



Impact of emotional intelligence on organizational performance in health sector during COVID-19: mediating role of psychological resilience

Suchitra PANIGRAHI

Sasmita MOHANTY

Siksha 'O' Anusandhan Deemed to be University, Odisha, India

Abstract. The emotional dimensions of health workers are emerging as a serious issue in academic discourse in the current decade. The World Health Organization (WHO) report underscores the significance of Emotional Stability among health workers as a factor affecting the performance of the health sector organization. *Purpose.* This study investigates the role of Emotional Intelligence on Performance through Psychological resilience in this pandemic situation of COVID19 in the Health sector Organization in Odisha, India. *Method.* Taking samples from public and private hospitals in Odisha 103 nurses' were administered Schutte's Self Report Emotional Intelligence Scale. The questionnaire has dimensions as Emotional Perception, Facilitating Cognition, Emotional Understanding, and Emotional Management. *Findings.* Regression analysis showed that the Emotional intelligence of health workers can be a predictive factor of Organization performance in the health industry. The nurses of different hospitals are proficient in taking on new challenges, they are also competent in adapting to any situation, they can recognize their strengths and weaknesses, and also they can treasure good humor during bad times. Principal component factor analysis showed that emotional perception and understanding as well as facilitating cognition used in regulating the overall performance of the hospital. *Value of results.* The amount of EI a nurse of a hospital has developed significantly impacts organization performance as a major part of the hospital nurses act as the central pillar of hospitals so they have a sense of understanding and can critically analyze patient behaviors and minimizes issues within the territory. This study going to help the hospital managers for managing the emotions of nurses who work under him / them.

Keywords: Emotional intelligence, emotional intelligence measures: Schutte measurement scale, psychological resilience, organization performance: subjective performance, hospital nurses, COVID-19, pandemic.

Introduction

The current COVID-19 pandemic has been weighing on since the end of December 2019 different societies worldwide. The affected population suffers directly from high infection numbers, which are associated with an increased mortality rate. Also, infection control measures such as social restrictions with indirect health outcomes as well with considerable psychological stress especially with Anxiety and depression linked (Wang, Pan, Wan et al., 2020). Various current comments have pointed to

the burden on mental health in the population (Chew et al., 2020). The mental health of medical staff (Chen, Liang, Li et al., 2020) and problematic care in psychiatric clinics and geropsychiatric institutions (Yao et al., 2020) are of particular importance. These requirements were presented not only in Asia but also in Europe (Greenberg et al., 2020; Petzold et al., 2020). COVID 19 or coronavirus disease 19 stood as the greatest pandemic that humankind has ever seen. The history of coronavirus defines how fatal this has been and has the power of questioning human existence. The fate and face of this pandemic in India are still unknown. The discovery of preventive vaccines or tablets for this life-threatening disease is yet a mystery. In India, it has become a difficult task to estimate the spread of this disease. In a nutshell, it can be said that till now India is at greater risk as compared to other countries wherever this virus has migrated. This virus is attacking almost all categories of humans without any discrimination. Still, due to the meticulous and selfless efforts of health workers like nurses, doctors have come to a phase where we can see some percentage of people getting healed out of this. Each day these healthy soldiers are risking their lives and working efficiently to save the life of the affected ones. Healthcare workers' emotional fatigue and burnout have been responsible for a crisis in the health sector even before the spread of the Covid-19 pandemic. Added to that, since March 2020, they are also battling with a lethal virus, risking their lives every day. The COVID-19 pandemic comes with a multi-prong increase in stress level and psychological distress. It is the first time that the entire health sector is fighting for scarce resources such as limited beds, PPEs, ventilators, and other medical apparatus. It is also the first time that there is no prior treatment available, no vaccine nor any available remedy. Adding to the woes is the scale and volume of patients admitted each day and the increasing number of deaths, infections, and easy spread. The psychological pressure is further intensified due to the human transmission of the virus in the face of no live-saving treatment. J. Mayer defined Emotional Intelligence as "an ability to recognize the meanings of emotions and their relationships and to reason and problem-solve based on them, EI involved in the capacity to perceive emotions, assimilate emotions, relate feelings, understand the information of those emotions and manage them (Mayer et al., 1999, p. 267). This is a corollary from E. Thorndike's concept of emotional intelligence which originated from its concept of social intelligence. He defined emotional intelligence as "the ability to understand and manage men and women, boys and girls — to act wisely in human relation" (Thorndike, 1920, p. 230).

As per social intelligence, it is the origin of emotional intelligence and it's among seven intelligence domains comprised of an individual's interpersonal and intrapersonal bits of intelligence (Gardner, 1983) whereas interpersonal intelligence relates to social intelligence, intrapersonal intelligence, or understanding of self about others in emotional intelligence. It symbolizes the complex and differentiates sets of feelings". From the definition it is clear that Emotional Intelligence is different from personality traits and constructs are self-emotional appraisal, another emotional appraisal, use of emotions, and regulating emotion. Firm performance as an outcome it's not a visible farce but can be observed in its manifestation. It can be observed through competency and performance indicators such as individual employee output, individual share in revenue generation, product marketing, innovation, organizational expansion, and diversification. In the health care sector for success and competitive advantage, it is important that the Emotional Intelligence of doctors, cleaning staff, nurses, support staff, ward boys, etc. are all adapting to external and internal changes in the environment. Individual employees' psychological mess up in facilitating, regulating, controlling, and actuating their own and others' emotions grow a long way in contributing to the effectiveness of an organization at a personal and organizational level. Effective employees are those who are effective in regulating and controlling their own and other emotional experiences.

