

# The Relationship between Prosocial Voice and the Patient Safety Culture in the Saudi Public Hospitals

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## Abstract

This study examines the direct linkage between prosocial voice and patient safety among public hospitals in Saudi Arabia. The researcher employed the quantitative survey design for data collection, where 127 out of 251 healthcare firms were chosen in Saudi Arabia with the following division-70 organizations from the central region and 57 from the western region. The hospitals comprising the sample all operate under the oversight of the Saudi Ministry of health. The researcher distributed 30 questionnaires in each of the 127 Saudi hospitals to staff workers working in the nursing units in both regions. A total of 1793 questionnaires were returned and the rate of response was calculated by dividing the number of returned questionnaires with the total number of participants. The present study made use of regression analysis to examine the relationship between prosocial voice and patient safety culture. The findings revealed a positive and significant relationship between the two. Some recommendations for future studies were provided at the end of the study.

**Keywords:** prosocial voice, the patient safety culture, Saudi public hospitals

## 1. Introduction

Culture has key role in the development and enhancement of an organization as it highlights individual behaviour and attitudes within the workplace. It comprises of a set of societal moral values that is displayed through individual behaviour (Feng et al., 2008) or the complete set of patterns of human behaviour. In the current times, problems linked to patient safety culture (PSC) have been debated on as the latter reflects the significance of safety when it comes to patients within the workplace (Milligan, 2007).

Prosocial voice (PSV) is among the approaches developed to relay medical errors and according to Hill (2011), it is a specific proactive and enhancement-centred style of workplace communication behaviour. An employee employing PSV is encouraged to relay knowledge, information and feedback in order to facilitate positive changes in the workplace, by maximizing work processes regardless of protests from other employees (Van Dyne et al., 2003). Organizations generally benefit from the employees' discussion and report of crucial issues. However, Morrison and Milliken (2000) claimed that despite PSV's invaluable contribution in the workplace, employees often steer clear of using it.

In this regard, open communication is among the significant tools used to determine the errors that employees commit within the organization. In case of hospitals, the staff's failure to provide feedback on the issues among their peers adversely impacts the hospital's ability to determine medical errors and learn from them (Lyndon, 2006; Hughes et al., 2009).

Proactive communication is related with the ability of the organizational leader to rectify mistakes, improve processes and create solutions to issues in the organization in many industries (Detert & Trevino, 2010) but despite this fact, it has been largely overlooked in scientific research. As a consequence, little information is in store regarding the relationship between a specific kind of proactive and upward-directed workplace communication behaviour, PSV, and PSC in hospitals (Hill, 2012). To compound the issue further, the importance of hospital staff communication in regards to patient safety issues have been, time and again, emphasized in literature, but studies focusing on the topic examined it via several variables lacking reliability

and validity.

Moreover, although effective communication has been stressed, several healthcare providers still overlook communication issues concerning unsafe practices and errors in medical practice. On the basis of a survey involving 196,462 staff members working in 622 U.S. hospitals, majority of the respondents (63%) displayed no patient safety concerns or relay errors in medical practice (Agency of Healthcare Quality and Research, AHRQ, 2009). To this end, the major reason behind the avoidable medical errors seems to be communication failure (IOM, 2006; The Joint Commission, 2010).

## **2. Literature Review and Hypotheses Development**

### *2.1 Prosocial Voice*

Prosocial voice is described as set of a general category of prosocial behaviour referring to values, thoughts, and expected reactions geared towards assisting an individual or a group (Eisenberg et al., 2002). It is a construct that is characterized as a discretionary, fundamental and challenging behaviour based on cooperative motives (Van Dyne & LePine, 1998). In literature, prosocial voice is referred to as a specific kind of proactive and upward-directed communication behaviour in the workplace that is geared towards improving as opposed to criticizing a situation (Van Dyne et al., 2003). It is an interesting construct to both researchers and practitioners because of the fact that it is an upward-cantered communication of work-related notions, feedback or opinions that may contribute to positive and teamwork and consequently effectiveness in the organization (Burriss et al., 2008; Tangirala & Ramanujam, 2008).

