal of applied social psychology*, *23*(21), 1789-1805.

Lewis, G. B., & Frank, S. A. (2002). Who wants to work for the government? *Public administration review*, *62*(4), 395-404.

Lyons, S. T., Duxbury, L. E., & Higgins, C. A. (2006). A comparison of the values and commitment of private sector, public sector, and parapublic sector employees. *Public administration review*, *66*(4), 605-618.

Pandey, S. K. (2010). Cutback management and the paradox of publicness. *Public administration review*, *70*(4), 564-571.

Park, S. M., & Rainey, H. G. (2007). Antecedents, mediators, and consequences of affective, normative, and continuance commitment: Empirical tests of commitment effects in federal agencies. *Review of Public Personnel Administration*, *27*(3), 197-226.

Perry, J. L. (1996). Measuring public service motivation: An assessment of construct reliability and validity. *Journal of public administration research and theory*, *6*(1), 5-22.

Siu, O. l. (2003). Job stress and job performance among employees in Hong Kong: The role of Chinese work values and organizational commitment. *International journal of psychology, 38*(6), 337-347.

Somers, M. J. (1995). Organizational commitment, turnover and absenteeism: An examination of direct and interaction effects. *Journal of organizational Behavior, 16*(1), 49-58.

Vandenberghe, C., & Bentein, K. (2009). A closer look at the relationship between affective commitment to supervisors and organizations and turnover. *Journal of occupational and organizational psychology, 82*(2), 331-348.

Vansteenkiste, M., Neyrinck, B., Niemiec, C. P., Soenens, B., De Witte, H., & Van den Broeck, A. (2007). On the relations among work value orientations, psychological need satisfaction and job outcomes: A self-determination theory approach. *Journal of occupational and organizational psychology, 80*(2), 251-277.

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APPENDIX

SURVEY QUESTIONS

Variables	Items used to measure the variables
Intrinsic Motivation	Military service feels interesting
	Military service is exciting and challenging
	Military service makes me happy.
	Military service is for my future and happiness
	Military service is important to me
	Enlistment in the army is my own choice
Job Stress	I am stressed out of life by the military standard schedule
	I am stressed in group life
	I cannot rest after work, so I get stressed
	I am usually stressed by vacation problems
	I feel that military service makes me frustrated
	I am under stress because I am not guaranteed the right to free time
	I am stressed to live apart from my family or loved ones
	I am isolated from the outside and stressed
	I am stressed out of my privacy
	I have adequate means to relieve stress
Organizational Commitment	I feel like a family member on my team.
	I have a strong affection for my team.
	I do not feel a sense of belonging to my team.
	I am proud of working in my team.
	I would like to continue working on our team.
	I feel like it's my problem if my team faces a problem.
	When serving the people, I always keep in mind the goals that my team pursues.
	I am always committed to doing my best for the development of my team.
	I think it is my mission to dedicate to my team.
	I want to find out the meaning of my military service by doing my best to the task given to my team.
	I feel bad when people around us criticize my team.
Job Satisfaction	I am satisfied with my job.

BIOGRAPHICAL SKETCH

Yongjun Park was born and raised in South Korea. He earned a Bachelor of Arts in Education from Korea Army Academy at Yeongcheon (KAAY) in February 2007. He is currently an army major and has served in the Republic of Korea Army for 15 years. Since 2007, he has carried out various duties as a platoon leader, a staff officer in field forces, and a company commander. In 2012, he was selected as a prospective professor of public administration for KAAY, and he earned a Master of Public Administration degree from Korea University in 2015. He then worked for KAAY as an assistant professor of public administration for six semesters. He led public administration courses for cadets who will become elite officers in the Republic of Korea Army. He joined the University of Texas at Dallas as a doctoral student in public affairs in August 2017.

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