EI is becoming a crucial skill across intelligent and highly skilled work teams. People need to work collaboratively and their communication skills become as important, if not more essential as

professional skills and abilities. They need to work together. “Careful explanations on what EI predicts are expected,” according to J. Mayer, P. Salovey, and D. Caruso (2004, p. 206). Many studies were conducted in college environments to assess school grades and the analytical solution to EI issues. Within the context of leadership and organizational behavior, the results showed that the lower participants of a company regarding EI as their subordinates; there is also a positive relationship between their organizational engagement and the EI of their superiors.

Emotional Intelligence in Organizations

As the idea of IT is easily attracted to companies, is it necessary, as some authors claim, more than cognitive ability or technical expertise? Or does it improve a person or an organization’s internal coherence and balance? “There are any disparities between the values that an emotionally intelligent organization proclaims and those it lives to deal with. Clarity about the principles, ethos, and purpose of an organization contributes to a fundamental trust in the decision-making the process of the business” (Goleman 1998, p. 281). Organizations are organizations that lead to flexibilization, transition, improving performance, and progress by positive engagement. As companies strive to achieve more with less, their so-called emotionally based “soft skills” are linked to the effectiveness of leadership and organizational success. Therefore, it is important to further investigate the interaction between EI and other abilities and intelligence. The interplay of emotional and practical intelligence and everyone’s relative contribution to our understanding of organizations is particularly interesting.

There has been a lot of research work conducted on health sector employees and their coping mechanisms in a busy hospital, their leadership qualities, work team behavior, and the impact on organizational development and effectiveness. Researches mainly focus on the social / psychological makeup of the changing health sector environment, little research has emphasized the role of Emotional Intelligence in affecting the organizational outcome in terms of productivity, profitability, innovation, etc.

The objectives of the study

This work has three main objectives:

- to study EI in health sector organization and brings out the constructs that are particularly useful in measuring EI of health care staff;
to study the predictability of EI as a factor for the enhancement of employee performance leading to increased contribution to firm performance.
- to establish the relationship between Emotional intelligence and organization performance through Psychological resilience.

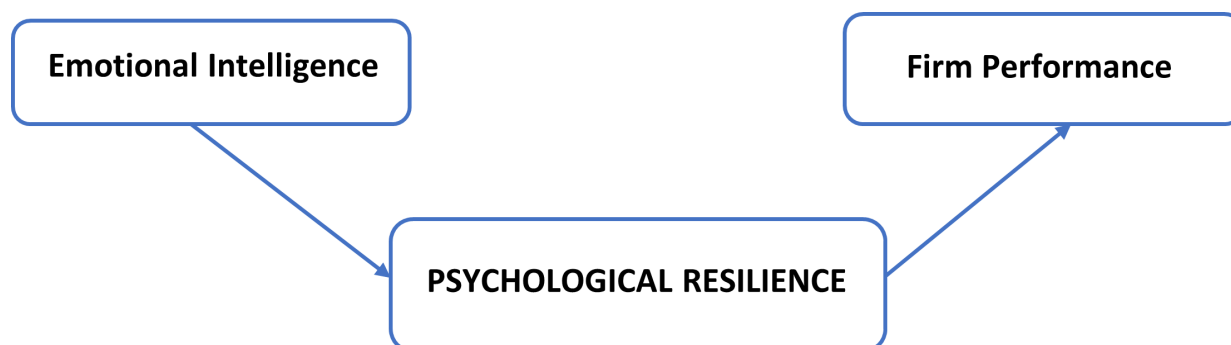


Figure 1. Conceptual model of the study

Literature review and Hypothesis

Emotional intelligence

The previous researches in related areas are mainly focused on organizational behavior and firm performance in the health sector. EI have been researched upon in other sectors as manufacturing and services. Most often than not EI has been researched as a part of the social intelligence of individual employees and constructs used are dynamic.

Since it is possible to understand the principle of emotional intelligence, the definition of intellect and empathy must be explored first of all. Aristotle was the first to use the idea of intellect. In 1920, Thorndike created the first security designation. Throughout his dissertation called "Permanent Mistakes throughout Cognitive Assessment," E. Thorndike explored knowledge in three ways. Includes the capacity to understand and manage people. Abstract awareness is an aspect of intelligence that is correlated with and makes the use of principles in problem-solving. Mechanical intelligence is described by abilities and behaviors linked to the use of tools and objects (Yaşlıoğlu et al., 2013). The Latin word 'motere' is the expression of Emotion. This means moving. This implies moving away if the suffix "-e" is applied to this term. It refers to a movement in every emotion (Goleman, 2013). According to Daniel Goleman, emotion is "a reaction to a certain feeling, to particular thoughts and mental and biological conditions and a variety of movements" (Goleman, 2013, p. 373). In 1990, Dr. Peter Salovey of Yale University and Dr. John D. Mayer of New Hampshire University described their concept of emotional intelligence. According to these scholars, emotional intelligence has arisen as the awareness of thoughts, desires, power, and ability to reason. The three aspects of emotional intelligence, P. Salovey and J. Mayer's claim, are the evaluation of the mental state, control of emotion, and the capacity to use feelings as intelligence.

