# IMPACT OF EMOTIONAL LABOR ON HOSPITAL EMPLOYEES' INITIATIVE TAKING BEHAVIOR

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# ABSTRACT

The purpose of this study is to develop a scale to measure the extent of initiative taking behaviors displayed by hospital personnel, while also investigating the effects of emotional labor on such initiative taking behaviors. The development of the initiative taking scale (ITS) was undertaken among healthcare workers to achieve this objective. The research sample comprised 769 clinical and administrative personnel employed in four public hospitals and one private hospital operating in Istanbul. The exploratory factor analysis (EFA) yielded the ITS, which comprises 5 dimensions and 34 items: perceived organizational support, individual competency, willingness to take risks, job autonomy, and failure related trust to supervisor. The Cronbach's alpha coefficients for the scale dimensions, accounting for 53.02% of the overall variance, varied from .67 to .90. The total of Cronbach's alpha coefficient for scale was found to be .93. A confirmatory factor analysis (CFA) was performed to test the fit of the theoretical model with the data, and it was determined to be a satisfactory fit. The criterion-related validity for ITS was tested using the emotional labor scale (ELS). The results revealed statistically significant positive correlations between all dimensions of both scales, indicating the existence of criterion-related validity. In addition to descriptive statistics, variance analyses were performed, and the effect of emotional labor on initiative taking behavior was measured by structural equation modeling (SEM) path analysis. It was inferred that the ITS developed for healthcare workers is a valid and reliable measurement tool based on statistical data. The SEM path analysis revealed a significant effect of emotional labor on the initiative taking behavior of hospital personnel.

Keywords: Healthcare employees, initiative taking, emotional labor, exploratory factor analysis, confirmatory factor analysis

# INTRODUCTION

The aim of this study is to develop a scale for initiative taking behavior in hospital employees. At the first stage of this paper, the definition and importance of initiative taking at individual and organizational levels are described. It continues with the relationship between emotional labor and initiative taking behavior. After explaining the stages of initiative taking scale development, information about the research method is given. The reliability and validity of the obtained scale are supported by statistical data in the findings section. In the last section, the results obtained from the research are given.

Personal initiative, a significant concept in both theory and practice, is defined by Frese et al. (1996; 1997) as a "personality trait" that drive an individual taking active and self-starting approach to work goals and tasks and displaying persistent behaviors in overcoming barriers and setbacks. As opposed to the view that employees' job descriptions should be predetermined by the employer, the individual's ability to affect and shape the work environment by exhibiting "active" behavior has been discussed in the fields of philosophy and social sciences (Frese et al., 2007). A need for personnel who possess strong self-assurance in order to guarantee both organizational and personal efficiency in the workplace is progressively rising (Fay & Frese, 2001). Consequently, an increasing number of academics are embracing the idea that the passive approach should be replaced with an active one for a dynamic working environment (Zacher & Frese, 2018). An individual who takes initiative can go beyond the predetermined job description and change his/her environment through proactive behaviors. In this

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scenario, employees start to exhibit "active" behaviors instead of passive behaviors (Speier & Frese, 1997; Fay & Frese, 2001). An employee taking initiative actively seeks out solutions to problems and informs his/her supervisor about obstacles or setbacks (Speier and Frese, 1997). To take the initiative, the employee must be aware of alternative ways and have a road map to act. A long-term focus is required to achieve success. This span of time is crucial for the employee to familiarize with and explore his/her surrounding (Frese & Fay, 2001; Fay & Sonnentag, 2002). Personal initiative behavior can be explained as making specific plans to achieve a goal by overcoming obstacles and setbacks. The persistent attitude to realize these plans step by step and the process of achieving success is a result of taking initiative (Frese & Gielnik, 2014). İnitiative taking behavior has individual and environmental characteristics that mature over a long period of time. The factors that enable the manifestation of initiative taking behaviors may be considered as antecedents for such behavior (Frese et al., 1997). Job-related attributes (control mechanism at work), knowledge and skills, personal characteristics (proactivity) and adaptability (errordependent, change-dependent situations), quality of work, level of conservatism and motivating factors are demonstrated as predictors of initiative (Fay et al., 1998; Frese & Fay, 2001; Fay & Sonnentag, 2010). Today, the success of work depends on employees who are solution-oriented, see opportunities, expand their work environment, and take initiative. Employees who only do what they are told lose their competitive power at work (Bateman & Crant, 1993; Bledow & Frese, 2009). Supporting employees to take initiative is shown as one of the best strategies that managers can do for organizational change (Frese et al., 2007). As work environments change over time, it is predicted that the importance of taking initiative will increase and the need for employees with high level of self-assurance will increase (Fay & Frese, 2001).

