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Original Article

Effects of Emotional Labor and Job Stress Perceived by Insurance and Asset Managers on Their Job Satisfaction

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Abstract

Background: Occupational stress is often high among the employees of insurance companies. We aimed to examine the effects of emotional labor and job stress on job satisfaction among insurance and asset managers and the moderating effect of regular exercise participation in these relationships.

Methods: This study was conducted in October 2022. A total of 261 insurance and asset managers working at Samsung Life Insurance Company, Seoul, Republic of Korea, were selected using non-probability purposive sampling. Data were collected using questionnaires. The data collected were analyzed using frequency analysis, descriptive statistics, confirmatory factor analysis, correlation analysis, structural equation model analysis, measurement equivalence tests, multi-group structural equation model analysis, and parametric comparison analysis.

Results: Both emotional labor and job stress had a negative effect on the job satisfaction of insurance and asset managers ($P< 0.05$). Regular exercise participation moderated the relationship between emotional labor and job satisfaction ($P< 0.05$) but not the relationship between job stress and job satisfaction.

Conclusion: The results of this study might help encourage devising of strategies that increase exercise participation among insurance and asset managers in order to reduce their emotional labor and job stress while simultaneously increasing their job satisfaction.

Keywords: Emotional labor; Exercise participation; Insurance; Job; Stress

Introduction

The job of an insurance sales agent encompasses a relatively high turnover rate and stress because the agents must not only sell insurance policies but also carry out long-term customer management and complex compensation processes. Moreover, they often have irregular working hours (1). Continuous exposure to stressful situations not only increases mental and physical fatigue but also causes negative pathological phenomena, such as depression, panic disorder, emotional numbness, and smile mask syndrome (2). These factors pose a health threat to insurance and asset managers, whose operations require significant and constant emotional labor (3).

Emotional labor has become a major cause of stress in Korean society (4). This is largely because of the shift in Korea's social structure from an industrial to a service society (4). In fact, in

2021, emotional workers accounted for a big proportion of workers in Korea (42% or approximately 11.65 million) (5). Among them, insurance and asset managers generally perform their work through face-to-face consultations with customers, and customers' complaining behavior has been found to cause job stress. Therefore, performing the duties of insurance and asset managers can generate job stress due to emotional labor (1-3). Furthermore, experiencing negative aggressive behaviors, such as verbal or physical violence from customers, can cause anger and depression. This can, in turn, reduce job satisfaction and efficiency, which inevitably become obstacles to the company's pursuit of profits (3). Thus, measures are required to reduce the job stress experienced by insurance and asset managers in the banking sector.

Regular participation in exercise, along with other physical activities, can improve physical and mental health (6, 7). As a measure to cope with stress, regular exercise participation effectively controls negative mental health, increases concentration, patience, and confidence, strengthens self-identity, and helps one respond to stress more resolutely (8, 9). It effectively lowers negative emotions, such as anxiety and depression, by bolstering a good mood and positive emotions (6-10). Furthermore, it helps prevent degenerative diseases, such as cardiovascular and musculoskeletal diseases (9, 10). Aerobic exercises are said to be effective in relieving symptoms such as depression and anxiety in individuals with mental illness, as well as improving the general mood (6-10). Thus, regular exercise participation can be considered an effective way to reduce job stress among insurance and asset managers.

Few studies have directly analyzed the effect of regular exercise participation in investigating emotional labor and job stress among insurance and asset managers (6-10). Therefore, we aimed to examine the impact of emotional labor and job stress perceived by insurance and asset managers on their job satisfaction and investigate whether regular exercise participation moderates these relationships. More specifically, this study verified the following hypotheses.

Hypothesis 1: Emotional labor affects the job satisfaction of insurance and asset managers.

Hypothesis 2: Job stress affects the job satisfaction of insurance and asset managers.

Hypothesis 3: Regular exercise participation moderates the relationship of emotional labor and job stress with job satisfaction.

Materials and Methods

Participants

This study was conducted in October 2022 among 261 insurance and asset managers working at Samsung Life Insurance Company, Seoul, Korea, who were selected using non-probability sampling. We selected individuals who had expressed sufficient understanding of the purpose and procedures of the study, had expressed their willingness to participate voluntarily, and did not have a physical or mental disease or a disability. Before data collection, the purpose of the study was explained to insurance and asset managers, and the study was only conducted with participants who wished to participate voluntarily and provided written informed consent. Afterward, the researcher and two assistant researchers visited the insurance and asset management companies that wished to participate in the study at the time and place agreed in advance. Efforts were made to ensure the accuracy of the responses by reviewing the recovered data for omissions and double entries.

All processes in this study were approved by Gachon University (2022-10). Furthermore, the study was conducted according to the principles outlined in the Declaration of Helsinki.

