## **Original Article**

# Predicting Nurses' Psychological Safety Based on the Forgiveness Skill

# Abstract

**Background:** Forgiveness, as an intentional denial of your right of anger and aversion from a harmful deed, is related to many psychological processes of human which results in more psychological safety for people. The present study aimed to predict the psychological safety of nurses through different dimensions of forgiveness skill. **Materials and Methods:** This correlational study was conducted on 170 nurses working in Kerman hospitals during 2016–2017 who were selected based on convenience random sampling. Edmondson psychological safety and Thompson Heartland forgiveness scale were used for data collection. Data were analyzed through Pearson correlation coefficient and multiple regression model. **Results:** TThe results indicated that psychological safety has a significant relationship with self-forgiveness (p= 0.0001) and other-forgiveness (p= 0.04). Further, only self-forgiveness could significantly predict 0.07 of psychological safety variance (p= 0.003). **Conclusions:** Self-forgiveness skill can improve the nurses' psychological safety and reduce the harms caused by job pressures by reinforcing positive psychological factors. It is recommended to teach forgiveness skill through holding in-service classes to staff and study the relationship between psychological safety with other social life skills among nurses.

Keywords: Forgiveness, Iran, nurse, safety

#### Introduction

Nowadays, due to professionalism and complexity of jobs, many people are working together in a workplace to achieve different organizational goals.[1] As interpersonal conflicts are inevitable at work,<sup>[2]</sup> an understanding of psychological safety as an influential factor should Psychological emphasized. be safety involves both people's understanding of the consequences of interpersonal conflicts in a special field such as workplace<sup>[1]</sup> and the way people react to this behavior such as when a person reports his mistake or propose a new idea.<sup>[3]</sup> Feeling of safety is regarded as a beneficial stimulus which develops a person's talent to cope with and solve problems, and plays a significant role on people's lifestyles in different ways.<sup>[4]</sup>

The study of the relationship between psychological safety and some other factors such as forgiveness, as an aspect of moral intelligence<sup>[5]</sup> and a strong factor for predicting job-related consequences,<sup>[2]</sup> can bring useful and practical advantages. Forgiveness means an awareness of one's own defects, tolerance of others' mistakes,<sup>[6]</sup>

and providing a second chance to the wrongdoer to compensate for the mistake to be able to re-build confidence.<sup>[7]</sup> It is also defined as an endeavor for preserving love and trust in relationships, terminating harmful bias,<sup>[8]</sup> abstaining from revenge, and reconciling with the wrongdoer.<sup>[9]</sup>

People are different in their attitude toward forgiveness and its degree<sup>[10]</sup> Thompson *et al.* (2005) explained different kinds of forgiveness including self-forgiveness, other-forgiveness, and uncontrollable situations-forgiveness, which are defined as how a person responds to himself or others when he, others, or the situations cause harm or disappointment, while that action, speech, or behavior has contradicted their belief on the way for behaving.<sup>[11]</sup>

Some studies claim that people have more psychological safety when they have more forgiveness.<sup>[12,13]</sup> Self-forgiveness in men and all other sorts of forgiveness in women predict less risks of suffering from depression. In general, it seems that self-forgiveness plays a more major role in psychological safety than other types of forgiveness.<sup>[14,15]</sup> The relationship between psychological safety and self-forgiveness is

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strong although it may be indirect.<sup>[16]</sup> It is worth noting that each type of forgiveness differently influences on people's health.<sup>[17]</sup> For instance, uncontrollable situations-forgiveness plays a more important role than self- and other-forgiveness to predict depression among the elderly.<sup>[18]</sup>

Nowadays, the relationship between forgiveness as a strong factor to predict job-related consequences and psychological safety as an important part of mental health in workplace has attracted a lot of attention. However, the relationship between the dimensions of forgiveness and psychological safety has not been studied so far. Regarding the main reason for selecting nurses as the sample, we can refer to their psychological safety which is exposed to many damages due to their stressful and hectic jobs. Further, attempts to recognize their psychological safety can play a major role in the promotion of their service.<sup>[18]</sup> Therefore, the present study aimed to predict the nurses' psychological safety by considering forgiveness dimensions in Kerman hospitals.

# **Materials and Methods**

This is a correlational study which was conducted on 300 males and females working in Kerman hospitals such as Afzalipour, Shahid Bahonar, Shafa, and Fatemeh Al-Zahra in different shifts during October–December 2016 to January–March 2017. Based on Krejcie-Morgan table, 200 subjects were selected based on convenient random sampling, among whom 170 nurses answered two questionnaires including Edmondson psychological safety scale and Thompson Heartland forgiveness scale. The exclusion criterion was partial response or no response to the questionnaires.