The success of healthcare systems is largely attributed to the healthcare professionals who work in this field. The decisions taken by healthcare workers regarding treatment are crucial, and throughout the COVID-19 pandemic, this significance has been evident in terms of resource utilization and the exploration of novel treatment approaches. Amidst the pandemic, there have been delays in making vital decisions. Employees expressed apprehension regarding engaging in high-risk endeavors (O'Brien et al., 2022). It has been argued that the feeling of being ill-equipped to handle the COVID-19 pandemic causes anxiety in healthcare workers (Bosma et al., 2023). The healthcare systems are experiencing rapid transformation as a result of the adaption of novel technologies and approaches for diagnosis and treatment, encompassing the impact of the COVID-19 pandemic, as well as the rise in life expectancy and improvements in health quality. The key components of transformation are the employees' innovative approaches, creativity, and proactivity. Employees are expected to go beyond statutory standards and the value of initiative taking behavior is emphasized (Kagan et al., 2021). Given the significance of taking initiative in healthcare, there is a need for the development of ITS.

## LITERATURE REVIEW

### **Antecedents of Initiative Taking Behaviors**

Taking initiative refers to proactive behavior that seeks to alter the status quo rather than passively adapting to existing circumstances (Crant, 2000; Parker et al., 2006; Parker & Collins, 2010). Personal initiative taking behavior conceptually overlaps with proactive behavior (Fay & Frese, 2001). Proactive individuals are those who challenge the status quo, take initiative, act, self-starting and make efforts to realize change (Bateman & Crant, 1993). Personal initiative behavior can be defined as the act of making decisions on one's own and self-starting, being proactive and willing to struggle with difficulties, overcome obstacles and influence one's surrounding. Employees who tend to take initiative do not wait for change to happen to act but make their own decisions for change (Seibert et al., 1999; Fay & Frese, 2001; Parker & Collins, 2010; Lang et al., 2016).

Employees with strong prosocial values can manage uncertainty by taking initiative (Grant & Rothbard, 2013). In other words, initiative taking behavior demonstrates its impact in intricate circumstances that are difficult to deal with. Amidst an environment of uncertainty, employees are anticipated to be motivated to diminish uncertainty and take proactive actions to protect against potential problems and enhance the present circumstances (Kawasaki, 2019). Initiative is necessary for resolving intricate circumstances, but the notion of self-efficacy as a personality trait also becomes important. Increased self-efficacy is thought to affect performance by increasing the ability to overcome problems (Speier &

Frese, 1997). Self-efficacy leads to an increase in personal initiative taking behavior and leads to higher levels of performance (Lisbona et al., 2018).

### **Emotional Labor and Initiative Taking**

Emotional labor is described as a dynamic self-regulatory process in which employees continuously adjust their emotions in accordance with the organizational needs. The employee's effort to display behaviors that are suitable with the organizational culture presents itself in three different regulatory strategies: surface acting, deep acting, and expression of natural felt emotions (Diefendorff et al., 2005). The common definition in all concepts related to emotional labor is that emotional labor is managerial emotions and emotional expressions are formed according to the request of businesses (Glomb & Tews, 2004). Emotional labor refers to the effort that employees make to adjust their emotional expressions or feelings while displaying the behaviors expected by the business by concealing their genuine emotions in their relationships with managers and customers in the context of work (Korkut & Gurkan, 2019). Employees are expected to suppress their personal emotions at work and align their emotions with the expectations of the work environment, and emotions displayed at work are expected to be controllable and manageable (Domagalski, 1999). For Mastracci and Hsieh (2016), emotional labor lies at the heart of patient care practices in healthcare services. Emotional labor is expected to occur naturally in nurses, especially since nurses have more interaction with patients and their relatives (Guajardo & Vasquez, 2018).

The relationship between emotional labor and initiative taking behaviors has been studied in some research in literature. However, no study has been conducted to establish the influence of emotional labor on initiative taking behavior or whether there is a direct relationship between them. According to a study done by Diefendorff et al. (2005), employees who are adaptable are considerably more likely to display emotional labor behaviors. Employees can regulate their emotional behaviors in the workplace based on personality traits, which are among the antecedents of emotional labor. Furthermore, emotional labor has a significant impact on employees' behaviors and creativity (Xu et al., 2020). Rank and Frese (2008) state that the inclusive and positive organizational climate in the work environment influences employees' emotions in terms of being involved in decisions, taking initiative, and adapting to the organization. However, it has been asserted that the ability to manage one's mood is related to initiative taking behavior (Fay & Sonnentag, 2010). Ma et al.'s (2023) study, which supports the use of initiative on decisions to be made at work by exhibiting proactive behavior with emotional labor, contains different dimensions from the studies conducted so far. It is stated that emotional labor behavior can affect problem-solving behaviors in instant problems. Positive emotions are observed to support taking initiative. Research indicates a correlation between the BIG 5 Personality Traits and emotional labor. Nevertheless, the outcomes of these investigations may differ based on the criteria such as the country, occupational groups, etc. (Ma et al. 2023).