Prosocial voice allows organizations to determine its opportunities and threats while improving itself with the help of opinions and suggestions from employees (Detert & Trevino, 2010; Venkataraman & Tangirala, 2010). According to studies, novel methods to investigating the topic of prosocial voice are required to provide a rich insight into the 'voice' concept (Van Dyne et al., 2003). Heeding such a call, several researchers embarked on examining prosocial voice in different settings through the use of mediating and moderating variables to investigate the causal mechanisms nature related to the behaviour.

Added to the above, prosocial voice is crucial among healthcare organizations in order to report and highlight safety risks as such risks impede patient safety and improvement of the organization (Henriksen & Dayton, 2006). Thus, prosocial voice is crucial to healthcare organizations focusing on patient safety to bring about patient care enhancement.

On the basis of a thorough literature review, it is evident that researchers employed different terms to synonymously depict a description of prosocial voice including, improvement-oriented voice based on positively intended goals, employee voice behaviour, speaking up and employee safety voice. Such voice types reflect changes directed towards improvement (Premeaux & Bedeian, 2003), initiatives for proactive expressions of novel solutions to resolve organizational problems (Fuller et al., 2007), a challenging effective notion to improve circumstances at work (Venkataraman & Tangirala, 2010), communication focused on improving job-related safety situations (Tucker et al., 2008), innovation recommendations for improvement (Walumbwa & Schaubroeck, 2009), and communication towards a specific target that holds the organizational power (Burriss et al., 2008; Detert & Trevino, 2010). A general theme noted among studies of this calibre is the description of voice of an employee speaking up, unique due to the motivation and interaction underlying the communication of notions and feedback provided for improving activities within the organization.

Studies in the past decade were focused on providing a description of the mechanisms that facilitate or prevent prosocial voice in several organizational settings. Prosocial voice related factors are perceived quality of leadership support, style of management, organizational loyalty and the level of employee fair treatment (Burriss et al., 2008; Detert & Trevino, 2010; Walumbwa & Schaubroeck, 2009). The next sections provide details of the prosocial voice factors that are significant to this study.

The relationship between an organization and prosocial voice has been evidenced by researchers. Specifically, Detert and Trevino (2010) carried out a qualitative study to shed an insight into the topic with the help of interviews with 89 high-tech industry employees to obtain their perceptions of the supportive or hindering affects of leaders on prosocial voice. They found that employee perception of supervisory supportiveness is a positive prediction of the tendency to employ prosocial voice. Stated differently, employees perceiving that their supervisors are open, empathetic and tolerant are more inclined to use prosocial voice as such supervisors encourage informal interaction with employees working at all levels in terms and urge them to make use of greater levels of prosocial voice. Detert and Trevino (2010) advised future studies to investigate the way in which individual characteristics are related to the hesitancy of the employee to use prosocial voice.

In the past decade and a half, scholars have increasingly focused on employee's voice behaviour although some have insisted that such voice behaviour does not need to go against the status quo. On the contrary, Maynes and Podsakoff (2013) exclusively focused on voice as a positive challenge to the status quo and hence, in order to produce a more extended view of voice, that is beyond voice and that may not be well-intentioned, the authors developed an outline identifying four different categories of voice behaviour namely supportive, constructive, defensive and destructive voice. Following this development, they enhanced survey measures for each of the types and evidence from the four samples comprise five studies supported our new measures. Specifically, a 4-factor confirmatory analysis model fit the data appropriately compared to 1, 2 or 3 factor models and the voice measures combined with the conceptually related comparison constructs but remained distinct. Also, personality predictors showed distinct relationship patterns with different voice types and actual voice behaviours variations directly impact responses to the survey items. Finally, every type of voice significantly affected important results for employees using voice.

Moreover, social interactions alteration, particularly prosocial behaviours are gaining importance as it is among the autistic disorders' characteristics. In order to enhance communication skills or minimize social impairments, several strategies are employed and although animal-assisted therapies provide relevant advantages, they lack scientific evaluation but are still used extensively.