The emotional intelligence definition has been used to define emotional qualities, such as "regulated personality, the ability to adjust and adumbrated, interpersonal conflicts overcome, perseverance, sensitivity, and respect" (Mayer, Salovey, 1997). Psychology and sociology are two different approaches in the case of measuring emotions where every discipline evaluated and varied their preferences. Mostly emotional intelligence consists of two words emotions and intelligence. Emotion refers to the cognitive thought associated with human psychology which is assessed and has a serious effect on an individual's psychology which can be shown physically through facial expression, gestures, postures, etc. and the reaction may result in specific action to match with the emotion, which implies on individual own emotion (Bagozzi et al., 1999). Emotions are a combination of physiological perception, incitement, and experimental systems (Salovey, Mayer, 1990) some examples of emotions are fear, anxiety, happiness, anger, surprise, and frustration (Voola et al., 2004) provides an insight into the effect of EI on firm performance in terms of its competitive advantage.

Taking the Resource-based View (RBV) as the framework in which this correlation has been found out they view that leadership capability is related to strategic change and competitive advantage. Leadership capability in turn affected by the core constructs of EI such as individual Employees' emotional behavioral and cognitive elements. The study found out that the reasons for differences in competitive advantage gained by the company are indirectly related to its employee's leadership capability developed through the dimensions of EI (Salovey, Mayer, 1989) developed a framework for understanding EI, a set of constructs that represent the expression of emotion in oneself another, regulation, and control of the same. They defined social intelligence and differentiate between social and emotional intelligence. Conceptualizing EI in the form of appraisal and expression, regulation, and utilization of emotion in oneself and others, P. Salovey and J. Mayer bring out the skills that represent high EI at these levels. Measures such as AST (*Affect Sensitive Test*), CARAT (*Communication*

of Affect Receiving Test), and PONS (*Profile Of Nonverbal Sensitivity Test*) are used for understanding the criteria under each construct. This study has been a pioneer in the understanding of EI as a method of research that has been conducted by researchers based on this study. Many principles and practices of Organizational Behavior and Human resources are based on this EI concept. C. S. Wong and K. S. Law developed a scale called (WLEIS) with 16 items on a Likert scale that measures expression, recognition, regulation, and application of Emotional intelligence in performance. It is based on the Ability model of EI. The item strongly correlates to constructs of EI and evaluated by different researchers as per validity in EI measuring. C. S. Wong and K. S. Law construct the validity of EI and its potential utility for management studies, review the differential aspect of Emotional intelligence in the scale and argue that to establish the construct validity of EI (Wong, Law, 2002).

It is needed to segregate and demonstrate its independence from other similar concepts that are analogs to the concepts of EI. The construct validity was established through factor analysis of EI related measures that included personality and social intelligence. Secondly, it was also established through a multi-trait method matrix (MTMM) with self and other ratings of EI. The two studies conducted in Singapore and Belgium earlier provided the database for evidence against the convergence of EI and personality dimensions. They proved that EI is directly related to job performance at the workplace despite similar personality traits. K. M. Ng with colleagues (2008) evaluated Wong and Law's scale of EI by applying it to a sample of international college students through a web-based survey making a confirmatory factor analysis they examined the factorial invariance of *Wang and Law EI scale* (WLEIS) the study supported the psychometric property of the scale as a measurement of EI an international college student. More recently N. Libbrecht with colleagues studied the measurement invariance of the WLEIS across Singapore and Belgium it was established that explains that the scalar invariance model was fully supported for both the countries and examined factor correlation for expression, recognition, regulation of emotion (Libbrecht et al., 2014). However, the use of emotion was shown to be non-variance across cultures. A. Mehrabian (2000) made a broad-based measurement of individual success potential which he named Emotional intelligence conducting a factor analysis of 31 individuals of different measures and concluded that EI is a segment of IQ and is devoid of certain personality factor as well as 10 factors.

Akgün with colleagues studied the impact of EI capability along with learning capability influencing firm performance through product innovation they concluded that the organization level of emotional capability includes freedom to display experience and identifying emotions (Akgün et al., 2007). This affects organizational outcomes in terms of product innovation. Secondly, the level of emotional capability in the firm will also influence the firm's learning capability comprising of managerial learning capacity that influences firm performance through product innovation. P. Qualter, J. I. Ireland, K. J. Gardner (2010) the scale that has been used in this paper is Schutte self-report EI scale (SSREI) developed by N. S. Schutte, J. M. Malouff, N. Bhullar (1998) is the most widely used measure of EI and is based on the ability model of EI. It has low inter-correlation with personality factors and social intelligence factors demonstrated in its discriminate validity checks done by a plethora of researchers assessed the (SSREI) scale through confirmatory factor analysis and exploratory factor analysis on a group of male offenders (Bastian et al., 2015; Ke et al., 2020; Qualter et al., 2010). They demonstrated the four factors of EI such as expression, awareness, and optimism, and understanding the emotions of others can be an alternative to the original factors after their modification for a group of male offenders. This is because the population taken here does not belong to the normal distribution.