### **Backgrounds and Item Development of Initiative Taking**

The literature was consulted to gather information to develop a comprehensive scale in which the dimensions affecting initiative taking behaviors at both personnel and organizational levels are assessed together. Accordingly, scales and their dimensions that have been proven by scientific studies to have a direct effect on initiative taking behavior, concepts and theories associated with the antecedents of initiative taking behaviors constitute the scope of this study. Upon a comprehensive examination of previous studies, an item pool was generated. A deductive method was employed in the creation of the item pool. To this end, the scales were thoroughly examined, and the related concepts were evaluated in detail. Both individual and organizational factors that influence the behavior of taking initiative that are directly related to it and may serve as its antecedents were also evaluated one by one.

The stage of creating an item pool was conducted in accordance with the eight-step scale development process (DeVellis, 2003). The scale statements were developed by drawing upon existing studies in the literature (Cacioppo et al. 1984; Grol et al, 1990; Bateman & Crant, 1993; Ibarra & Andrews 1993; Scott & Bruce, 1994; Gerrity et al.,1995; Mayer et al., 1995; Schwarzer & Jerusalem, 1995; Cummings & Bromiley, 1996; Frese et al., 1997; Parker, 1998; Speier & Frese 1997; Judge et al, 1999; Mayer & Davis 1999; Zhou & George, 2001; Baer & Frese 2003; Kaufman & Baer, 2004; Mayer & Gavin, 2005; Dewett, 2006; Dulebohn & Murra 2007; Bledow & Frese 2009; Grant et al., 2011; Kaufman, 2012; Neves & Eisenberger, 2014; Strauss & Parker 2014; Glaser et al, 2016; Schoorman et al., 2016; Mensmann &

Frese, 2018; Gieure et al., 2020). All the concepts that best represent the structure of the study and are seen to be related to initiative taking were grouped under 12 dimensions and named.

## DATA AND METHODOLOGY

#### **Population and Sample**

This study was designed to develop ITS for healthcare workers and to investigate the effects of emotional labor on initiative taking behaviors. The research obtained ethics committee approval with the decision no 22.02.2021-16 from Marmara University Institute of Health Sciences. The research was carried out at four public hospitals and one private hospital operating in Istanbul from January to March 2023. The questionnaires were distributed and collected by hand using a random sampling method based on volunteerism. Of the 1135 questionnaires that were handed out, 815 were returned (participation rate = 72%). Incomplete and incorrectly completed questionnaires and questionnaires belonging to employees who have been working in the organization for less than 6 months were excluded from the sample. As a result, the sample size analyzed consists of 769 questionnaires.

#### **Measurement Tool**

The research employs a questionnaire comprising of three distinct sections. The first section of the questionnaire consists of demographic data. The second section consists of the emotional labor scale (ELS), which was originally developed by Diefendorff et al. (2005) and adapted into Turkish by Basim and Begenirbas (2012). The 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) consists of three dimensions and 13 items. The third section of the questionnaire comprises the initiative taking scale (ITS), which encompasses 12 dimensions and 57 items. The scale is a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The translation-retranslation technique described by Brislin (1986) was utilized for the translation of the statements in the developed scale. The translation of the scale items, comparison of translations, back- translations, and comparison of back- translations were performed by four different academics working at the School of Foreign Languages Department of two universities. A specialist in the field of Turkish Language and Literature checked the linguistic validity of the scale in terms of Turkish language and expression. Finally, the content validity, pertaining to the scale's capacity to accurately represent what is intended to be measured, was assessed by three specialists in the field of health sciences to determine its cultural appropriateness. The data gathered in the study was analyzed using IBM<sup>®</sup> SPSS<sup>®</sup> Version 24 and IBM<sup>®</sup> SPSS<sup>®</sup> AMOS<sup>™</sup> Version 24 statistical package programs. The statistical analyses employed in the study included descriptive statistics, exploratory factor analysis (EFA), confirmatory factor analysis (CFA), Friedman test, variance analysis, correlation, and structural equation modeling (SEM) path analysis.

