

A Validation Study on the Translated Korea Version of Emotional Labor Scale (ELS) in Hospitality Organizations

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Abstract

Background/Objectives: To validate the Korea version of the emotional labor scale, an instrument widely used to understand how professionals working with people face emotional labor in hospitality organizations. **Methods/Statistical analysis:** The objective of this research was to translate and to test the reliability and validity of the 3 types ELS in Korea. An observational, cross-sectional and multicenter survey was used. Health care providers (n=205) completed the self-reported ELS. Data was gathered at 3 hospitals during Oct. 2013 after obtaining an informed consent. **Results:** Exploratory Factor Analysis (EFA) & Confirmatory Factor Analysis (CFA) were estimated in order to test the factors structure of the scale. The internal consistency coefficients from the three studies, ranging from .69 to .94, evidence the reliability of the 3 types ELS. Among them, ELS by Brotheridge and Lee⁴ revised 2011, the most appropriate in the results of EFA. The results of the CFA confirm a factor structure of the scale with two subscales. **Conclusion/Application:** Evidence was also provided for convergent and discriminant validity. The paper concludes with a discussion of potential applications of the scale.

Keywords: Emotional Labor, Hospitality Employee, Hospitality Emotional Labor

1. Introduction

As the economy in most of the developed countries has shifted from manufacturing to the service industry, the nature of job role requirements has changed. As part of hospital and labor interpersonal relationships people must often make an effort to show emotions and hide other ones¹. This is the case of the new nurses or new doctors who is going to perform for the first time a procedure in his clinical experience and despite some nervousness he tries to seem quiet in front of the patient; or the case another hospitality employee who gives her patient a neutral facial expression or warm smile although she feels

disgust at the smell given off by the vomit of the patient. In the service industry in general, and the hospitality industry in particular being friendly of nice to people is a value-added part of the product that employees provide².

Since Hochschild's¹ research, interest in emotional labor has accelerated rapidly over the past decades. In recent years, researchers³⁻⁷ have used a more systematic, quantitative approach to measure the dimensions and nature of emotional labor presented by nurse, bank teller, hotelier. Although emotional labor is a common experience in professional practice, its influence on profession socialization and other aspects of nursing and medical

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education remains largely unexplored. Moreover, because health care providers learn about the right emotional behavior by observing other professionals, it would be useful to understand how practitioners face emotional labor. In our teaching and training setting, added to the challenges above is the need for valid and reliable instruments to study the emotional labor. Having such instruments is useful for a better understanding of the construct in general and in the specific contexts of health care.

Various measuring instruments have been developed from the different approaches to the emotional labor construct. They all have been used to study the emotional labor in health care professionals but unlike other available scales.

The aim this study is therefore to validate the Korea Version of ELS³ & DEELS⁷ & HELS⁶, three instrument widely used in English speaking contexts and often used in research with nurses, doctor and other health care providers.

2. Methodology

2.1 Design

An observational, cross-sectional and multicenter survey was used to collect data in order to validate the Korea version of 3 types ELS. Doctors as well as Nurses completed the scale in Oct. of 2013.

2.2 Instrument

- ELS

ELS is a self-reported scale developed by Brotheridge and Lee³ that is used to measure various characteristics of the emotional work carried out by people whose professional activity is directed to other people. It contains 9 items measuring 3 facets of dimensions related to the expression of emotions at work: Hiding feeling, Fake emotion, Deep acting.

- DEELS

DEELS is a self-reported scale developed by Glomb and Tews⁷. It contains 14-discrete emotion items measuring 6 factors of dimension: genuine positive, genuine negative, fake positive, fake negative, suppress positive, suppress negative.

- HELS

HELS is a self-reported scale developed by Chua & Murrmann⁶. It contains 19 items for assessing

employees' perception of emotional labor in hospitality organization.

2.3 Participants

A total of 209 subjects participated in this study; doctors, nurses, emergency medical technician. This study data were collected from October 4, to November 30, 2013.

In relation to age and sex of participants, 29.3% were male and 70.7% were female and 64.4% were 20-29 years ranging from 22 to 56 years. 66.3% were nurses, 32.7% were doctors and 1.0% were emergency medical technician in various hospitals; and the mean career was 4 years 7 months.

2.4 Data Collection

The researchers received permission from C Hospital from the Committee for Researches (Institutional Review Board : CAUH-2013-08-003). We explained the purpose of the study to the health care providers and informed them they could refuse to participate. Those health care providers who took part gave informed consent, and process was conducted in accordance with the Helsinki Declaration. All participants were given some small token of thanks.

2.5 Data Analysis

The data were analysed using spss 21.0 and AMOS 21.0 for Windows.