H1: *Positive relationship between the construct of EI on overall Organizational Performance.*

Table 1. Summary of Empirical study of EI and Organizational Performance

Author (year)	Variables	Method	Findings
P. Salovey and J. Mayer, 1989	Organization performance	Conceptual model	Nonverbal Sensitivity Test are used for understanding the criteria under each construct. This study has been a pioneer in the understanding of EI was a method of research that has been conducted by researchers based on this study
C. S. Wong and K. S. Law, 2002	Measurement of EI	(WLEIS) scale developed	Four constructs are evolved like expression, recognition, regulation, and application of Emotional intelligence in the performance
Wong, Law, Song, 2004	Utility for management study	Construct validity used Multi trait matrix method (MTMM)	They proved that EI directly related to job performance at the workplace despite similar personality traits.
K. M. Ng et al., 2008	Performance	The WLIES scale was used to predict students' EI level and used confirmatory factor analysis	The study supported the psychometric property of the scale as a measurement of EI in international college students
Libbrecht, de Buckeleer, and Lievens, 2014	EI and performance	WLIES scale used for survey used correlation	Fully supported for both the countries and examined factor correlation for expression, recognition, regulation of emotion. However, the use of emotion was shown to be no variance across cultures.
A. Mehrabian, 2000	Intelligence Quotients	The survey method used factor analysis and correlation	All the factors positively correlated except emotional empathy, emotional thinking, and affiliative tendency with a relationship, physical, work, and overall success.
Akgun et al., 2007	Learning capability, product innovativeness, firm performance	Personally administered Questionnaire used in 250 industrial firms in turkey	Emotional intelligence has a positive impact on the willingness to learn securely, and emotional skill has a positive impact on productivity growth through a mediating influence of learning power.
Qualter, Ireland et al(2010)	Schute self-report Emotional intelligence Questionnaire used and exploratory and confirmatory factor analysis	Questionnaire method used by taking 225 male offenders to measure the emotional functioning	Social environments and experiences that trigger emotions that vary, and that an EI measure unique offenders and known offenders.

Firm Performance

K. Ghalandari with colleagues (2012) demonstrated the effect of EI on job performance and organizational commitment using the simple linear equation and multiple hierarchical regressions they demonstrated that Emotional labor strategies influence job performance of individual outcome and organizational outcome leads to an organizational outcome. M. Ng with colleagues (2014) demonstrated the mediating role of work locus of control among nurses, using a cross-sectional design to investigate the relationship among EI and OCB concluded that EI correlated positively with OCB and negatively with mental health in nurses. Al-Azzam (2015) demonstrated the relationship between EI and the transformational leadership style to enhance the effectiveness of decision making in the public health sector. They concluded that those five types of transformational leadership were not found to be correlated with decision-making effectiveness EI correlated with enhancing decision-making. A. Choudhry and A. Usma (2012) investigated the role of EI in employees and their performance. They used a scale to measure performance consisting of 16 items through a five point

Likert scale. The study was used Pearson correlation and linear regression analysis for the valuation of data. They found that an employee's job performance can be judged through their EI scores.

H2: *Emotional intelligence has a positive and direct impact on and organizational performance.*

Psychological Resilience

Resilience represents the special attributes that make it competitive against future adversity. Research on the last 20 years has shown that longevity is a multidimensional feature that varies according to context, place, age, gender, and cultural experience, as well as within an individual subject to different circumstances of life (Garmezy and Rutter, 1985; Rutter et al., 1985; Seligman and Csikszentmihalyi, 1985; 2000; Werner and Smith, 1992). One hypothesis established the variation, and the model (Richardson et al., 1990; Richardson, 2002) may have been proposed by longevity-seeking colleagues. It starts with a bio-psychological psychological equilibrium ("homeostasis"), an adaptation of body, mind, and spirit to present conditions that last a lifetime. External and inside stressors are often present, and the ability to cope with these events is affected by both positive and poor adaptation to previous disturbances. Creation as per D. Jackson with colleagues starting in the 1800s, the idea of resilience continues today (Jackson et al., 2007). However, most of the resilience studies conducted up to now has focused on children and youth (Bonanno, 2004).

An understanding of the role of corporate resilience and workers in organizational research has recently emerged from analyzes of successful settlements (Example: Harvey, Blouin, Stout, 2006), showing that this concept is applicable and relates to workforce performance (Youssef, Luthans, 2005). Resilience is described as the capacity to restore, heal, and improve socially, academically, and despite being subject to extreme physiological abilities Condition 5 (Csikszentmihalyi, 1999). Taken as one of its dimensions resilience has been verified to systems such as Hope, Trust, or Optimism as a separate but linked psychological capital component (Luthans, Avey, Patera, 2008) (Luthans et al., 2006). A feeling of hope and endurance is associated with coming back from failure or transition (Earvolino-Ramirez, 2007), indicating that it is not only the ability to deal with a traumatic or challenging circumstance but the potential to recover. Tamera with colleagues (2013) aimed at the investigation of the relationship between EI and Psychological Resilience in which the study majorly highlighted the influence of ability-based EI on the stress process. Authors also examined EI ability model to find out the challenge as a result which increases positive and decreases negative effects and evoked psychology. 126 numbers participants were included in the study for the determination of result regression and correlation analysis used. The study provides predictive validity that EI facilitate psychological Resilience.