### RESULTS

### Descriptives

Demographic characteristics such as age, gender, education, job experience are given in Table 1. It presents the demographic characteristics of the participants, including the values of frequency, mean and standard deviation. It's evident that the participants are predominantly female (71.9%), aged 25-29 (44.6%), and with a bachelor's degree (41%). The dominating group consists of participants with 2-4 years of work experience (32.8%), or seniority (36.7%) as determined based on the evaluation in terms of their level of work experience and seniority. One of the demographic findings reveals that the proportion of managers among the participants is 12.4%.

Variables	n	%	Min.	Max.	М	SD
Gender						
Female	553	71.9				
Male	216	28.1				
Age (in years)			20.0	64.0	31.9	8.1
< 25	73	9.5				
25-29	343	44.6				
30-39	210	27.3				
$\geq 40$	143	18.6				
Education						
Assoc. Deg.	265	34.5				
Undergrad.	315	41.0				
Graduate	189	24.6				
Job Experience (in years)			.5	38.8	7.8	7.9
< 2	137	17.8				
2-4	252	32.8				
5-9	166	21.6				
$\geq 10$	214	27.8				
Tenure (in years)			.5	35.0	4.8	5.3
< 2	241	31.3				
2-4	282	36.7				
5-9	138	17.9				
$\geq 10$	108	14.0				
Job						
MD	117	15.2				
RN/RM	283	36.8				
Allied Health Profess.	169	22.0				
Administrator	200	26.0				
Department						
Outpatient/ED	244	31.8				
Inpatient	242	31.5				
Auxiliary	181	23.5				
Administration	102	13.3				
Managerial Post	102	15.5				
No	674	87.6				
Yes	95	12.4				
Working Status	,5	12.4				
Permanent	498	35.2				
Contract	271	64.8				
Collitaci	4/1	0.10				

Table 1. Descriptive Statistics

N = 769; M: mean; SD: standard deviation; ED: emergency department; MD: medical doctor; RN: registered nurse; RM: registered midwife.

#### Measuring Validity and Reliability

Explanatory factor analysis (EFA) was employed to the data by using principal component analysis with varimax rotation technique. The suitability of the scale components for factor analysis was determined by examining the results of the Kaiser-Meyer Olkin (KMO) and Bartlett Sphericity tests: KMO = .946, Bartlett Sphericity tests:  $\chi^2 = 10942.976$ , df = 561, p < .001. Values indicate that the sample size and data set were suitable for factor analysis (Hair et al., 2006). As a result of the factor analysis applied regarding the validity of the scale, five factors representing 53.02% of the total variance were obtained. Five factors explained 53.02% of the overall variance. It is accepted that the variance values explained above 50% in social sciences (Streiner, 1994; Hair et al., 2010). Table 2 provides the items and corresponding factor loadings. Factors were named based on the meaning and integrity of the statements with each other. ITS has five dimensions namely: Perceived Organizational Support: 12 items characterized by the appreciation of the employee for his/her work by the hospital management, perception that the employee's contributions are valued, and the employee's personal interests are promoted by the managers of the organization. The explained variance is 17.57% ( $\alpha = .90$ ). Individual Competency: the explained variance of the 11 items that include behavior and knowledge such as knowledge, skills, experience, abilities, and knowledge that the employee has for the performance expected to show in the task assigned to him/her in the hospital is 15.59% ( $\alpha = .88$ ). Willingness to Take Risks: the explanatory value of variance of the 4 items indicating the willingness of healthcare workers to be prepared for unexpected situations and to make decisions in uncertain situations is 7.68% ( $\alpha$  = .78). Job Autonomy: the explanatory value of variance of the 5 items explaining how free and independent the employee feels about how to carry out his/her job in the hospital environment and that s/he has control over his/her job is

7.14% ( $\alpha = .67$ ). Failure Related Trust to Supervisor: the explanatory value of variance of the 2 items explaining the employees' trust that they will not be faced punishment for job-related mistakes and that the facility will not put them into a vulnerable situation is 5.04% ( $\alpha = .81$ ).