In a related study, Walumbwa and Schaubroeck (2009) obtained the participation of 894 employees and their 222 immediate supervisors in a U.S. financial institution. They showed that leadership personality traits of both agreeableness and conscientiousness were related to prosocial voice behaviour via the mediating impact of employee's perception of ethical leadership. Stated clearly, employees were not as inclined to identify issues or recommend improvement when they perceive low levels of ethical leadership. They also found that ethical leadership perceptions are predictors of higher employee voice levels. This relationship was partially mediated by psychological safety perceptions where psychological safety refers to the level to which employees believe that they have a positive and collaborative environment and they are safe to report issues, provide novel ideas or feedback to benefit the organization.

Similarly, Tucker et al.'s (2008) quantitative research, involving 213 U.K. bus drivers, showed that support from leadership regarding safety predicted employee prosocial voice. They made use of perceived co-worker support as a mediating factor between leadership support for safety and employee's prosocial voice. The employee's perception of support from their peers regarding workplace safety mediated the perceived leadership support in terms of safety-employee prosocial voice relationship. Employees often employ their prosocial voice to relay safety issues upon perceiving that their leaders are supportive of their safety, and such relationship was mediated by the level of peer support with regards to workplace safety. Added to this, the use of employees' prosocial voice was maximized when leaders encourage them to voice their recommendations and to transform them into actions.

In the same line of studies, Burreis et al. (2008) conducted a quantitative study involving 234 restaurant managers to investigate the relationship between leadership and prosocial voice with two mediators. They focused on the psychological attachment of employees and their detachment to the organization as mediators in the relationship between two independent variables and leadership behaviour and the dependent variable of prosocial voice. Their findings showed that psychologically detached employees are inclined to curtail ideas that may be significant to the enhancement of the organization in that when there is poor relationship between employee and leader, the employees get detached and think about leaving their jobs and to this end, they are not concerned about improving their work environment. Added to this, abusive supervisors significantly related to employee detachment with the latter significantly related to minimal prosocial voice. The authors encouraged future studies to look into the relationship between prosocial voice and organizational culture.

The only study that focused on registered nurses as the sample population in the hospital was conducted by Tangirai and Ramanujam (2008). Their quantitative study involved 606 registered nurses in an attempt to gauge the effect of perceived climate of procedural justice on employee silence. According to them, procedural justice refers to the level to which employees believe that their leaders are fair. In other words, employees felt a sense of procedural justice when they think that leaders make decisions that are consistent, fair and unbiased. They showed that regardless of individual factors' motivating nurses to use their prosocial voice, the procedural justice climate of an organization plays a major role in their silence or voice. They also highlighted that prosocial voice were heightened through work-group identification, professional commitment, and procedural justice perceptions.

In a related study, Cheng and Lu (2007) tested a theoretical model emphasizing on the mediating mechanism of

psychological safety in the social-exchange relations-voice relationship. They noted disentanglement of the employees' voice behaviour through their collected data from 685 employees in Taiwan's trucking company. The empirical findings showed that supervisor relations impact voice behaviour of employees through psychological safety and that psychological safety partially mediated the colleague relation-voice relationship.

In this regard, leaders have key role in encouraging observation and work condition behaviour of employees in different ways (May, Gilson, & Harter, 2004) and these include, leader satisfaction (Cheng, Huang, & Chou, 2002), performance of the task (Wang, Law, Hackett, Wang & Chen, 2005), commitment (Avolio, Zhu, Hoh, & Bhatia, 2004), and voice (Detert & Burris, 2007). It is evidently noted in Social Exchange Theory that leaders provides rewards (whether tangible or intangible) to employees and expects benefits from them (Blau, 1964). This perspective posits that good relations with supervisors are inclined towards the perception of supportive management environment, collective respect, trust climate and liking that shows social exchange within the firm (Cropanzano, Prehar, & Chen, 2002; Masterson, Lewis, Goldman, & Taylor, 2000), while they contribute effectively to the organization (Blau, 1964). Similarly, Deci and Ryan (1987) showed that supervisors who provide a supportive environment, display employee concern and provide feedback and encouragement for voice use regarding concerns and issues. Also, Bettencourt (2004) found that the relationship between supervisor and subordinate significantly and positively related with change-oriented OCBs on a study involving 183 sales in retail. Meanwhile, Van Dyne, Kamdar and Joireman (2008) conducted two studies that highlighted employees' increasing involvement in assisting and in voice behaviour.