The resilience of the society at large

News is alarming about the coronavirus pandemic, with an overwhelming number of new cases and fatalities every day. Governments have imposed intense social distancing, quarantine, and lockout initiatives, and businesses are closing down, exposing the pressure and likely long-term adverse consequences on the economy and safety. Moreover, even if precise estimates of the financial damage determined by COVID-19 in Europe, preliminary analyzes show that the continental GDP will fall substantially (Fernandes, 2020). Those are certainly stressful times, particularly when the stressor is fresh, the lack of notice currently precludes planning and pre-adaptation, the absence of antidotes or vaccines, and the uncertain long-term health and social consequences of the virus. It's unclear how the pandemic will impact our future lifestyle, and when and if we will resume our normal lives. Such omnipresent uncertainty makes it difficult to plan for the future and therefore creates greater psychosocial stress.

H3: *Emotional Intelligence has a positive and direct on organizational performance through Psychological Resilience.*

Methods

Sample

The study identified a group of 103 nurses from different six private as well as public hospital respondents from India. Only female nurses are included in the sample. The majority of those interviewed were 25–31 age groups.

Measures

Firstly reliability was tested for all the variables and the Cronbach α -value was found out. The α -coefficient for all the variables taken together is found to be 0.97 for 48 variables which are way above the threshold of 0.70. That number is well above the threshold of 0.700. The result is demonstrations that the questionnaire items are clearly understood by the staff and are logically coherent (Nakip, 2013). For this study, though, each element has been used along its way to move to the exploratory component, the research that would be the next step of statistical analysis with no space for uncertainty.

Table 2. The output of factors Reliability

Factors	Questions	Cronbach Alpha value (α)
Organization Performance	08	.956
Emotional intelligence	25	.98
Psychological Resilience	15	.702

1. Emotional Intelligence measured using SSREI (*Schutte Self Report EI*) constructed by Schutte, Malouff, Hall, et al. (1998). There are four dimensions in the Questionnaire for EQ measurement they are Search for positive emotions (10 items), Emotion-consciousness (five items), Determine other's emotion (four items), and Concern for other people's emotions (six items). A total of 25 items were taken to measure EI with a Cronbach α -value of 0.98. this is well above the threshold value of 0.7. Such a high Cronbach alpha value denotes a high internal consistency of the items in the Questionnaire (Kirk, Shutte, Hine, 2008).

2. Organizational performance measured by eighth items developed through taken from different scholars (Guest, 1997; Paauwe and Boselie, 2005; Bartuseviciene and Sakalyte, 2013). Cronbach α value for eight items is determined at 0.841. All variable measured using five points Likert scale which range from "1" (Strongly disagree) to "5" (strongly agree).

3. Psychological Resilience is measured by 15 items developed by K. M. Connor and J. R. Davidson, (2003). Reliability of scale is found to be at Cronbach α 0.702 used five points Likert scale starts from "0" (not true at all) to "4" (true nearly all of the time).

Results

This study was aimed at identifying and predicting the relationship between EI and OP with the mediating effect of psychological resilience through correlation analysis and regression analysis. The survey was conducted by distributing Questionnaires to nurses of different public and private hospitals located at Bhubaneswar in Odisha through various means like the internet, goggle form and via email, some of them given personally. A total of 150 numbers of the questionnaire was distributed out of which 74 were returned and 103 have come valid. Pearson's correlation applied to identify the relationship between different sub construct of EI like to try and use positive thinking, constructive thought and knowledge of the emotions, motivation, and acceptance of other people's

emotions and knowing others' emotions with organization performance, psychological resilience, and EI as a whole. Table 3 demonstrates the coefficient correlation of respective variables below.

Table 3. Correlations analysis of variables

Variables	SUPE	PCAE	ODEO	UEO	OP	EI	PR
Seeking and using positive emotion	1.000	.735**	.799**	.676**	.670**	.711**	.781**
Good thought and emotional perception	.735**	1.000	.804**	.834**	.813**	.832**	.732**
Optimism and how others' feelings are determined	.799**	.804**	1.000	.745**	.780**	.821**	.734**
Understanding the emotion of others	.676**	.834**	.745**	1.000	.822**	.858**	.633**
Organization Performance	.670**	.813**	.780**	.822**	1.000	.803**	.638**
Emotional Intelligence	.711**	.832**	.821**	.858**	.803**	1.000	.685**
Psychological Resilience	.781**	.732**	.734**	.633**	.638**	.685**	1.000

Note: ** — Correlation is significant at the 0.01 level (2-tailed).

The result of the study shows in table 3 that all the sub construct of EI i.e. seeking and using positive emotions, constructive thought and knowledge of other people's emotions, motivation, and deciding emotions, and, lastly, knowing others' emotions are correlated with another variable like organization performance, psychological resilience and emotional intelligence as a whole.

Firstly seeking and using positive emotion has a high correlation coefficient value of 0.799 with determining the emotion of others, the next highest value appeared with psychological resilience which is 0.781. The second sub-constructs positive consideration and awareness of emotion has a high value of 0.834 with understanding the emotion of others. Optimism and determining the emotion of others have a high coefficient value of 0.821 which surprisingly came out with EI. Understanding the emotion of others also has a high impact on the same variable that is EI with a coefficient value of 0.858. Organizational performance has a high impacted correlation with positive consideration and awareness of emotion with a value of 0.813 and understanding the emotion of others 0.822. EI has the highest coefficient value of 0.858 which is correlated with understanding the emotion of others. Psychological resilience has a high coefficient value of 0.781 which is seeking and using positive emotion.