Items	Factor Loadings
Perceived Organizational Support	0
Individuals with innovative mindset are appreciated at my workplace.	.759
Creativity is promoted at my workplace.	.736
Our supervisor respects our creative ideas.	.668
The reward system at my workplace encourages innovation.	.661
Employees at my workplace frequently take on responsibility and get involved in office operations right away.	.643
Employees seize the opportunity whenever there is a chance to actively engage in my workplace.	.638
Employees are expected to challenge established business business practices in my workplace.	y .627
Issues are actively tackled at my workplace.	.615
I don't believe I have to worry about the policies being implemented at my workplace.	.612
Whenever things go wrong at my workplace, a prompt solution is sought.	.579
The work environment allows me to focus on my work.	.574
I can request the necessary resources from my supervisor to fulfill my work requirements.	.481
Individual Competency	
If I feel stuck, I usually have an idea of what to do.	.746
When faced with a challenge, I can come up with a variety of solutions.	.686
I like to assume responsibility for dealing with an issue that requires extensive contemplation.	.671
Even if others disagree with me, I choose to defend my own opinions.	.652
I can approach challenges with confidence because I am confident in my capacity to overcome obstacles.	.640
I feel my leadership and interpersonal skills to be satisfactory.	.611
I derive satisfaction from engaging in jobs that require the discovery of new solutions to problem.	.610
If I have an idea that will enhance my work, I take risks and try novel approaches regardless of how I will be judged.	.581
Upon receiving a change announcement from management, I tend to approach problem-solving attitude rather than giving an emotional reaction.	.575
I am good at seeing opportunities.	.542
I take risks in areas where I am knowledgeable if I believe it will help me reach my goals, even if failure is possible.	.516
Willingness to Take Risks	<
I am confident in my capacity to make valuable contributions to significant decisions taken at my workplace.	.670
The training and education I received has enhanced my capacity for taking risk.	.659
I do not ponder about taking calculated risks if I believe it will make me more productive, regardless of whether my efforts will succeed.	.590
I can spot a good chance before others do.	.587
Job Autonomy	(70)
Occasionally, I derive pleasure breaking the rules and doing things I shouldn't do.	.673
I enjoy challenging the status quo.	.635
I have a preference for interpreting things from my own perspective	.552
I can be self-starting in my job.	.547
Employees are encouraged to cope with problems independently and tenaciously in a proactive manner.	.498
Failure Related Trust to Supervisor	
I prefer to share the challenges I faced in the workplace with my supervisor. (R) When I lack proficiency in any task I undertake, I feel at ease sharing that with my supervisor.	.771 y .747

#### Table 2. The Results of Exploratory Factor Analysis for ITS

R: reverse scored.

CFA was performed to verify the validity of ITS factor structures. The consistency of all the fit indices (CMIN/DF = 2.56; GFI = .91; CFI = .93; RMSEA = .045) supports the conclusion that the model fits the data well and has a good acceptable fit according to theory (Schermelleh-Engel et al., 2003). A non-parametric Friedman test was used to assess whether there are any statistically significant differences

between the paired groups. According to Table 3, the level of difference between the means of the dimensions is statistically significant ( $\chi^2 = 375.197$ , df = 4, p < .001). This suggested that at least one of the conditions differs from at least one other condition (Siegel & Castellan, 1988).

Dimensions	Mean Rank
Job Autonomy	2.39
Perceived Organizational Support	2.51
Failure Related Trust to Supervisor	3.16
Willingness to Take Risks	3.27
Individual Competency	3.67

Table 3. The Results of Friedman Test

Wilcoxon signed-rank test was used to compare the means of two dependent samples. According to the data obtained, it was observed that the differences between all dimensions were significant (p < .05). It's seen that there is cyclic transitivity between the dimensions (Hagedoorn et al., 1999). Taking initiative requires autonomy in the job at very base, which starts with trust to supervisor in relation to failure, followed by taking support from the organization, being competent, and finally willingness to take risks then the cycle begins again.

#### **Criterion-Related Validity**

Criterion-related validity refers to the capacity of a measurement tool to replicate the outcomes obtained with an external performance measurement tool. The correlation coefficient' strength obtained predicts the performance of the assessed scale (Cooper et al., 2019). Criterion-related validity is explained with two subgroups. Predictive validity is obtained by calculating the correlation between the predictive score obtained from the scale and the criterion known to measure the properties intended to be measured (Cook & Beckman, 2006). A simultaneous application is conducted for concurrent validity. The developed scale is administered simultaneously with another scale that examines the same or an associated construct and was previously proven to be valid (Mielke et al., 2019). In this study concurrent validity was used to examine the associations between the subdimensions of the ELS and the ITS. The study utilized the ELS, developed by Diefendorf et al. (2005) and adapted into Turkish by Basim and Begenirbas (2012), administered to the same participants concurrently, to analytically determine the extent to which the ITS predicts the characteristics intended to measure. To the best of our knowledge, there is no comparative study on emotional labor and initiative taking within the same research. This study is significant in terms of testing the validity of the developed scale. Correlation analysis was performed to assess the association between the research variables (Table 4). The results indicate that there is a positive relationship between ELS and ITS.