Moreover, the influencing situations for prosocial behaviour in both genders (married and unmarried) in the age range of 20-40 years old was deliberated by Iqbal (2013). Accordingly, 4 different situations were presented involving a sample of 240 participants namely Accident Victims, Neighbour Fighting, Molestation and Shoplifting. The participants were left to decide from the options as to the way they would interfere with the situation. The study sample comprised 120 males and 120 females, where 60 were married and 60 were singles. The author made use of Chi-square and t-test for calculation and the findings showed; majority of the sample would indirectly assist rather than directly and only some would refuse to help. The finding also revealed that helping behaviour differs from situation to another and no difference was highlighted between married or unmarried men and women who would directly or indirectly assist.

In the realm of prosocial voice literature, individual factors are another set of factors that have been extensively examined. Specifically, the relationship between personality, voice and contextual performance in a traditional quantitative study was conducted by LePine and Van Dyne (2001), with contextual performance referring to activities that contribute to the enhancement of the social, psychological and organizational aspects of the organization. Voice was gauged via change-oriented and constructive communication. The findings revealed the positive association of prosocial voice with conscientiousness and extroversion and the negative association of agreeableness with voice. These findings were in the contrary with the premise that personality on its own is a predictor of voice behaviour - stated differently; individuals using the 'voice' strategy should be change-oriented and should embrace risks that could change the status quo and the interpersonal relations in the short-run.

With regards to moderators in this field of study, two variables namely employees' task performance and workgroup identification were deemed as moderators of work-flow centrality, where the latter refers to the level to which employee is important to a task. In this relationship, personal influence was considered to be a mediator. . The employee's work-flow was found to improve their personal influence in work groups and this boosted their engagement in higher levels of prosocial voice (Venkataraman & Tangirala, 2010). Owing to the limitation of the study sample to Indian citizens, the authors recommended other cultural contexts for future studies.

## *2.2 Patient Safety Culture*

Research concerning patient-safety culture began in the mid-2000s and was precipitated by the IOM report (2000) and the interest in assessing safety culture in the healthcare organizations. Prior studies of this calibre were carried out for the sole assessment of staff perception of patient-safety culture among hospitals. Such studies are extensive and are reviewed in this study. However, measurable results were related with patient-safety culture have only presently been addressed from scientific literature and only a few of them provided an outcome variable. Therefore, empirical studies addressing the association of patient-safety culture and errors in the medical field are still lacking. Recent studies tried to gauge the patient-safety culture in terms of effectiveness via direct measures of its outcomes like prevention of nosocomial (hospital-acquired) infections (Elder et al., 2008), patient-safety occurrence in terms of frequency and severity level (Kline et al., 2008; Mardon et al., 2010), reporting medical errors frequency (Snijders et al., 2009), level of medical errors (Singer et al., 2009), and

patient mortality and length of hospital stay (Huang et al., 2010).

In addition, Elder et al. (2008) examined 15,846 patients housed in 51 AICUs in 31 U.S. hospitals in an attempt to investigate the association between organizational culture (working environment of nurses) and specific patient-safety indicator. One thousand and ninety five nurses completed the survey of a measure of patient-safety culture for the examination of their perceptions regarding work environment. The findings showed that negative working conditions and heightened overtime among the nurses were related with the patients' risks of developing infections. This study was the first study to link infection observing data to the nurses' working condition and it reinforced the report published by IOM (2004) contending that insufficient staffing and long hours are some of the significant problems that may characterize the environment and result in errors in medical practice.

In this stream of study, two studies are known for their manner of examining contributing factors prediction of negative events in hospitals. One of them was conducted by Kline et al. (2008) in the form of a retrospective analysis of 5070 patient-safety incident reports and patient safety culture survey findings from 298 employees in three Canadian hospitals. The findings showed that a positive culture of patient safety relates significantly to lowered patient-safety incident level. The authors encouraged future studies to study acute rare environment to determine factors related with patient-safety culture so that specific interventions may be created to maintain a positive patient-safety culture. The second study was conducted by Mardon et al. (2010) in the form of an exploratory analysis of 179 U.S. hospitals. Their findings highlighted a more positive patient-safety culture related to less negative hospital events and they showed that hospitals with greater scores of HSPSC displayed lower patient-safety incident rates. They reached to the conclusion that failure in communication among the nursing staff contributes to errors in medical practice. Their findings supported the importance of maintaining positive patient-safety culture, particularly in hospitals. They advised future studies to look into the relationship between components of behaviour of patient-safety culture.