Emotional labor

Emotional labor was measured using the Emotional Labor Questionnaire developed by Hochschild (11). This questionnaire consists of 15 questions across three subfactors: five questions about surface behavior, five questions about inner behavior, and five questions about emotional dissonance. The questions are answered on a 5-point Likert scale, in which 1 cor-

responds to "not at all" and 5 corresponds to "very much."

Job stress

Job stress was measured using a questionnaire developed by Demerouti et al. (12). The questionnaire consists of 13 questions across three subfactors: four questions about external stress, four questions about internal stress, and five questions about self-anxiety. The questions are answered on a 5-point Likert scale, in which 1 corresponds to "not at all" and 5 corresponds to "very much."

Job satisfaction

Job satisfaction was measured using the Job Satisfaction Index developed by Beehr and Newman (13). The index consists of five single-factor questions that are answered on a 5-point Likert scale, in which 1 corresponds to "not at all" and 5 corresponds to "very much."

Data analysis

Frequency analysis and descriptive statistical analysis were performed to determine the characteristics of the participants. Confirmatory factor analysis was performed using the measurement model to verify the validity and reliability of the measurement tool. Conceptual reliability, average variance extracted (AVE), and Cronbach α, which indicates whether each latent variable has reliability and concentrated validity, were also calculated. Pearson correlation was conducted to confirm the general relationship between the subfactors. Structural equation model analysis was conducted to verify the impact of emotional labor and job stress perceived by insurance and asset managers on their job satisfaction. Furthermore, measurement equivalence verification and multi-group structural equation model analysis were conducted to verify the moderating effect of regular exercise participation. If the multi-group structural equation analysis was statistically significant, a pair-wise parameter comparison analysis was conducted to verify the moderating effect. Statistical significance was set at the P= 0.05 level. These statistical analyses were performed using the PASW and AMOS programs (version 25.0; IBM Co., Armonk, NY, USA).

Results

Characteristics of the participants

Table 1 presents the characteristics of the participants.

Table 1: Characteristics of the participants (n = 261)

Variable		*Frequency*	*Percentage*
Sex	Male	176	67.4
	Female	85	32.6
Age(yr)	≤40	138	52.9
	>40	123	47.1
Regular exercise participation	Yes	176	67.4
	No	85	32.6

Validity and reliability of the questionnaire

The measurement model was set according to the classification presented in Table 2. The goodness-of-fit indices of the measurement model were $\chi 2$ = 1175.506 (df = 474), P< 0.001, Q ($\chi 2$/df) = 2.480, comparative fit index (CFI) = 0.912, Tucker–Lewis index (TLI) = 0.906, root mean square error of approximation (RMSEA) (90% confidence interval) = 0.075 (0.070-0.080), satisfying goodness-of-fit criteria. The factor loading of all items was greater than 0.500. In addition, the AVE, concept reliability, and Cronbach α of the subfactors exceeded 0.500, 0.700, and 0.700, respectively, proving the reliability and validity of the measurement tool.

Table 2: Results of the verification of the measurement model

Variable	*Subfactors*	*Items*	*λ*	*Standard error*	*Critical ratio*	*Average variance extracted*	*Concept reliability*	*Cronbach α*
Emotional labor	Surface behavior	Items 1	0.697	-	-	0.541	0.854	0.881
		Items 2	0.798	0.101	11.655***			
		Items 3	0.831	0.103	12.076***			
		Items 4	0.775	0.101	11.361***			
		Items 5	0.761	0.098	11.171***			
	Inner behavior	Items 6	0.601	-	-	0.500	0.832	0.787
		Items 7	0.567	0.143	7.129***			
		Items 8	0.706	0.130	8.258***			
		Items 9	0.638	0.127	7.748***			
		Items 10	0.750	0.146	8.515***			
	Emotional dissonance	Items 11	0.802	-	-	0.607	0.885	0.884
		Items 12	0.830	0.067	14.732***			
		Items 13	0.763	0.074	13.247***			
		Items 14	0.840	0.068	14.940***			
		Items 15	0.666	0.067	11.199***			
Job stress	External stress	Items 1	0.627	-	-	0.529	0.817	0.758
		Items 2	0.770	0.128	9.863***			
		Items 3	0.680	0.116	9.016***			
		Items 4	0.598	0.113	8.147***			
	Internal stress	Items 5	0.680	-	-	0.550	0.830	0.726
		Items 6	0.659	0.097	10.214***			
		Items 7	0.631	0.104	9.808***			
		Items 8	0.576	0.105	8.999***			
	Self-anxiety	Items 9	0.709	-	-	0.505	0.836	0.834
		Items 10	0.633	0.099	9.602***			
		Items 11	0.719	0.096	10.873***			
		Items 12	0.744	0.099	11.241***			
		Items 13	0.745	0.090	11.264***			
Job satisfaction		Items 1	0.805	-	-	0.565	0.866	0.886
		Items 2	0.728	0.085	12.543***			
		Items 3	0.760	0.076	13.246***			
		Items 4	0.881	0.065	15.896***			
		Items 5	0.749	0.075	13.008***			