Table 4. The Results of Zero-Order Bivariate Correlations Between Study Variables

Variables	М	SD	1	2	3	4	5	6	7	8
1. Perceived Organizational Support	3.17	.79	(.90)							
2. Individual Competency	3.66	.66	.499 **	(.88)						
3. Willingness to Take Risks	3.52	.79	.515 **	.661 **	(.78)					
4. Job Autonomy	3.11	.73	.434 **	.400 **	.475 **	(.67)				
5. Failure Related Trust to Supervisor	3.41	1.03	.565 **	.403 **	.402 **	.278 **	(.81)			
6. Surface Acting	2.45	1.10	.099 **	.014	.084 *	.282 **	.025	(.90)		
7. Deep Acting	3.08	1.11	.290 **	.241 **	.240 **	.200 **	.180 **	.324 **	(.90)	
8. Expression of Natural Felt Emotions	3.81	.94	.234 *	.338 **	.230 **	.097 **	.197	160 **	.342 **	(.85)

N = 769; M: mean; SD: standard deviation; Cronbach's alpha coefficients are given in parentheses; (1-5) belongs to ITS; (6-8) belongs to ELS.

\* p < .05; \*\* p < .01.

The independent samples t-test is used to compare the means of two independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different (Table 5). The study investigated whether there were differences in the initiative taking dimensions of health care workers according to the management duties variable. t test results suggested that perceived organizational support of employees with managerial tended to score higher than perceived organizational support of employees without managerial duties, MD = .28, p < .05. The willingness to

take risks score of employees with managerial duties was higher than the willingness to take risks of employees without managerial duties, (MD = .24, p < .05). Failure related trust to supervisor in employees with managerial duties was greater than in employees without managerial duties, MD = .25, p < .05. According to these data, it can be said that taking initiative differs in some of the dimensions of taking initiative according to whether they have managerial duties. It examined whether there were differences in the mean scores of taking initiative according to gender. It was observed that there was a difference in job autonomy according to gender. Men's job autonomy scores are higher than women's job autonomy scores, MD = .17, p < .05. Perceived organizational support differs according to tenure status. Perceived organizational support scores of contracted employees are higher than those of permanent employees, MD = .09, p < .05. Based on the test findings, it can be concluded that the managerial duties variable exhibits the highest differences between the averages scores between two different groups.

									In	nitiati	ve Taking						
					eived		Indiv	vidual			ngness		Joł	)	Failu	re Rel	ated Trus
			Organ	izatic	nal Support	0	Comp	etency	to	o Tako	e Risks		Auton	omy	te	o Supe	rvisor
Variables	п	%	М	SD	F	М	SD	F	М	SD	F	М	SD	F	М	SD	F
Gender					.155			.776			.308			3.890 *			1.807
1. Female	553	8.6	3.19	.78		3.65	.67		3.49	.80		3.06	.74		3.40	1.01	
2. Male	216	19.4	3.14	.79		3.66	.64		3.58	.77		3.23	.69		3.43	1.09	
Age (in years)					2.038			1.438			.988			.340			2.232
1. < 25	73	26.6	3.30	.78		3.70	.61		3.54	.82		3.12	.79		3.63	1.07	
2. 25-29	343	43.7	3.17	.79		3.61	.68		3.48	.82		3.10	.73		3.34	1.02	
3. 30-39	210	1.8	3.08	.83		3.72	.63		3.50	.76		3.14	.75		3.38	1.08	
$4. \ge 40$	143	18.9	3.25	.68		3.67	.67		3.61	.75		3.07	.70		3.51	.95	
Education					2.407			7.571 **			1.164			.233			.430
1. Assoc. Deg.	265	18.0	3.25	.81		3.78	.66		3.54	.82		3.12	.82		3.43	1.11	
2. Undergrad.	315	65.8	3.16	.75		3.62	.65	2<1	3.54	.75		3.08	.68		3.43	.93	
3. Grad.	189	16.2	3.08	.80		3.55	.64	3<1	3.44	.83		3.11	.68		3.35	1.08	
Job Experience (in years)					4.018 **			2.479			1.097			.019			1.433
1. < 2	137	2.7	3.33	.70		3.65	.63		3.54	.78		3.10	.74		3.45	1.00	
2. 2-4	252	37.8	3.84	.85	2<1	3.57	.70		3.44	.87		3.11	.77		3.32	1.14	
3. 5-9	166	18.5	3.09	.82	3<1	3.74	.58		3.56	.73		3.10	.67		3.39	1.00	
4. > 10	214	23.0	3.23	.71		3.69	.68		3.55	.75		3.11	.73		3.51	.93	
Tenure (in years)					6.006 ***			.866			2.026			.141			1.229
1. < 2	241	1.4	3.28	.73		3.65	.66		3.52	.79		3.09	.71		3.38	1.05	
2. 2-4	282	39.6	3.02	.87	2<1	3.62	.68		3.45	.85		3.09	.77		3.35	1.07	
3. 5-9	138	3.6	3.22	.78		3.71	.61		3.65	.70		3.13	.71		3.51	.98	
4. ≥10	108	19.4	3.26	.60	4>2	3.71	.64		3.52			3.13	.71		3.51	.94	
Job					4.382 **			9.350 ***			2.737 *			.928			1.487
1. MD	117	74.3	2.98	.79		3.46	.66	1<4	3.33	.87		3.09	.72		3.23	1.12	
2. RN/RM	283	36.8	3.14	.81		3.60	.64	2<4	3.52	.79		3.11	.69		3.40	.98	
3. Allied Health Profess.	169	4.5	3.21	.77		3.68	.65	3>1	3.56			3.04	.74		3.46	1.04	
4. Administrator	200	15.8	3.30	.73	4>1	3.83	.64		3.58	.77	4>1	3.16	.79		3.47	1.04	
Department					.739			1.813			1.078			.467			1.317
1. Outpatient/ED	244	38.3	3.11	84		3.63	.67		3.49	.84		3.32	1.12		3.12	.77	
2. Inpatient	242		3.20			3.61	.68		3.47			3.41	.94		3.14	.70	
3. Auxiliary	181	9.0	3.20			3.70	.64			.82		3.52	1.06		3.06	.75	
4. Administration	102	13.1	3.20			3.76			3.57			3.43	.96		3.07	.69	
Managerial Post	102	15.1	5.20	.00	5.078 *	5.70	.50	1.148	5.57	.70	5.143 *	5.45	.70	1.281	5.07	.07	3.927 *
1. No	674	86.1	3.14	70	5.070	3.63	.66	1.140	3.49	81	5.145	3.09	.74	1.201	3.38	1.05	5.941
2. Yes		13.9	3.42			3.83	.60		3.73			3.09	.74		3.63	.90	
Working Status	95	13.9	5.42	.09	4.216 *	5.85	.00	.523	5.75	.00	.182	5.25	.09	.275	5.05	.90	.255
Permanent	271	35.2	3.14	76	7.210	3.63	.67	.525	3.49	80	.102	3.06	.72	.213	3.40	1.04	.235
Contract		64.8	3.14			3.71	.67		3.57	.80		3.18	.72			1.04	
N = 769; M; mean; SD; sta				.64		3./1	.03		5.57	. /9		3.18	./3		5.45	1.02	

