The Influence of Job Stress and Job Satisfaction of 119 Paramedics on Job Performance Ability

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119구급대원의 직무스트레스, 직무만족도가 직무수행능력에 미치는 영향

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Abstract

This study is a descriptive research study to find out the effect of job stress and job satisfaction of 119 paramedics on job performance ability. The subjects of the study were 119 paramedics working at the fire department located in Jeonbuk who agreed to participate in the study, and data collection was conducted from July 1st to September 10th, 2020. Data analysis was performed using the SPSS 23.0 program, with frequency and percentage, mean and standard deviation, correlation analysis, t-test, and ANOVA. As a result of the study, the average job stress of 119 paramedics was 2.85±.0.29 points, job satisfaction 3.35±0.30 points, and job performance ability 3.53±0.89. The higher the job satisfaction, the higher the job performance ability. Examining the characteristics of the variables according to the general characteristics, it was found that the job performance ability was significantly related to the educational level, clinical experience, first aid experience, and emergency certification. Based on the above results, a positive professional intuition was established as a way to increase the job performance ability of 119 paramedics, and to lower job stress and increase job satisfaction by raising awareness related to job satisfaction, establishment of job view through performance improvement and Program development and education programs for job satisfaction should be actively implemented.

Kewords : EMS, Job Stress, Job Satisfaction, Job Performance Ability, 119 paramedic

1. Introduction

1.1 The need for research

Fire fighting officials are organizations that deal with all the dangers and emergencies related to the safety of people's daily life and national disasters and solve their urgency[1]. Among them, 119 paramedics are establishing themselves as the most trusted organization of the people. However, while 119 paramedics have established themselves on the basis of public trust, the reality is that they have not been able to respond to the rapidly increasing demand, and they are working in various stressful environments such as equipment aging, lack of expertise, conflict and various stressful environments[2]. The number of dispatches of 119 paramedics is 2,929,994 as of 2019, which is increasing every year. Compared to the 2,045,097 dispatches in 2010, more than 800,000 cases have increased over 10 years. Paramedics who perform first-aid activities are always in a state of tension when waiting for dispatch, but it is known that their job stress is very high[4]. In particular, paramedics are the first to be exposed to emergencies, and are always experiencing heavy job stress, having to respond directly with their whole body in an unstable space called the field in order to save lives in a short time[5]. For 119 paramedics, these situations become dissatisfied and increase job stress, and have the potential to be applied as a factor that lowers job satisfaction and morale[6]. If these job stresses are overcome using the right method, they will maintain mental health as well as help in first-aid activities, but if they are difficult to handle, repeat, or persist, they will have a negative job attitude. In addition, mental illness is induced, and the degree of satisfaction of the job is rapidly decreased[7]. As the various demands of 119 paramedics increase rapidly, they must respond appropriately to those demands, but they face a lot of job stress. In particular, 119 paramedics suffer from unexpected incidents such as sudden accidents or damage, and their judgment is blurred, and not only patients or guardians with intense anxiety and

emotions, but even drunk people suffer violence at the scene of the incident [8, 9]. Therefore, the 119 paramedics who experience such work-related incidents have no choice but to lower their job satisfaction. These problems faced by 119 paramedics are not limited to individual issues and can affect the entire paramedic, society as a whole, and the people.

think it is very necessary to study the relationship between job stress, job satisfaction and job performance that 119 paramedics feel. I think that it can be helpful in devising a plan to improve the efficiency of emergency dispatch by understanding the level of job stress and job satisfaction at the current workplace. The correlation between job stress and job satisfaction on job performance of 119 paramedics can be identified and provided as basic data on measures to improve the quality of emergency services and environmental improvement.

1.2 purpose

The purpose of this study is to determine the degree of job performance ability of 119 paramedics and job satisfaction, and to confirm performance ability and related factors. The specific purpose is as follows.

- Identify the subject's job stress, job satisfaction, and job performance ability.
- Understand job stress, job satisfaction, and job performance level according to the general characteristics of the boss.
- Identify the correlation between the subject's job stress, job satisfaction, and job performance ability.
- Identify the factors that affect the job satisfaction of the subject.

2. Main subject

2.1 method

This study is a descriptive research study to understand the effect of job stress and job satisfaction of paramedics on job performance ability.

2.2 Research subject

The subject of this study was conducted for subjects who understood the purpose of this study and agreed to participate in the study among 119 paramedics working as a fire fighting headquarters in G province. Data were collected only for those who signed in. The consent to participate in the study included the purpose of the study, the subject's anonymity, confidentiality, and withdrawal of the study.