***$P < 0.001$; tested by confirmatory factor analysis

Correlation between the subfactors

Before analyzing the research model, variables were constructed through item bundles of the measurement questions that constituted each subfactor based on the results of validity and reliability verification. Descriptive statistical analysis and correlation analysis were conducted to determine the normality and relevance of the subfactors. As shown in Table 3, the average score for the variables ranged from 2.56 to 3.88 points. Since there were no outliers in kurtosis (< 4.00), the score distribution of the measured variables was judged to meet normality. The correlation coefficient of the subfactors ranged from -0.124 to -0.346, indicating a significant negative correlation. Since the correlation coefficient of the subfactors did not equal or exceed 0.80, there were no concerns about multicollinearity.

Table 3: The results of normality and relevance of the subfactors

	Mean	*Standard deviation*	*Skewness*	*Kurtosis*	*Surface behavior*	*Inner behavior*	*Emotional dissonance*	*External stress*	*Internal stress*	*Self-anxiety*	*Job satisfaction*
Surface behavior	2.91	0.93	-0.102	-0.483	1.000						
Inner behavior	3.88	0.63	-0.658	1.239	-0.162**	1.000					
Emotional dissonance	2.18	0.84	0.787	0.362	0.504**	-0.229**	1.000				
External stress	2.93	0.87	0.073	-0.250	0.375**	-0.070	0.383**	1.000			
Internal stress	2.78	0.85	0.165	-0.024	0.378**	-0.138*	0.455**	0.760**	1.000		
Self-anxiety	2.56	0.92	0.404	-0.123	0.408**	-0.204**	0.482**	0.690**	0.790**	1.000	
Job satisfaction	3.49	0.91	-0.200	-0.096	-0.111	0.218**	-0.124*	-0.291**	-0.346**	-0.335**	1.000

*$P < 0.05$, **$P < 0.01$; tested by Pearson correlation

Effects of emotional labor and job stress on job satisfaction

Table 4 presents the results of the structural equation model analysis. First, a structural equation model analysis was conducted to verify the impact of emotional labor perceived by insurance and asset managers on their job satisfaction. The model fit was relatively appropriate with $\chi2 = 72.950$, df = 19, $P< 0.001$, TLI = 0.905, CFI = 0.936, and RMSEA = 0.079. Emotional labor had a statistically significant negative impact; therefore, Hypothesis 1 was accepted. Then, a structural equation model analysis was conducted to verify the impact of job stress perceived by insurance and asset managers on their job satisfaction. The model fit was relatively appropriate with $\chi2 = 63.140$, df = 19, $P< 0.001$, TLI = 0.948, CFI = 0.965, and RMSEA = 0.075. Job stress was found to have a statistically significant negative impact; therefore, Hypothesis 2 was also accepted.

Table 4: Results of structural equation model analysis

Path			*β*	*Standard error*	*t*	*Result*
Emotional labor	→	Job satisfaction	-0.222	0.112	-2.570*	Accepted
Job stress	→	Job satisfaction	-0.408	0.073	-6.029***	Accepted

*$P < 0.05$, ***$P < 0.001$; tested by structural equation model analysis

Moderating effect of regular exercise participation

Measurement identity was conducted based on a measurement model that comprised seven subfactors and 33 questions to measure emotional labor, job stress, and job satisfaction. The results of analyzing the model fit of the two groups' measurement model were TLI = 0.893, CFI = 0.907, and RMSEA = 0.055, indicating that no difference exists in the shape identity of the groups. To verify the identity of the factor loadings of the two groups, a model analysis was conducted in which the shape identity was constrained as the base model. No difference was found between the groups according to the degrees of freedom. Therefore, the moderating effect was verified using a multi-group structural equation model analysis (Table 5).

Emotional labor was found to have a greater impact on job satisfaction among the participants who did not participate in exercise regularly than among those who participated in it regularly. In addition, the comparison of the parameters for each pair showed that Z = 1.998 ($P< 0.05$), which exceeded the rejection threshold. These results indicated that regular exercise participation moderates the relationship between emotional labor and job satisfaction. Job stress was found to have a greater impact on job satisfaction among the participants who participated in exercise regularly than among those who did not. However, the results of parameter comparison for each pair showed that the difference in path coefficients was at a level where there was no statistically significant difference. These results suggested that regular exercise participation does not moderate the relationship between job stress and job satisfaction. Therefore, Hypothesis 3 was partially accepted.