Table 5. The	Results of	Variance An	alyses
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*N* = 769; M: mean; SD: standard deviation. \* *p* < .05; \*\* *p* < .01; \*\*\* *p* < .001.

One-way analysis of variance was used to compare more than two independent groups (Table 5). In cases where differences between groups were significant, post-hoc tests were used for multiple comparisons of mean scores. Since group variances were equal, Tukey HSD test was used. When the data are evaluated, it is seen that there are differences between the occupational groups in terms of the dimensions of taking initiative. There is a difference in at least one of the occupational group averages of willingness to take risk (p < .05). There is a statistical difference in at least one of the occupational group averages for perceived organizational support (p < .01) and individual competency (p < .001). It was determined that the scores of work autonomy and failure related trust to supervisor from the dimensions of taking initiative did not differ according to the averages of the occupational groups. There exists a difference in the mean individual competency score in at least one of the education levels of healthcare workers. The differences between the averages of seniority in years differentiate the perception of organizational support.

Structural equation modeling (SEM) path analysis was utilized to determine whether the theoretical model obtained was valid (Figure 1). Based on the fit values of the model presented in Table 6, it can be inferred that the observed data fits well to the proposed model. Since the GFI value is affected by the sample size, values between .85-.90 obtained in the analysis are accepted as good fit (Byrne, 2000). It can

be stated that the data acquired can explain the model at a significant level (Schermeller -Engel et al., 2003).

	CMIN/DF	GFI	CFI	RMSEA
Model Fit Summary	(< 3)	(<.90)	(<.95)	(<.08)
Measurement Model	2.225	.890	.931	.040
SEM Path Analysis	2.530	.881	.914	.045

Table 6. SEM Goodness of Fit Statistics

Reference values are given in parenthesis.

