## Factors Affecting Perception of Subway Service Workers' Emotional Labor

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#### Abstract

This research aimed at investigating factors affecting perception of service workers' emotional labor in charge of the public service in the subway station. For this purpose, this research conducted frequency and percentage, mean and standard deviation, t-test, ANOVA and multiple regression analysis with data of 881 workers at the business management office in charge the public service among Urban Railway Corporation employees in S City, Korea. As a result of this research, subway workers' perception of their emotional labor was different according to gender, experience of negative emotions, and psychology; and variables such as experiences of physical and verbal abuse, disregard of their personality and interpersonal sensitivity psychology accounted for 17.2% of the perception of emotional labor. Mental health promotion programs are needed to be offered to the service workers in the future to alleviate the experience of negative emotional labor coming from relations with consumers.

**Keywords:** Component, Emotional Labor, Experience of Physical Abuse, Experience of Verbal Abuse, Interpersonal Sensitivity

## 1. Introduction

Workers at the subway business management office, that is, service workers work underground on the basis of the shift system from the nature of their working conditions that operate subway, and their satisfaction of working environment belongs to the lowest occupational group of the subway workers' occupational groups<sup>1</sup>, and to the highest in stress of their working environment and psychosocial stress<sup>2</sup>. Their primary responsibilities are also associated with irregular sleep, shift system, consumer information service, management of facilities and management of the homeless and drunkards, so they have to suppress their emotions and to do emotional labor with kindness and consideration<sup>3</sup>. Emotional labor means 'behaviors expressing emotions socially required in the service transaction situations'<sup>4</sup>, and expressing specific emotions required in the organization or duty while employees offer services to customers in a touchpoint of the service<sup>5</sup>.

This research tries to investigate factors affecting service workers' perception of emotional labor that perform public service in the subway station, focusing on the variables such as general and task-related characteristics and experiences of physical and verbal abuse, and psychology; and to use as the basic data for health promotion program for the service workers. The specific purposes of this research are as follows:

First, it investigates subjects' general and task-related characteristics, experiences of physical and verbal abuse, psychology and perception degree of the emotional labor.

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Second, it compares differences in perception of the emotional labor according to the subjects' general and task-related characteristics, experiences of physical and verbal abuse, psychology.

Third, it investigates factors affecting subjects' perception of the emotional labor.

## 2. Research Methods

### 2.1 Research Subjects of and the Ethical Considerations

This research conducted a survey targeting the whole employees working in the Urban Railway Corporation in S City, Korea, from June to July, 2012, by applying Web-Questionnaire; and, of the 4,075 respondents (64.01%), it used data of 881 workers at business management office in charge of the public service for the final analysis. In the survey, information of the research purpose and confidentiality of privacy protection was offered to them, and it was designed only for the subjects who agreed on this research to participate in the survey.

#### 2.2 Research Tools

#### 2.2.1 Emotional Labor

Components of the emotional labor used in this research were measured by frequency of emotional expression and caution degree of emotional expression that Ashforth<sup>4</sup> proposed in his research. Frequency of emotional expression is related with number of expressing emotion required in an organization for duty, which is associated with concealing one's real emotions, insincere efforts and false expression, measured by 3 questions. Caution degree of emotional expression is the degree of caution required in the norm of emotional expression for duty, including difficulty in expression and the best effort to serve customers, measured by 4 questions. Reliability of the frequency of emotional expression was .623, and that of the caution degree of emotional expression was .621.

#### 2.2.2 Psychology

Psychology of this research used subdomain such as obsessive-compulsive, interpersonal sensitivity (9 questions), depression (13), anxiety (10), hostility (6), phobic anxiety (7), paranoid ideation (6), and psychoticism (10) among the mini-psychology Symptom Checklist 90 Revision (SCL-90-R). Each was measured by 4-point scale and divided into the lower group from the minimum value to less than average point, and the higher group from above the average to the maximum value, based on the average. Reliability of each domain was .872~.947.

#### 2.2.3 Experiences of Physical and Verbal Abuse

This research divided into 4 domains for the experiences of workers' physical and verbal abuse: physical abuse, verbal abuse, sexual harassment and disregard of their personality. The question of physical abuse was "Did you ever had any physical abuse experience (or nearly being abused physically) while working for the past year?"; the question of verbal abuse, "Did you ever had any verbal abuse experience including swearing while working for the past year?"; the question of sexual harassment, "Did you ever heard any sexual harassment comments or suffered from physical contact while working for the past year?"; and the question of disregard of personality, "Did you ever heard any comments that disregarded your personality while working for the past year?". Each question was measured by "Yes" or "No" answers.