2.3 Research tools

2.3.1 Job stress

As for job stress, the shortened version (K0SS-SF) of the Korean job stress measurement tool of developed to measure job stress of Koreans was used[10]. The sub-factors of the job stress measurement tool consist of a total of 24 questions in 7 areas (job demand, job autonomy, job insecurity, relationship conflict, organizational system, inadequate compensation, and workplace culture). Each question is on a 4 point Likert scale from 1 point (not at all) to 4 points (very much). Positive questions excluding negative questions were inverted and calculated. The higher the score, the higher the job stress. In this study, cronbach's alpha of all 24 questions was 0.867, job demand was 0.599, job autonomy was 0.379, job insecurity was 0.692, relationship conflict was 0.691, organizational system was 0.769, compensation inadequate was 0.680, and workplace culture was 0.860.

2.3.2 Job satisfaction

As for the measurement tool for job satisfaction, the job satisfaction tool[11] developed by Stamps (1978), etc., was modified to suit the Korean situation. It was composed of 30 questions as supplemented data, and was composed of 7 professional level questions, 5 interaction questions, 4 job questions, 5 autonomy questions, 6 administrative questions, and 3 remuneration questions. Each question was scored on a Likert-type scale with 1 point for “not at all” and 5 points for “strongly agree” according to job satisfaction. The higher the score, the higher the job satisfaction. At the time of development of the tool, the reliability was Cronbach's α = .71, and in this study, Cronbach's α =.96.

2.3.3 Job performance ability

The measurement tool of this study[12] was modified and supplemented with the developed tool to investigate factors affecting performance. After being reviewed, a pilot study was conducted on 25 paramedics in the Gyeonggi area participating in SALS, and a tool was constructed. The SALS job performance ability, importance, and educational demand were measured on a 5-point Likert scale, and the SALS job performance ability was rated as “very good” as 5 points and “not at all” as 1 point. In terms of importance, 5 points for "very important" and 1 point for "not important", 5 points for "very necessary" and 1 point for "not necessary" in the educational demand. The higher the score, the higher the SALS job performance ability, importance, and educational demand. Cronbach's alpha of the tool used in this study was SALS job performance ability .907, importance level .897, education requirement level .931

2.4 Data analysis

The collected data were analyzed as follows using IBM SPSS 23.0 program.

1) The general characteristics of 119 paramedics were calculated as frequency and percentage.
2) The average and standard deviation were calculated for the job stress, job satisfaction and job performance of 119 paramedics.
3) The difference in job stress, job satisfaction, and job performance ability of nursing college students was analyzed using t-test and ANOVA, and post-test was analyzed by Scheffe' test.
4) The correlation between job stress, job satisfaction and job performance was analyzed by Pearson's correlation.
5) The factors affecting the job performance ability of 119 paramedics were analyzed by multiple regression.

3. Results

3.1 Differences in general characteristics, job stress, job satisfaction and job performance of the subject

As a result of looking at the general characteristics of the subjects in this study, the age of the subjects was the most in 57 patients (55.9%) aged 30 to 39 years old, and the lowest was 3 patients (2.9%) aged 50 years or older. In the first-aid career, 53 (52%) were the most in 1-5 years, and 9 (8.%8) over 10 years were the least. In this study, as a result of examining the differences in job stress, job satisfaction, and job performance according to the general characteristics, educational level in job performance ability (F=3.23, p<.044), clinical experience (F=6.06, p<.001) , There were significant differences in first aid experience (F=-8.63, p<.001) and emergency qualification (F=39.14, p<.001) (Table 1).

3.2 Job stress, job satisfaction and job performance of 119 paramedics

The average of 119 paramedics' job stress was 2.85 points out of 4 points, job satisfaction was 3.35 points out of 5 points, and job performance ability was averaged 3.53 points out of 5 points (Table 2).

Table 2. 119 paramedics' Job Stress, Job satisfaction and job performance ability

	Mean±SD	Range
Job Stress	2.85±.0.29	1~4
Job satisfaction	3.35±0.30	1~5
Job Performance Ability	3.53±0.89	1~5

3.3 The relationship between job stress, job satisfaction and job performance capability of 119 paramedics

Job stress of 119 paramedics was found to have a positive correlation with job satisfaction (r=.478, p<.001), and job satisfaction and job performance ability (r=.212, p<.032) were found to have a positive correlation. It was found that there was a positive correlation (Table 3).

Table3. Correlation between Job Stress, Job satisfaction and job performance ability of 119 paramedic.