Table 5: Results of verifying the moderating effect of regular exercise participation

Path			***Regular exercise participation***	***Not regular exercise participation***	***Z***	***Result***
			β	*β*		
Emotional labor	→	Job satisfaction	-0.146	-0.251*	1.998	Accepted
Job stress	→	Job satisfaction	-0.387***	-0.416***	0.592	Rejected

*$P < 0.05$, ***$P < 0.001$; tested by multi-group structural equation model analysis
Z rejection threshold = ±1.96 (α = 0.05), ±2.58 (α = 0.01)

Discussion

This study verified the impact of emotional labor and job stress on job satisfaction and the moderating effect of regular exercise participation in these relationships. We first found that the emotional labor perceived by insurance and asset managers negatively affects their job satisfaction. This result aligns with that of Chung (14), who found a negative correlation between emotional labor and job satisfaction among childcare teachers. The phenomenon that job satisfaction decreases as emotional labor intensifies appears to be natural. There is a perception in service-oriented companies that the quality of service determines the company's competitive advantage. Thus, employees are asked to express their emotions and feelings to customers based on the company's emotional expression norms (4, 15).

Second, we found that job stress perceived by insurance and asset managers negatively affects their job satisfaction. This result aligns with that of Lee and Park (16), who reported that job stress and job satisfaction are negatively correlated among insurance planners. They found that insurance planners become stressed because of the pressure to give intangible plans a tangible form amid infinite competition. This has a detrimental effect on life satisfaction and health, reduces efficiency and productivity, and hinders the formation of amicable relationships among colleagues (17). When stress surpasses the appropriate level, job satisfaction decreases, and turnover rates increase. This is in line with the results of previous research showing that organizational productivity and work quality can be hindered (16, 17). These findings suggest that stress-generating factors should be investigated in depth to improve job satisfaction, health, quality of life, social relationships, and work efficiency, especially among insurance and asset managers who experience high levels of stress. There is a need to actively conduct research to address and reduce this stress (1-3).

Third, we found that emotional labor has a greater impact on job satisfaction in the absence of regular exercise participation than in its presence. Choo et al. (18) found that exercise and eating habits partially mediate the relationship between emotional labor and job burnout among insur-

ance and asset managers and salespeople with prominent sales characteristics. Additionally, individuals with sales jobs that require a high level of emotional labor, such as insurance and asset managers, may experience lower job satisfaction due to the level of emotional labor. However, this influence can be reduced as participation in sports increases (18, 19). Nonetheless, since this study was conducted only among insurance and asset managers, job satisfaction may have decreased due to excessive emotional labor. Thus, there is a need to expand the scope of research, target individuals with various sales occupations, and verify the moderating effect of regular exercise participation.

Finally, we did not find a moderating effect of regular exercise participation in the relationship between job stress and job satisfaction. Lee (20) conducted a study among middle school teachers and found that the level of participation in sports and leisure activities does not have a significant impact on job stress and job satisfaction, aligning with our finding. Based on the verification of the negative relationship between job stress and job satisfaction, the relationship between the two variables is likely to be moderated by the level of exercise participation (21). Insurance planners experience stress because they not only have to acquire complex insurance knowledge but also manage multiple customers and achieve individual goals (17). Their busy schedule and complex work create an environment in which regularly participating in physical activity becomes a challenge. This may make the difference in the degree of exercise participation small, making it difficult to determine the moderating effect of regular exercise participation in the relationship between job stress and job satisfaction. This could be the reason the adjustment effect did not show a clear difference.

This study has several limitations. First, because the study was conducted among insurance and asset managers in the Seoul area, care must be taken in generalizing the results. Second, since the sample size was small (n = 261), it is difficult to generalize the results to all Korean insurance and asset managers. Third, although two assistant researchers visited the insurance and asset management company, data were collected using questionnaires, which have several limitations, including potential self-bias. Nevertheless, this study is significant because it directly measured the effect of emotional labor, job stress, and regular exercise participation, emphasizing job satisfaction among insurance and asset managers.

Conclusion

Emotional labor and job stress negatively affect the job satisfaction of insurance and asset managers. Regular exercise participation has a partial moderating effect. It moderates the relationship between emotional labor and job satisfaction but not the relationship between job stress and job satisfaction. The results of this study can help develop strategies that improve exercise participation among insurance and asset managers to reduce their job stress and increase job satisfaction.

Journalism Ethics Considerations

Ethical issues (including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc.) have been completely observed by the authors.

Conflict of Interest

The authors declare no conflicts of interest.

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