The researchers obtained the approval of Ethics Committee and a written introduction letter from the nursing and midwifery school as well as the needed permissions from the health care centers' authorities. Then, they went to different wards of the hospitals and distributed the questionnaires. In order to observe the principle of equal conditions for the participants, and prevent any bias while answering the questionnaire, the distribution and collection of questionnaires were conducted individually and no further and biased information about the questionnaires was provided. The nurses were also asked to answer the questions based on the first impression and conception they got from each question. A demographic information such as age, gender, marital status, and years of service was obtained at the beginning of the study.

The measures used for the purpose of the present study were standardized questionnaires with acceptable psychometric properties and construct validity. Psychological safety scale was designed by Edmondson (1999) to assess psychological safety in teamwork. The questionnaire includes 7 five-point Likert scale questions (very much = 5, very little = 1). Questions 1, 3, and 5 are scored in reverse, and the score

range is between 7 and 35 and higher scores indicate greater psychological security.<sup>[20]</sup> The questionnaire was translated in Farsi by Shams and Khalijiyan (2014). The construct validity of the questionnaire was confirmed and its reliability was calculated by Cronbach's alpha coefficient (r = 0.80).<sup>[13]</sup>

Heartland's Forgiveness Scale (HFS) (Thompson *et al.*, 2005) included 18 seven-point Likert scale questions (totally agree = 7, totally disagree = 1). Self-forgiveness (Questions 1 to 6), other-forgiveness (Questions 7 to 12), and uncontrollable situations-forgiveness (Questions 13 to 18) were regarded as three subscales. Scores range was 18–126 and higher scores mean more forgiveness.<sup>[11]</sup> Ebrahimi *et al.* (2015) reported the reliability of all scales and subscales through test–retest method, with a 2-week interval as 0.86, 0.74, 0.82, and 0.77, and its convergent validity through life satisfaction scale was reported to be 0.53.<sup>[19]</sup>

Data were analyzed through Statistical Package for the Social Sciences, version 20 software based on descriptive statistics such as mean and standard deviation, and inferential statistics such as correlation coefficient and multiple regression. Before analyzing data through multiple regression, regression assumptions were checked and the results indicated that the data had a spatial scale, linear relation, normal distribution, and equal variance. In order to predict psychological safety, all dimensions of forgiveness as predictor variables were entered in the model in one step.

## **Ethical considerations**

This study was approved by the Ethics Committee of Psychology Department of Shahid Bahonar University of Kerman, Kerman, Iran and all ethical considerations including subjects' volunteer participation, obtaining informed consent from all subjects, and confidentiality of data were considered. Ethical code presented to the present study is E. A. 95. 08. 23.

## **Results**

Table 1 indicates the demographic information about the subjects. Most of the participants are women (N = 135)and the number of men is 35. The subjects' age ranged between 21 and 53 [Mean (M) = 32; Standard deviation (SD) = 7.30]. The majority of sample are married (135 individuals) and have 1-9 years of service (M = 8.82; SD = 6.87). As shown in Table 2, uncontrollable situations-forgiveness has the highest mean (28.05) compared to other subscales of forgiveness, and the lowest mean belongs to self-forgiveness (26.27). The correlation of all variables with each other is significant except the relationship between uncontrollable situations-forgiveness and psychological safety. Table 3 shows the results of the multiple regression analysis on the predictor variables. As it is evident, among forgiveness subscales, it is only self-forgiveness that can significantly predict psychological

Table 1: Demographic characteristics of the sample			
Variables	n(%)		
Gender			
Female	135 (79.4)		
Male	35 (20.6)		
Age			
21-31	86 (50.6)		
32-42	72 (42.4)		
43-53	12 (7)		
Marital status			
Single	35 (20.6)		
Married	135 (79.4)		
Years of service			
1-9	101 (59.4)		
10-19	51 (30)		
20-30	18 (10.6)		

SD)	(1)	(2)	(3)	(4)
				(4)
.15)	1			
58) 0	.26**	1		
.88) (	0.15*	0.27**	1	
.44)	0.14	0.28**	0.53**	1
	58) 0 88) ( 44)	58) 0.26** 88) 0.15* ( 44) 0.14 (	58) 0.26** 1 88) 0.15* 0.27**	58) 0.26** 1   88) 0.15* 0.27** 1   44) 0.14 0.28** 0.53**

M: Mean, SD: Standard deviation  $**p \le 0.01 * p \le 0.05$ 

0.04

Table 3: Standardized coefficient, t-test, significant level,									
<b>R</b> , and <b>R</b> <sup>2</sup> of multiple regression analysis									
Model	β	t	р	R	$R^2$				
Self-forgiveness	0.23	2.98	0.003						
Other-forgiveness	0.07	0.78	0.43	0.28	0.07				

safety ( $\beta = 0.30$ , p = 0.003), by which 0.07 of the psychological safety variance is explained.