Table 4. Regression analysis of Models 2^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	β		
(Constant)	-.214	.206		-1.041	.301
Resilience	.017	.087	.018	.196	.845
1 Seeking and using positive emotions	-.017	.116	-.016	-.148	.883
Awareness of Emotions	.296	.124	.263	2.383	.019
Determining the emotion of others	.307	.103	.291	2.992	.004
concern for Emotion for others	.414	.096	.396	4.304	.000
R²	.795	Corrected R ²	.784	F	75.066

Note: a. Dependent Variable: OP.

In the above regression model 1 table 4, all the sub-factors of EI and psychological resilience, and organization performance have been investigated. This analysis includes five sub-independent variables that affect the dependent variable: seeking and using positive emotions, awareness of emotions, determining the emotion of others, concern for the emotion of others, and psychological resilience. The result arising from the predictor and dependent variable indicated that concern for other emotion, determining the emotion of others, and awareness of emotional factors are influences organization performance by the value of 79.5% of changes in organization performance which three individual variables described in the result. Seeking and using positive emotions and psychological

resilience is deficient as a significant factor in affecting organizational efficiency. So unless analysts focus on beta levels, the highest value is found to be .396 for the emotions of others. In the model, which is the F value 75.06, the error rate of relevant predictor variables is below 5%.

Table 5. Regression analysis Model 2^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	β		
(Constant)	-.230	.189		-1.216	.227
2 Awareness of Emotions	.300	.114	.266	2.632	.010
Determining the Emotions of others	.306	.088	.290	3.467	.001
Concern for the emotions of others	.411	.094	.394	4.369	.000
R^2	0.891	Corrected R^2	.788	F	127.620

Note: a. Dependent Variable: OP

In the above-stated table, the sub-factors on the constructs of EI are tested in this Regression analysis model. Findings in the analysis included a total of three independent variables and one dependent variable. Emerging factors have shown that concern for the emotion of others, determining the emotion of others, and awareness of emotional factors also has an impactful influence on organization performance. Such three independent factors describe 89% of shifts in organizational performance. In this model, the beta value obtained a maximum value of 0.394 for the emotion of others and the F value consists of 127.620, less than 5% is the standard percent error of a substantial independent variable.

Table 6. Regression Analysis Model 3^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	β		
(Constant)	-.062	.192		-.324	.747
3 Emotional Intelligence	1.007	.090	.945	11.196	.000
Resilience	-.075	.081	-.078	-.927	.356
R^2	.777	Corrected R^2	.772	F	173.876

Note: a. Dependent Variable: OP.

To interpret the findings obtained from the research in a literal and correct manner, some additional study is considered required. An appropriate regression analysis was carried out such that considers potential shading results. All variables with all of their sub-factors previously included in the latest analysis the regression analysis took its place as a single top element in the report. Or bring things another way, EI, and psychological resilience were supplemented without subdividing into sub-factors in the report. The result of this analysis shows that two factors are EI and psychological resilience strongly impact organization performance without any subdivision of factors.

The explanation factor ratio of two predictor variables for predicted organization performance was specified as 77.7%. the explanation for the rate of decrease appears to have been more important for staff according to the previous chart as sub-factors of EI and psychological resilience have been explored in-depth separately when we move through the study more thoroughly the finding would be more positive. When performing a superficial analysis the coefficient of determination decreases. Even if in the study the psychological resilience has an effect on Organization Performance with a beta coefficient -0.078 . the main influence arises from EI from a beta value of 0.945. Shutte EI scale five sub-constructs has been used for prediction of EI in which three come out relevant for predicting organization performance those variable are i.e. awareness of emotions, determination of emotions of others and concern for others emotions are proved to be strong and natural where organization performance affected directly or indirectly through employee performance where EI

is given priority and staff is conscious about the circumstances. The result is confirmed true by the analysis of correlation and multiple regression.

Principal component factor Analysis

Principal component factor analysis is used to identify the EI and psychological resilience factors that have an impact on organization performance for employees or nurses who work in hospitals. This will help the senior manager and human resource management to manage the employees with less conflict based on the factors which are high factor loadings in this study.

Emotional Intelligence

The KMO value is 0.802 which means the correlation between the pairs of variables and the factor analysis as the methodology for data reduction is recommended. The Bartlett sphericity test is used to assess the null hypothesis with no substantial difference between the two matrices and the identity matrix observed for the co-relations. Eigen values reflect the number of variances referred to as the factor. The findings suggested that three components are capable of explain the difference at 57.167 percent.

Table 7. Principal component factor Analysis

Questionnaire item	Component					
	1	2	3	4	5	6
When I'm in a good mood I find it easy to solve the problem	.86					
I use a good mood to help myself deal with problems/obstacles	.82					
I'm looking for activities that will make me happy when I'm in a positive mood.	.85					
I identify my emotions quickly, as I feel them	.56					
When I change my emotion I seem to change my views about important issues		.79				
When someone else asks me about an important event in his / her life, I almost feel like I witnessed the event myself		.76				
I find it hard to comprehend other people's nonverbal messages.			.72			
I have a hard time knowing why people behave the way they do			.66			
I know when to talk to someone about my issues				.69		
I learn the feelings people feel from looking at their facial expressions				.73		
I know of non-verbal messages which I send to others				.78		
Management is encouraging me to put effort to increase productivity					.69	
I am confident that my organization is providing all facilities to deliver the best level of service quality to patient					.84	
My superior encourages me to introduce a lot of innovative ideas					.75	
My organization has a formal system of communication that reduces conflicts					.71	
I can adapt to change						.85
I have a close and secure relationship with others.						.82
I can cope with anything that comes up to me						.82
I assume that past achievement confides in new challenges						.85
I believe coping with this strengthens my confidence						.88
I always put in the best effort no matter what may be the situation						.88
When things look hopeless, I give up						.82
I know where to seek help						.88
I like to take the lead in tackling problems						.88
I can handle unpleasant feelings						.82
Feel proud of my achievement						.87