#### 2.3 Methods of Data Analysis

- Data used for this research were analyzed as follows, with the SPSS 18(PASW Statistics 18) program.
- Subjects' general and task-related characteristics, experiences of physical and verbal abuse, psychology and perception degree of emotional labor were calculated by frequency and percentage, mean, and standard deviation.
- T-test and ANOVA were carried out for the mean difference analysis of subjects by variable.
- Multiple regression analysis was carried out to identify variables affecting subjects' perception of emotional labor.

## 3. Research Results

## 3.1 Differences among General and Task-Related Characteristics and Perception of Emotional Labor

Table 1 shows the relations among the research subjects' general characteristics, task-related characteristics and perception of emotional labor. Most of the research subjects were male (87.63%), 70.71% of them graduated from

		n	%	Mean	SD	t/F	р
Gender	male	772	87.63	19.83	2.81	2.059*	.04
	female	109	12.37	19.24	2.69	2.059	
	lower than high-school	132	14.98	19.61	2.852		
Educational	junior college graduates	126	14.30	19.63	3.241	- 1.094	.351
background	college graduates	597	67.76	19.85	2.642		
	above graduate school	26	2.95	18.96	3.715		
	Christianity	207	23.50	19.47	2.732		
	Buddhism	99	11.24	19.93	2.662	10.635	.247
Religion	Catholicism	88	9.99	19.90	3.010		
	no religion	460	52.21	19.86	2.790		
	the others	27	3.06	19.00	3.246		
	single	74	8.40	20.03	2.664		.595
Marital status	married	786	89.22	19.72	2.840	4.081	
	the others	21	2.38	20.05	1.627		
Work-place	on the ground	10	1.14	18.90	5.043		
	e underground		98.75	19.76	2.767	1.617	.199
	alternate	1	0.11	24.00			
Years of service	less than 5 yrs.	67	7.60	19.31	3.001		
	5~10yrs.	98	11.12	20.00	2.717	- 1.037	
	11~15yrs.	307	34.85	19.86	2.735		.375
	above 16yrs.	409	46.42	19.69	2.838		

Table 1.Differences among general and task-related characteristics and perception of emotional labor(n = 881)

a university, 44.73% held religious belief, and 89.22% were married. Of the general characteristics, only gender was statistically significantly different in perception of emotional labor, and men's perception degree was higher than women's (t = 2.059, p<.05). More than 98.75% of the subjects worked underground, and 81.27% of them worked for more than 10 years. These variables were not statistically significantly different.

## 3.2 Differences between the Experiences of Physical and Verbal Abuse and the Perception of Emotional Labor

Table 2 shows the relations between the subjects' experience of physical and verbal abuse and perception of emotional labor. The subjects had experiences of physical abuse (37.57%), verbal abuse (78.32%), sexual harassment (6.92%) and disregard of personality (71.17%); and perception of emotional labor was found to be statistically significantly higher in the experienced group than in the non-experienced group.

## 3.3 Differences between Psychology and Perception of Emotional Labor

Table 3 shows the relation between the research subjects' psychology and perception of emotional labor. In the psychological characteristics, perception of emotional labor was statistically significantly higher in the group with higher obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism, than in the opposite group (p<.001).

# 3.4 Factors Affecting Subjects' Perception of their Emotional Labor

Table 4 is the multiple regression model that analyzed with the stepwise regression analysis method, by putting

		n	%	Mean	SD	t	р
Experience of physical abuse	yes	550	62.43	19.14	2.815	-8.692	<.001
	no	331	37.57	20.77	2.468		
Experience of verbal abuse	yes	191	21.68	18.16	2.950	-9.33	<.001
	no	690	78.32	20.20	2.593		
Experience of sexual harassment	yes	820	93.08	19.67	2.790	-3.332	.001
	no	61	6.92	20.90	2.725		
Experience of disregarding personality	yes	254	28.83	18.30	3.071	-10.362	<.001
	no	627	71.17	20.34	2.454		

**Table 2.** Differences between experiences of physical and verbal abuse and perception of emotional labor (n = 881)

		n	%	Mean	SD	t	р
Obsessive-compulsive	low	443	50.28	19.15	2.88	-6.583	<.001
	high	438	49.72	20.37	2.58		
Interpersonal sensitivity	low	486	55.16	19.15	2.85	-7.265	<.001
	high	395	44.84	20.49	2.55		
Democrier	low	500	56.75	19.30	2.883		<.001
Depression	high	381	43.25	20.36	2.574	-5.665	
	low	555	63.00	19.39	2.832	-5.048	<.001
Anxiety	high	326	37.00	20.37	2.643		
Hostility	low	502	56.98	19.30	2.860	-5.682	<.001
	high	379	43.02	20.36	2.606		
	low	506	57.43	19.22	2.848	-6.806	<.001
Phobic anxiety	high	375	42.57	20.48	2.569		
Paranoid ideation	low	495	56.19	19.26	2.854	-6.073	<.001
	high	386	43.81	20.39	2.602		
Psychoticism	low	510	57.89	19.25	2.862	-6.45	
	high	371	42.11	20.45	2.562		<.001