Similarly, Singer et al. (2009) employed indicators of potential safety events in 91 U.S. hospitals to study the relationship between patient-safety culture and hospital performance. They surveyed 35,006 people, among which 18,223 (52%) returned complete surveys. Based on their results, an effective patient-safety culture is linked with less risk of medical error events. Their findings are significant to the present study as it is the pioneering quantitative evidence of a positive relationship between hospital safety performance patient-safety culture. They called for healthcare organizations to improve their safety culture in order to minimize safety events.

Along the same line of study, Huang et al. (2010) examined the relationship between patient-safety culture and two major outcomes, which were patient mortality and length of hospital stay and concluded that lower degrees of patient-safety culture predicted greater levels of patient mortality, and it significantly linked to greater hospital length of stay.

Moreover, Sorra and Nieva (2004) contributed to literature addressing the topic by developing a survey tool to measure patient-safety culture. The components of the survey included acknowledgement of an event, promotion of an environment that is blame-free in order to boost reporting of events, collaboration and teamwork, communication and leadership support. Such components represented safety culture indicators that mimicked those provided by Weigmann et al. (2004). Sorra and Nieva (2004) contended that values, beliefs, and norms of the patient safety culture in an organization make employees realize the way patient safety and errors are deemed from the viewpoint of the organization and the way attitudes and behaviours are related with patient-safety. They carried out a pilot study with the help of the HSOPSC survey instrument distributed among 1437 hospital employees in 21 hospitals in six U.S. states. Their findings showed a positive perception of patient safety where some participants felt that it had not been compromised while others reported negative events that happened the year before. Their findings also revealed a relationship between overall patient safety perception and patient safety level (event reporting frequency with feedback and communication regarding the error, non-punitive response to error and reporting event). They made use of the HSOPSC instrument to survey the perceptions of nurses' aides and top management working in nursing homes.

Meanwhile, Castle (2006) carried out a survey among 1579 nurses' aides in a total of 72 nursing homes located in five states. The survey results showed low hospital scores indicating less developed patient safety culture. Added to this, Castle, Handler, Engberg and Sonon (2007) utilized the HSOPSC instrument among a sample of nursing home administration numbering 2840, with a response rate of 71%. They found nine out of ten HSOPSC scales to be considerably lower than hospital scores indicating low patient safety culture among the nurses' aides and hospital staff.

Moreover, a survey involving 3940 healthcare staff was conducted by Hellings et al. (2007), which garnered a

rate of response of 77% in five Belgian acute care hospitals via the Belgian version of the HSOPSC instrument. Specifically, they conducted an assessment of fourteen patient safety culture scales among a sample consisting of 2813 nurses and assistants, 462 physicians, 397 physiotherapists, laboratory and radiology assistance and social workers along with 64 pharmacists and 397 physiotherapists. The found average positive scores on the overall patient safety scales to range from low to average, which indicated the requirement for further improvement of non-punitive culture and organizational learning, and a focus on hospital transfers across hospital units.

Thus, in the quest to improve safety culture within organizations, it is pertinent for hospital leaders to facilitate an effective safety culture that encourages healthcare professional communication in order to leverage opportunities among procedures, practices and processes (Armstrong et al., 2009; IOM, 2000, 2004). Prior researchers like Burris et al. (2008), Detert and Trevino (2010), Grant and Mayer (2009), Tucker et al. (2008), and Walumbwa and Schaubroeck (2009) claimed that prosocial voice, a specific type of proactive and upward-directed workplace communication behaviour, are linked with enhanced effectiveness in several industries and may be employed in the healthcare industry.

In a related study, Hill (2011) examined registered nurses' perception of prosocial voice, self-monitoring behaviour and patient-safety culture and his findings showed a weak positive relationship between their prosocial voice and four out of twelve dimensions of the patient-safety culture. However, the study results cannot be generalized owing to its several limitations - among them being that only one hospital was focused on and the sample was small and collected via non-probability sampling method. Also, only four dimensions of patient safety culture was included when there are actually twelve dimensions that reflect patient safety culture. The author called for a thorough in-depth study of prosocial voice and patient safety culture based on a larger population to minimize the gap in literature.