The various EI factors are loaded into four groups they can be named as factor 1 i.e. search for positive emotion, factor 2 i.e. change of emotions, factor 3 i.e. obtaining others emotion, factor 4 i.e. Accepting others emotion. This indicates in the study that the hospital nurses are seeking

positive emotions from others i.e. superiors, subordinates, patients, etc. change in emotion appears as because they are facing a different kind of patient from a different state of mind, a culture so it is quite obvious that change of emotion is another important factor for hospital nurses. Acquiring and understanding others emotion can be said to be foremost duty of nurses here others refers to main patients.

Organization Performance

In the case of organization performance, the KMO value lies at 0.81 which shows factor analysis as a technique for data reduction is appropriate. Eigenvalue indicates that one part can clarify the difference of 58.67%. It indicates that eight variables of Organization performance that are somehow directly or indirectly are not recognized by a procedural system. The factor which is included in principal factor analysis can be named Organization Facilities.

Psychological Resilience

All the eigenvalue of each item are higher than 0.60 which is an acceptable form of every item, namely the item coming highest eigenvalue in the category of resilience, like quick in adapting to change, good interpersonal relationship, always ready for new challenges, and also believes in fate others are mentioned in the below Table 7. Almost every item has above 0.80 eigenvalues of each item of psychological resilience. Thus it can be termed as the factor as highly resilient for the pandemic COVID19. It shows that the nurses of different hospitals are proficient in taking on new challenges, they are also competent in adapting to any situation, they can recognize their strengths and weaknesses, and also they can treasure good humor during bad times.

Conclusion

The findings are very important for managers of hospitals, head nurses, nurses, and also for researchers in this study of research, which has been investigated that EI and PR have significant influence over organization performance. The amount of EI a nurse of a hospital has developed significantly impacts organization performance as a major part of the hospital nurses act as the central pillar of hospitals so they have a sense of understanding and can critically analyze patient behaviors and minimizes issues within the territory. As discussed earlier this study going to help the hospital managers for managing the emotions of nurses who work under him / them. So the manager regulates the development of further coordination and collaboration between workers and the formation of a teamwork spirit. Employees work without bringing effort and stress into corporate where there is low conflict, a moderate atmosphere is felt gathers momentum through their popularity, as well as their company results. If managers consider employee feelings, remind workers that emotions are a resource for management, not an element of company error that does not pose a deficit in moments of crisis, they increase the quality of work of employees, allowing them to succeed in their professional competence fields.

Similarly, if employees understand their emotions as they obtain more information, and even if they think differently, it can have a huge impact on the success of their working lives. In their ability to confirm the rules and procedures of the company, we are parallel to our emotional wisdom to be able to handle the new tasks offered, to be able to stay in contact with other people who work properly. It was identified within the framework of the study that only variables of organizational success in which nurses think positively and about individuals and make full choices with their emotions were ineffective. In other words, nurses or staff are not focused on purely other emotions rather they act logically at the time of decision making. Emotions are merely a tool of assistance used for organization, particularly they require optimum decision making at a time of crisis.

Another independent variable used in this study is psychological resilience. EI is connected directly to resilience according to A. R. Armstrong, R. F. Galligan, and C. R. Chichley (2016). In tough situations in life, we view resistance as a defensive attribute. The emotionally aware actions in critical situations may be resilient, stronger dealing with the cognitive demands of traumatic experiences. Thus in context to my research, it can be concluded that enhancing a person's resilience would rely on a person's EI. In relevance to my research work findings, this can be assumed that these nurses are making use of EI in their work platform for performing their best. They are attending their duty in such a podium where any time a small mistake can contaminate them with this viral disease. They are self-motivating them, keeping a positive mindset, and serving selflessly to the contaminated ones. Indirectly the use of emotional intelligence has contributed to the best possible service that could have been provided to human life during such a pandemic situation.