Table 3.Differences between psychology and perception of emotional labor (n = 881)

all variables statistically significantly affecting perception of emotional labor of the workers in charge of public service. The variables affecting their emotional labor include physical abuse experience (t = 3.554, p<.001), verbal abuse experience (t = 2.877, p<.01), experience of being disregarded (t = 3.946, p<.001), and interpersonal sensitive psychology (t = 6.001, p<.001). F value of regression model shows figures of 46.662 in p<.001, and regression equation shows explanation power of 17.2%. As Durbin-Watson is 1.874, which comes close to the reference value 2, and not close to 0 or 4, it is judged there is no correlation between residuals, so this regression model can be

Variables	В	S.E	β	t	р	Tolerance limit
(Constants)	14.244	.429		33.166	<.001	
Experience of physical abuse	.715	.201	.124	3.554	<.001	.778
Experience of verbal abuse	.784	.272	.115	2.877	.004	.586
Experience of being disregarded	1.006	.255	.163	3.946	<.001	.553
Interpersonal sensitivity	.084	.014	.191	6.001	<.001	.930
Statistics		$R = .419 R^2 =$	.176, Adjusted Durbin-Wat	$R^2 = .172, F = 4$ tson = 1.874	6.662, p<.001	

 Table 4.
 Factors affecting perception of emotional labor (n = 881)

interpreted adequate. In addition, as the model shows a tolerance limit of above 0.1, it can be judged there is no problem in multicollinearity as well<sup>13</sup>.

## 4. Discussion

This research tried to investigate differences in the perception of emotional labor of the service workers engaging in the subway public service and the factors affecting their emotional labor. Trial of this research is significant in that there have rarely been studies of the perception of emotional labor related with subway workers previously.

The results of this research show that in the general characteristics men perceive frequency of emotional expression and caution degree more than women, which is in common with the previous studies. Hochschild5 stated that the strongest characteristic of the workers' sociode-mographic characteristics affecting emotional labor was gender, and Grandey<sup>9</sup> mentioned that men's perception of emotional labor was found higher than women's, as women had more motives than men when contacting customers while men did not so, and men needed more efforts. Compared with these research results, the investigation of this research that men accounts for 87.6% of the subway service workers is very suggestive, and the busi-

ness owner should arrange service workers considering female workers more than male in the future.

Of the service workers, perception of emotional labor was found higher in the workers with experiences of negative emotions such as physical abuse, verbal abuse and sexual harassment. This is because the emotional labor uses emotion as the medium, so that the more frequently the emotion arises the more emotional disharmony increases and the more stresses are added, and it seems to have caused negative result<sup>10</sup>. And according to the Kim and Lee<sup>14</sup>'s study, response-centric emotion controlling strategy has a positive influence on the emotional exhaustion and alienation of the service employees, and it includes many elements threatening their psychological peace. This fact also supports these results. In the future, it is needed to lessen situations that suppress the service workers, who will input their emotions into the labor processes as it is, with the excessive task demands such as repetition of emotional labor situation. And we need to develop programs that grow interaction with customers and control.

Perception of emotional labor was higher in the highscore group of mental health-related symptoms, such as obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety and paranoid ideation. According to the study of Kim et al.<sup>12</sup>, mentalrelated symptoms were higher in the shift workers than in the non-shift, related with shift of the subway workers. Compared it with this research, related with shift from the nature of service work, it can be understood that shift workers' high scores related to mental health symptoms affect perception of emotional labor and have a negative influence on the workers' mental health. According to the study of Kim et al.<sup>11</sup>, emotional labor workers conduct what they do not want regardless of their will while facing customers and what is forced to do from the outside, so that they experience depression more than non-emotional labor workers.

Lastly, as the workers' experiences of physical and verbal abuse and being disregarded and interpersonal sensitive psychology were found as the variables affecting perception of emotional labor, this research suggests offering the service workers the mental health promotion programs in the future to alleviate experiences of negative emotional labor coming from the relationship with customers.

## 5. Conclusions and Suggestions

As a result of research, subway workers' perception of emotional labor was different according to their gender, experience of negative emotions and psychology; and variables affecting emotional labor include experiences of physical and verbal abuse, disregard of personality and interpersonal sensitive psychology. This research has a limit of using only self-administered questionnaire to investigate perception degree of emotional labor that workers feel in the interrelation with customers. Qualitative research method is necessary in the future to investigate specific reality of emotional labor through in-depth interviews with subway workers. In addition, follow-up study is also necessary to find out the effect of workers' perception degree of emotional labor on the physical and psychological response and to find out what influences have on the organizational level using variables of organization and turnover intention.

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