On the basis of the above arguments, the researcher proposes the following hypothesis;

H: There is a relationship between a positive Prosocial Voice and Patient Safety Culture.

### **3. Research Method and the Study Model**

The survey questionnaire was employed for data collection from respondents. According to Sekaran (2003) a questionnaire is described as a pre-written question set that is closely defined and that which the respondents are requested to answer. It is a data collection technique that is efficient when the researcher knows the requirements and the variables' measurements (Sekaran, 2003). In the present study, a questionnaire was employed to collect data and to obtain the responses concerning prosocial voice and patient safety culture in Saudi Public Hospitals via certain measurements.

The questionnaire along with the letter of approval would obtain greater responses as the participants were briefed on the research significance. The approval letter was deemed to be a formal permission to conduct the research at 127 public Saudi hospitals located in the Central and Western region. Thirty questionnaires were distributed in each of the 127 hospitals in both regions such regions constitute greater population. The total questionnaires distributed were 3810.

Specifically 127 hospitals from a total of 251 were chosen in the list provided by MOH (2011) with the following distributions - 70 from the Central region and 58 from the Western region. Such public hospitals and are under the oversight of the Kingdom's Ministry of Health (MOH). The staff workers in the nursing units of these hospitals were the main focus from where data was collected via questionnaires. One thousand seven hundred and ninety three questionnaires were completed and returned after which the rate of response was calculated by dividing the number of returned questionnaires by the number of survey participants (Zikmund et al., 2010).

The present study examined the relationship between prosocial voice (PV) and patient safety culture (PSC) at Saudi public hospitals.

### **4. Data Analysis and Results**

After collecting data, it was analysed through IBM SPSS in order to determine data description and hypothesis testing.

#### *4.1 Descriptive Statistic*

Descriptive statistics of continuous variables are depicted in Table 1 and they cover the results of mean, standard deviation, minimum and maximum, which were calculated with the help of SPSS Version 21.

Table 1. Descriptive statistics of continuous variables

	Minimum	Maximum	Mean	Std. Deviation
PV	1.00	5.00	3.4739	0.69122
PSC	1.00	4.50	3.3053	0.38263

#### 4.2 Correlation Analysis

A summary of correlation results obtained are provided in Table 2. Based on the results, correlations are all lower than 0.80, which is consistent with the recommendations of Gujarati and Porter (2009). According to them, the correlations of less than 0.80 ensure the non-existence of multicollinearity.

Table 2. Results of pearson correlation analysis

	1	2	3
PV			
PSC	0.157***		

\*\*\*. Correlation is significant at the 0.01 level (2-tailed).

#### 4.3 Testing the Assumption of Normality

Normality is examined to determine the symmetrical curve that has the highest score frequency towards extremes in the small and middle frequencies (Pallant, 2005). Accordingly, some researchers like Kline (1998) and Pallant (2005) recommended the assessment of the scores normal distribution for both independent and dependent variables via the examination of the values of their kurtosis and skewness.

In the field of social science, the constructs nature has various scales and measures that may lead to positive or negative skewness (Pallant, 2005). Added to this, kurtosis refers to a measuring distribution score that reflects the level to which observations around the central mean are distributed.

Hair et al. (2006) stated that skewness values that are outside the range of +1 and -1 shows significant skewness in distribution but Kline (1998) stated that the range is from +3 to -3. On the basis of the above criteria, in this study, the skewness values are within Kline's (1998) recommended range rather than Hair et al.'s (2006) range. As for the kurtosis values, Coakes and Steed (2003) recommended the acceptable range of +3 to -3, and in this study, the kurtosis values fall within this range as evidenced in Table 3.

On the basis of the above discussion, some skewness values deviated from normal distribution and hence, the researcher made use of SPSS to handle skewed data (Chin, 1998).