0.44

0.65

# Discussion

Situations-forgiveness

The present study aimed to predict psychological safety of nurses through forgiveness dimensions. The results indicated that a direct and significant relationship was observed between forgiveness and psychological safety and among the subscales of forgiveness, only self-forgiveness could significantly predict psychological safety.

Therefore, as there are different sources for creating stress in health care jobs and nurses are suffering from a lot of psychological pressures, the identification of influential variables affecting on the psychological safety of the nurses should be prioritized for improving their psychological safety and reducing psychological stresses.<sup>[21]</sup>

The study on the role of forgiveness on positive and poor mental health has proliferated during the last decade.<sup>[14]</sup> However, little work has conceptually or empirically focused on the variety of forgiveness. Among the alternative dimensions of forgiveness, forgiveness of self and uncontrollable situations-forgiveness, which were emphasized in the present study, have attracted a lot of attention.<sup>[16]</sup>

Based on the results, a direct and significant relationship was observed between forgiveness and psychological safety. The results are congruent with those of some other studies (e.g., Miller and Worthington, 2015; Yanchus *et al.*, 2014; Toussaint *et al.*, 2014). Therefore, those who are enjoying more forgiveness, i.e. those who tolerate others' mistakes better,<sup>[6]</sup> are likely to give the chances of compensation and restoration of trust to others, and enjoy a higher degree of psychological safety.<sup>[7]</sup>

Only self-forgiveness could significantly predict psychological safety in the present study. The results are in line with those of other studies (e.g., Davis *et al.*, 2015; Toussaint *et al.*, 2016; Webb *et al.*, 2013). In other words, people can experience less negative emotions, shame, and lower mental rumination, and less interpersonal conflicts, through self-forgiveness,<sup>[22]</sup> which directs their energy toward generating positive thoughts and establishing better relationships with others.<sup>[16]</sup>

Thus, health care employers such as nurses are constantly exposed to physical and psychological harms. Although physical safety is well ensured in workplaces, little attention has been paid to psychological safety.<sup>[23]</sup> Regarding the fact that nurses are suffering from a lot of psychological pressure, thanks to their stressful conditions of hospitals such as encountering deaths, patients with special diseases, accidents, etc., the creation of trust and safety among the group's working atmosphere can increase the chances of positive interaction and assisting other members in such a way that they are no longer concerned about their colleagues' reactions, resulting in increase in their psychological safety.<sup>[24-26]</sup>

In nurses' workplace, forgiveness not only plays a pivotal role in increasing physical and psychological health but also can improve the nurse–patient relationship and nurses' interaction with doctors.<sup>[27,28]</sup> For example, they should be able to forgive when they are offended or treated them with disrespect, which is regarded as one of interprofessional relationship problems among Iranian nurses and physicians,<sup>[29]</sup> or when they are sued by patients, because doctors have failed to suggest them an effective, fast, and unrealistic treatment.<sup>[22]</sup> For these reasons, some suggest that the forgiveness should be considered as one of the criteria in international classification of training nurses.<sup>[30]</sup>

So far, a few studies have investigated the relationship between forgiveness and psychological safety, especially among nurses. The present study focused on this problem although there were some limitations such as the unwillingness of the hospitals' authorities to cooperate with the administrators of the questionnaires, tight schedules of some nurses' to answer the questionnaires, as one of the most important barriers of nursing research in Iran,<sup>[31]</sup> and nonrandom sampling.

The present study considered the relationship between psychological safety and forgiveness. However, further research is needed to expand our understanding of how psychological safety plays a role in other contexts or situations. Furthermore, it is recommended to teach forgiveness skill through holding in-service classes to staff and conduct other studies to investigate the relationship between psychological safety among nurses and other mental or social life skills so that the empirical and practical knowledge of the field can be increased.

## Conclusion

Based on the results of the study, it seems that improving and promoting the forgiveness skill among nurses as a working group of the society who are constantly exposed to mental pressures and job fatigue can lead to the enhancement of health factors such as psychological safety.

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#### **Conflicts of interest**

There are no conflicts of interest.

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