The data were subjected to Exploratory Factor Analysis(EFA) using a Varimax rotation to reduce the number of items. Kaiser-Meyer-Olkin(KMO) measure and Bartlett's test of sphericity were used to ensure that the data had inherent sufficient correlation to perform EFA.

Confirmatory Factorial Analysis(CFA) were estimated using Average Variance Explained(AVE) and Construct Reliability(C.R.) in AMOS 21.0. In order to determine overall model fit several tests were used: Chi-square (χ^2) statistic and the associated probability (p), thereby the failure to reject the null hypothesis ($p > .05$) was therefore a sign of a good model fit and the Root Mean Square Error of Approximation Index (RMSEA), and a value equal or minor to .05 was considered informative of good model fit. Other fit indices used were: Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Comparative Fit Index (CFI), Normed Fit Index (NFI)

and Non-Normed Fit Index (NNFI). The values for these latter statistics range between 0 and 1 with values over .90 and closer to 1.0 indicating a very good fit.

3. Results

3.1 Scale Purification

The descriptive statistics and correlations are presented in Table 1.

The clients, coworkers, and supervisor groups in ELS were 3.01-3.84, 2.89-3.29, and 2.94-3.76, respectively. The true, fake, and hide mean scores in DEELS were 1.62-3.25, 1.30-2.63 and 1.45-3.32, respectively. The mean scores in HELS were 3.44-5.25 respectively. The other demographic and clinical characteristics of the subjects are listed in Table 1.

The internal consistency coefficients from the three studies, ranging from .69 to .94, evidence the reliability of the 3 types ELS. Among them, ELS by Brotheridge and Lee⁴ revised 2011, the most appropriate in the results of EFA.

3.2 Exploratory Factor Analysis

The Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity were used to ensure that the data had inherent sufficient correlation to perform EFA. The KMO index was Clients (.827), Coworkers (.819),

Supervisor (.835), and Bartlett's test of sphericity was Clients (676.342, $p < .001$), Coworkers (686.908, $p < .001$), Supervisor (692.500, $p < .001$).

The data were subjected to exploratory factor analysis using a Varimax rotation to reduce the number of items. Items with corrected item-to-total correlation lower than .40 were discarded. As individual item (No. 1) was removed from the analysis. A total of 8 items were retained for further unidimensionality examination.

As can be seen in Table 2, factor one was comprised of 8 items with factor loadings greater than .70, which explained 60% of variance.

3.3 Derivatization Procedure

As seen in Table 3, among 8 items, three items measured deep acting, and five items measured faking and hiding. In the clients group we found difference between faking & hiding ($M = 3.50$, $SD = .69$) and deep acting ($M = 3.17$, $SD = .66$). In the coworker group we found difference between faking & hiding ($M = 3.03$, $SD = .72$) and deep acting ($M = 3.06$, $SD = .62$).

The last stage of scale validation was to reevaluate the factor structure of the ELS4 using confirmatory factor analysis (CFA). The scale's convergent and discriminant validities were also examined. Using the 8-item ELS. The final model provide an improved and reasonable fit for the data. Table 4 lists the construct and indicator factor loadings and reliability score.

First order confirmatory factor analysis with the clients by ELS was performed on the items of the scale. Such

Table 1. Descriptive statistics of observed 3 instrument

Instrument		Mean	SD	skewness	kurtosis	Correlated item-total correlation
ELS	Clients	3.01~3.84	.761~.990	-.733~.072	-.926~1.340	.297~.630
	Coworkers	2.89~3.29	.745~.916	-.344~.105	-.740~.053	.326~.725
	Supervisor	2.94~3.76	.803~.993	-.445~.168	-.680~.004	.233~.649
DEELS	genuine	1.35~3.25	.755~2.291	-.120~2.291	-.765~6.255	.371~.588
	fake	1.30~2.63	.718~1.318	.270~2.785	-1.183~8.327	.618~.739
	suppress	1.45~3.32	1.150~1.714	-.580~1.302	-1.202~1.319	.503~.771
HELs		3.44~5.25	1.011~1.523	-.785~.316	-.590~.447	-.211~.676

structure formed was confirmed in this study achieving a very good fit to data ($\chi^2(p)=34.003(.008)$, GFI=.960, CFI=.973, RMSEA= .071).

An additional confirmatory factor analysis with a coworker was performed indicating an acceptable fit data ($\chi^2(p)=29.679(.038)$, GFI=.950, CFI= .961, RMSEA= .088).

Finally, the result of supervisor confirmatory factor analysis are presented an acceptable fit with the data as evidenced by its non-significant χ^2 value ($\chi^2=28.679$, $p=.038$). Thus, the values obtained for GFI, AGFI, CFI, NFI, NNFI were all above the .90 level considered as an acceptable level of fit. Added to this, the RMSEA was smaller than .05 considered to represent a good fit to data.