Table 3. Results of Skewness and Kurtosis for normality test

Variables	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
PV	-0.697	0.058	0.333	0.116
PSC	-0.536	0.058	2.162	0.116

#### 4.4 Regression Results of Model (Based on Patient Safety Culture)

Table 4. Regression results of model (dependent= patient safety culture)

Variables	Standardized Coefficients		t-value	Sig.
	Beta			
PV	.157		6.737	.000
R <sup>2</sup>				.025
Adjusted R <sup>2</sup>				.024
F-value				45.381
F-Significant				0.000

## 5. Discussion of Results

The present study investigated the relationship between prosocial voice and patient safety culture among Saudi public hospitals. According to the results, a significant relationship exists between the two with the correlation value between them significant at  $R^2=.025$ . It appears that the variables of prosocial voice contribute to the development of patient safety culture in the context of Saudi public hospitals. This finding is consistent with that reported by Hill (2011) who showed positive correlation between the prosocial voice of registered nurses and four dimensions of patient-safety culture. The nurses in Hill's (2011) study were chosen from a single hospital in Midwest, U.S. Hill's (2011) study was the pioneering study to investigate the variables relationship, but the present one is unique in that it examines the ten instead of four dimensions of prosocial voice and their impact on patient safety culture in a distinct Saudi setting. Moreover, majority of the Saudi hospitals in this study are located in small cities where most of their staff is not exposed to knowledge.

Prosocial voice refers to a specific category of proactive and upward-directed workplace communication behaviour that is geared towards enhancing as opposed to criticizing a situation (Van Dyne et al., 2003). It is described as an interesting construct focused on by both researchers and practitioners because of its upward-directed communication of work-related ideas, information/feedback that may encourage collaborative work environment and facilitate the effectiveness of the organization (Burriss et al., 2008; Tangirala & Ramanujam, 2008). Added to this, prosocial voice allows organizations to highlight their opportunities and threats and improve themselves based on the feedback and opinions of employees (Detert & Trevino, 2010; Venkataraman & Tangirala, 2010). Prior studies examined prosocial voice as an outcome variable. Scholars who addressed voice have conceptually described it as a distinct type of workplace communication behaviour that is intended to enhance processes and bring about effective functioning of the organization (Morrison & Milliken, 2000). It is particularly significant in hospital organizations, where the staff voice issues, opportunities that are linked to patient safety and that eventually allows leaders' detection of errors and improvement of methods towards patient safety (Tangirala & Ramanujam, 2008). This study revealed a significant relationship between prosocial voice and hospital patient-safety culture in Saudi public hospitals.

## 6. Conclusion

Prosocial voice has been studied in different organizations but only a single study examined it in the context of healthcare workers in the form of registered nurses. This highlights a research gap in literature assessing the way hospital staff use prosocial voice and its association with patient safety culture in hospitals. This underlies the dire need to focus on the issue of the enhancement of prosocial voice-patient safety culture relationship.

The present study investigated such relationship in the context of Saudi public hospitals where the sample comprised of 127 out of 251 healthcare organizations in Saudi Arabia (MOH, 2011) - 70 organizations from the Central region while the remaining 57 from the Western region. The entire organizations are public hospitals under the oversight of the Kingdom's Ministry of Health (MOH). Specifically, thirty questionnaires were distributed to each of the samples. A total of 1793 questionnaires where the response rate was calculated by dividing the number of returned questionnaires over the number of total participants (Zikmund et al., 2010). The relationship between the two constructs (prosocial voice and patient safety culture) was examined with the help of correlation analysis and a significant relationship was found between prosocial voice and patient safety culture.

## 7. Limitations and Suggestions for Future Research

This study is successful in providing some insight into the significance of patient safety culture and prosocial voice although it has several limitations in terms of concept and method. First, the study distributed only 30 questionnaires to each hospital and only two Saudi provinces were included - thus, the predictive power of PSC could be confined. The study received a rate of response of 47% and hence, generalization of findings should be carried out with caution. However, despite the above limitations, the analysis and findings are still valid in that they still provide an insight into patient safety culture in the context of Saudi Arabia, and eventually they can assist practitioners and managers in addressing patient-safety culture issues among the Kingdom's healthcare organizations. The research investigated the factors in terms of structure-process-outcome (SPO) model as its underlying basis and as such, future studies are recommended to examine them under other theories and models to validate the significance of variables' relationship with the main indicators of model acceptance. Future studies could also replicate the study in other countries.



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