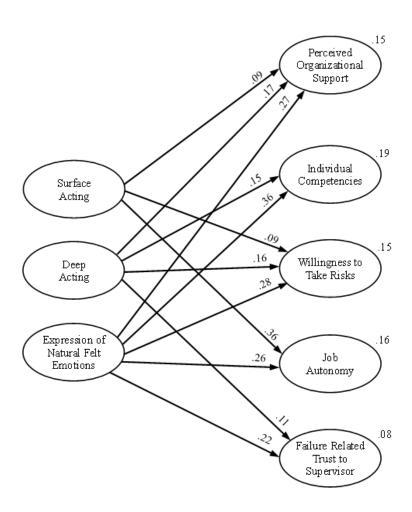


Figure 1. SEM Path Analysis

The regression weights were analyzed to gain insight into the dimensions of interaction for the statistical effects of emotional labor on initiative taking. Upon examining the analysis results presented in Table 7, it is seen that the significance level is p < .05 in all values. Expression of naturally felt emotions have a greater effect on the dimensions of individual competency, willingness to take risks, perceived organizational support, and failure related trust to supervisor than surface acting and deep acting. In this study, it is seen that the diversity in initiative taking dimensions can be predicted by emotional labour dimensions at a rate of 19% and less.

**Table 7.** The Results of SEM Path Analysis

Dependent Variables	Independent Variables	β	$\mathbb{R}^2$
Individual Competency	← Expression of Naturally Felt Emotions	.360 ***	.192
		(.035)	
	$\leftarrow$ Deep Acting	.147 ***	
	1 0	(.026)	
Willingness to Take Risks	← Expression of Naturally Felt Emotions	.280 ***	.145
		(.037)	
	← Deep Acting	.159 **	
	1 0	(.029)	
	← Surface Acting	.086 *	
	C C	(.021)	
Perceived Organizational Support	← Expression of Naturally Felt Emotions	.271 ***	.146
		(.042)	
	← Deep Acting	.168 ***	
		(.032)	
	$\leftarrow$ Surface Acting	.089 *	
		(.026)	
Job Autonomy	← Surface Acting	.354 ***	.157
		(.027)	
	← Expression of Naturally Felt Emotions	.256 ***	
		(.035)	
Failure Related Trust to Supervisor	← Expression of Naturally Felt Emotions	.224 ***	.081
		(.046)	
	$\leftarrow$ Deep acting	.109 *	
		(.035)	

N = 769; standard errors are given in parentheses.

\* p < .05; \*\* p < .01; \*\*\*p < .001.

#### **DISCUSSION AND CONCLUSIONS**

It has been commonly stated in the literature that initiative taking behaviors develop depending on several factors including personal characteristics such as self-starting, overcoming obstacles, proactivity, and self-efficacy (Speier & Frese, 1997; Fay & Frese, 2000; Fay & Frese, 2001; Bledow & Frese, 2009). The work environment should have an appropriate climate for the individuals to exhibit initiative taking behavior. It is anticipated that their sense of responsibility would increase, leading to higher performance and success at work when they have greater freedom to make decisions and there is less external control at the workplace (Hackman & Oldham, 1975). The healthcare system aligns well with the theory of complex adaptive systems, as it exhibits characteristics of a "living organism" such employee productivity, diversity, self-organization, semi-autonomous behavior, hospital design and patient interventions; it shows more energetic, proactive, and innovative approaches (Beyan et al., 2007; Barasa et al., 2017; Kiviliene & Blazeviciene, 2019). Especially after pandemic, taking initiative has become an important part of these approaches. For this reason, it was felt the need to develop a scale to determine the situations affecting the initiative taking behavior of health workers. The EFA for the scale regarding the initiative taking behaviors of healthcare workers yielded a measurement tool consisting of 5 dimensions and 34 items was obtained. The acquired structure was found to be sufficient to measure the attitudes of healthcare workers towards taking initiative. Among these dimensions, the dimension of individual competency, which incorporates personal traits, is comparable to the study results of Fay and Frese (2001), one of the first researchers to investigate the concept of initiative taking. For a study conducted by Fay and Frese's (2001), personal initiative is explained by the dimensions of self-starting, proactivity and overcoming obstacles. These three dimensions are included as sub-concepts under the dimension of personal traits in our study. Likewise, there are similarities in terms of factor structure between the results of Akın's (2014) study investigating initiative taking behaviors in school principals and the concepts of spontaneous initiation, proactivity, and persistence under the dimension of individual competency in our study. However, it can be argued that the new dimensions of willingness to take risks and failure related trust to supervisor, which are formed as a result of the interactions of the initiative taking dimensions in the literature in this study conducted for healthcare workers, can offer managers a difference in practice in the field of healthcare. The scale we developed differs from other ITSs with the dimensions of risk-taking attitude and failure related trust to supervisor.

ITS can be considered as a valid and reliable measurement tool for measuring the initiative taking behaviors of healthcare workers in hospitals. There is a cyclic transitivity between the dimensions of initiative taking. It is thought that the applications to be made in other health institutions will contribute to the development of the scale.

### **Conflict of Interest**

No conflict of interest was declared by the authors.

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