Table 2. Factor loading from Efa and theoretical dimensions represented

Item	Clients			Coworkers			Supervisor		
	Explained variance	Explained (%)	Cumulative (%)	Explained variance	Explained (%)	Cumulative (%)	Explained variance	Explained (%)	Cumulative (%)
8.	.866	46.927	66.136	.904	48.682	65.299	.871	48.696	67.346
7.	.849			.856			.840		
3.	.757			.766			.807		
4.	.743			.742			.744		
6.	.741			.734			.801		
2.	.848	19.209		.798	16.617		.832	18.650	
9.	.825			.699			.836		
5.	.710			.828			.716		
KMO Bartlett Cronbach' a		.827 p<.001 .831			.819 p<.001 .845		.835 p<.001 .843		
2. Make an effort to actually feel the emotions that I need to display to others. 3. Hide my true feelings about a situation. 4. Pretend to have emotions that I don't really have. 5. Really try to feel the emotions I have to show as part of my job. 6. Show emotions that are expected rather than what I feel. 7. Resist expressing my true feelings. 8. Conceal what I'm feeling. 9. Try to actually experience the emotions that I must show.									

4. Discussion

The overall purpose of this study was to examine the psychometric properties of a Korea version validated scale, the ELS, designed to assess the emotional labor that hospitality employees perform for their customer.

The results of this validation process support the validation of the Korean version of ELS. The comparison of means and standard deviations of the different dimensions

of both versions of ELS yields an acceptable congruence. It provided evidence of the reliability and convergent and discriminant validity of the ELS. The subscales demonstrated and adequate degree of internal consistency as indicated by Cronbach's alpha. Additionally, a confirmatory factor analysis indicated that items loaded only onto their respective latent variables, thus demonstrating the unidimensionality of each factor. Respondents appeared to be able to distinguish between the various role char-

Table 3. Descriptive statistics of observed variables

Instrument		Mean	SD	Skewness	Kurtosis	Cronbach's α	AVE	Construct Reliability
Clients	Faking & Hiding	3.50	0.69	-.515	.229	.854	.584	.875
	Deep acting	3.17	0.66	-.436	.210	.737	.588	.797
Coworkers	Faking & Hiding	3.03	0.72	-.131	-.454	.864	.611	.886
	Deep acting	3.06	0.62	-.194	-.631	.708	.768	.768
Supervisor	Faking & Hiding	3.45	0.73	-.282	-.181	.869	.606	.885
	Deep acting	3.13	0.67	.023	.094	.740	.583	.787

Table 4. Model fit statistics for cfas

Instrument	χ^2 (p)	GFI	AGFI	CFI	NFI	NNFI	RMR	RMSEA
Clients	34.003 (.008)	.960	.915	.973	.948	.955	.041	.071
Coworkers	43.364 (.000)	.950	.893	.961	.938	.935	.031	.088
Supervisor	28.679 (.038)	.965	.927	.983	.959	.972	.034	.059

acteristics. The low to moderate correlations between the ELS subscales and other scales demonstrated both its relationships with associated scales and its ability to be adequately distinguished from other scales. The clients, coworker, and supervisor models show a very good fit confirming the factor structure found in the validating the Korean version of ELS.

When applying the ELS, special consideration has to be paid to the number of items. We recommend that future researchers use the 8-item rather than the 9-item instrument when applying the ELS Korean version. Several recent studies suggest that emotional labor should be viewed and measured as a multidimensional construct. However, how and why the dimensions are inter-related remains unclear and deserves further attention. Emotional dissonance has been incorporated into discussions of emotional labor⁸. This suggests that how workers relate to such normative expectations may affect how they manage their emotions and may affect their sense of authenticity^{9,10}.

5. Conclusion

To a greater or lesser extent, every job requires a certain degree of emotional labor. In fact, it would be difficult to identify any job that does not require the exercise of emotional labor. And, for hospitality firms, the display of deep acting, and faking & hiding of concern is viewed as an essential ingredient is service quality. The ELS has a variety of potential applications. It can be use by a wide range of hospitality organizations in assessing employees' emotional labor lever as well as clients' perceptions of the desired or expected emotional effort. It can also help in pinpointing areas requiring more managerial attention and action to improve the emotional labor hospitality employees perform. Lastly, it is our hope that the availability of this instrument will stimulate much needed empirical hospitality emotional labor research.

However, since this research only looked at a small sample of hospital employees, it will be difficult to extend the results of this study to other analyses, so follow-up studies must be carried out.

6. Results

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