	Job Stress	Job satisfaction	Job Performance Ability
Job Stress	1		
Job satisfaction	.478 (<.001)	1	
Job Performance Ability	-.114 (<.254)	.212 (<.032)	1

3.4 Factors Affecting 119 Paramedic's Job Performance Ability

In order to identify the factors affecting the job performance ability of 119 paramedics, a multiple regression analysis was conducted by setting education, clinical experience, number of years of paramedic service, emergency qualification, and job satisfaction that showed significant differences in general characteristics. As a result of residual analysis, the Durbin-Watson statistic was 1.833, which was close to 2 and not close to 0 or 4, so the independence of the residuals was satisfied.As a result of testing the multicollinearity between the independent variables, the tolerance was 0.692, which was less than 1.0, and the variance The Variance Inflation Factor (VIF) was 1.142, which was less than the standard value of 10, and there was no problem of multi collinearity among the independent variables.

The variables affecting the job performance of 119 paramedics were clinical experience (β=.535, p=<.001), emergency experience (β =.204, p=.015), and emergency certification (β=-.190 , p=.023), job satisfaction (β=.163, p=.041), and the explanatory power of clinical performance was 40.2% (Table 4).

Table 4. Factors affecting job performance ability

Spec.	B	SE	β	t	p
Constant	-.197	.812		-.242	.809
education	.214	.122	.141	1.753	.083
clnical career	.966	.144	.535	6.725	<.001
rescue career	.215	.086	.204	2.488	.015
license	-.176	.076	-.190	-2.310	.023
Major Satisfaction	.473	.229	.163	2.068	.041
F(p)	14.573(<.001)				
R2	.432				
Adjusted R^2	.402				

Table 1. Differences between Job Stress, Job satisfaction and job performance ability to the general characteristics (n=102)

Characteristics	Categories	n(%)	Job Stress		Job satisfaction		job performance ability	
			Mean(SD)	t or F(p)	Mean(SD)	t or F(p)	Mean(SD)	t or F(p)
Gender	Male	78(76.5)	2.86±0.30	-0.903	2.91±.66	0.773	3.47±0.90	-1.321
	Female	24(23.5)	2.80±0.29	(.369)	2.86±.70	(.441)	3.74±0.86	(.189)
Marriage	Yes	52(51.0)	2.84±0.31	-0.397	2.67±.50	0.244	3.62±0.90	1.076
	No	50(49.0)	2.86±2.86	(.693)	2.97±.83	(.808)	3.43±0.88	(.284)
Age	20s	26(25.5)	3.31±0.30		3.07±.73		3.55±0.79	
	30s	57(55.9)	3.34±0.28	0.472	2.86±.67	0.472	3.55±0.95	.227
	40s	16(15.7)	3.41±0.36	(.702)	2.96±.64	(.702)	3.53±.0.90	(.842)
	50s	3(2.9)	3.45±0.47		2.82±.68		5.11±0.70	
Religion	Yes	83(81.4)	2.86±.0.31	0.940	2.88±.74	0.406	3.52±0.90	-0.263
	No	19(18.6)	2.79±.0.23	(.350)	3.08±.50	(.686)	3.58±0.86	(.793)
final ducational background	high school	5(4.9)	2.70±0.26	0.811	3.18±0.19	1.177	2.60±1.20	3.235
	Cdllege	41(40.2)	2.84±0.26	(.447)	3.32±0.33	(.312)	3.65±0.79	(.044)
	University	56(54.9)	2.87±0.32		3.38±0.29		3.53±0.90	a>b
Clinical career	Yes	43(42.2)	2.90±0.32	1.678	3.34±0.28	-0.161	2.96±.0.94	-6.060
	No	59(57.8)	2.81±0.27	(.097)	3.35±0.35	(.872)	3.95±.0.57	(<.001)
years of service for paramedics	>1y	20(19.6)	3.36±0.27		3.36±0.27		2.71±0.95	-8.632
	1y~5y	53(52.0)	3.30±0.28	1.348	3.30±0.28	1.348	3.71±0.78	(<.001)
	5y~10y	20(19.6)	3.42±0.35	(.263)	3.42±0.35	(.263)	3.72±0.75	a>b,c,d
	<10y	9(8.8)	3.47±0.35		3.47±0.35		3.87±0.70	
License or Certificate	1EMT	34(33.3)	3.36±0.29		3.31±.0.30		3.36±.0.29	39.141
	2EMT	22(21.6)	3.30±0.32	0.508	3.34±0.28	.508	3.30±0.32	(<.001)
	Nurser	40(39.2)	3.35±0.31	(.677)	3.41.0.36	(.677)	3.35±0.31	d>a,c
	first aid training	6(5.9)	3.35±0.30		3.45±0.47		3.46±0.25	

4. Conclusion

This study examines the correlation between job stress, job satisfaction, and job performance ability of 119 paramedics, and examines the effect of job stress and job satisfaction of 119 paramedics on job performance ability to determine the job performance ability of 119 paramedics. It was attempted to provide basic data to enhance.

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