References

- Akgün, A. E., Keskin, H., Byrne, J. C., Aren, S. (2007). Emotional and learning capability and their impact on product innovativeness and firm performance. *Technovation*, 27(9), 501–513.
- Al-Azzam, Z. F. (2015). The effects of perceived transformational leadership style and emotional intelligence on enhancing the effectiveness of decision making in public health sector. *International Journal of Advanced Research*, 3(12), 1665–1682.
- Altındağ, E., Köseadağı, Y. (2015). The relationship between emotional intelligence of managers, innovative corporate culture and employee performance. *Procedia-Social and Behavioral Sciences*, 210, 270–282.
- Armstrong, A. R., Galligan, R. F., Critchley, C. R. (2011). Emotional intelligence and psychological resilience to negative life events. *Personality and Individual Differences*, 51(3), 331–336.
- Bagozzi, R. P., Gopinath, M., Nyer, P. U. (1999). The role of emotions in marketing. *Journal of the academy of marketing science*, 27(2), 184–206.
- Bartuševičienė, I., Šakalytė, E. (2013). Organizational assessment: effectiveness vs. efficiency. *Social Transformations in Contemporary Society*, 1(1), 45–53.
- Bastian, V. A., Burns, N. R., Nettelbeck, T. (2005). Emotional intelligence predicts life skills, but not as well as personality and cognitive abilities. *Personality and individual differences*, 39(6), 1135–1145.
- Bonanno, G. A. (2004). Loss, trauma, and human resilience: have we underestimated the human capacity to thrive after extremely aversive events? *American psychologist*, 59(1), 20.
- Chaudhry, A., Usman, A. (2011). An investigation of the relationship between employees' emotional intelligence and performance. *African Journal of Business Management*, 5(9), 3556–3562.
- Chen, Q., Liang, M., Li, Y., Guo, J., Fei, D., Wang, L., Zhang, Z. (2020). Mental health care for medical staff in China during the COVID-19 outbreak. *The Lancet Psychiatry*, 7(4), e15–e16.
- Chew, Q. H., Wei, K. C., Vasoo, S., Sim, K. (2020). Psychological and coping responses of health care workers toward emerging infectious disease outbreaks: A rapid review and practical implications for the COVID-19 pandemic. *The Journal of clinical psychiatry*, 81(6), 0–0.
- Connor, K. M., Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and anxiety*, 18(2), 76–82.
- Csikszentmihalyi, M. (2000). The contribution of flow to positive psychology. In J. E. Gillham (Ed.). *The science of optimism and hope: Research essays in honor of Martin E. P. Seligman* (387–395).
- Earvolino-Ramirez, M. (2007, April). Resilience: A concept analysis. In *Nursing forum*, Vol. 42, No. 2 (73–82). Malden, USA: Blackwell Publishing Inc.
- Fernandes, N. (2020). *Economic effects of coronavirus outbreak (COVID-19) on the world economy*. Available at SSRN 3557504.

- Gardner, H. (1983). *The theory of multiple intelligences*. Heinemann. New York, NY: basic Books.
- Garmezy, N. (1993). Children in poverty: Resilience despite risk. *Psychiatry*, 56(1), 127–136.
- Ghalandari, K., Mortazavi, S., Abbasi, S., Jogh, M. G. G. (2012). The effect of emotional labor on emotional exhaustion in banking services: The role of Iranian emotional intelligence. *Research Journal of Applied Sciences, Engineering and Technology*, 4(12), 1794–1800.
- Goleman, D., Boyatzis, R. E., McKee, A. (2013). *Primal leadership: Unleashing the power of emotional intelligence*. Harvard Business Press.
- Goleman, D. (1998). *Working with Emotional Intelligence*. United States: Bantam Books.
- Greenberg, N., Docherty, M., Gnanapragasam, S., Wessely, S. (2020). Managing mental health challenges faced by healthcare workers during covid-19 pandemic. *BMJ*, 368.
- Goleman, D., Boyatzis, R. E., McKee, A. (2013). *Primal leadership: Unleashing the power of emotional intelligence*. Harvard Business Press.
- Guest, D. E. (1997). Human resource management and performance: a review and research agenda. *International journal of human resource management*, 8(3), 263–276.
- Harvey, S., Blouin, C., Stout, D. (2006). Proactive personality as a moderator of outcomes for young workers experiencing conflict at work. *Personality and individual differences*, 40(5), 1063–1074.
- Jackson, D., Firtko, A., Edenborough, M. (2007). Personal resilience as a strategy for surviving and thriving in the face of workplace adversity: A literature review. *Journal of advanced nursing*, 60(1), 1–9.
- Ke, T., Barlas, J. (2020). Thinking about feeling: Using trait emotional intelligence in understanding the associations between early maladaptive schemas and coping styles. *Psychology and Psychotherapy: theory, research and practice*, 93(1), 1–20.
- Kirk, B. A., Schutte, N. S., Hine, D. W. (2008). Development and preliminary validation of an emotional self-efficacy scale. *Personality and individual Differences*, 45(5), 432–436.
- Law, K. S., Wong, C. S., Song, L. J. (2004). The construct and criterion validity of emotional intelligence and its potential utility for management studies. *Journal of applied Psychology*, 89(3), 483.
- Libbrecht, N., Beuckelaer, A. D., Lievens, F., Rockstuhl, T. (2014). Measurement invariance of the Wong and Law Emotional Intelligence Scale scores: Does the measurement structure hold across far Eastern and European countries?. *Applied Psychology*, 63(2), 223–237.
- Luthans, F., Avey, J. B., Patera, J. L. (2008). Experimental analysis of a web-based training intervention to develop positive psychological capital. *Academy of Management Learning & Education*, 7(2), 209–221.
- Luthans, F., Vogelgesang, G. R., Lester, P. B. (2006). Developing the psychological capital of resiliency. *Human resource development review*, 5(1), 25–44.
- Malouff, J., Schutte, N. S. (1998). Emotional intelligence scale scores predict counselor performance. In *Annual Convention of the American Psychological Society*, Washington, DC.
- Mayer, J. D., Salovey, P. (1997). What is emotional intelligence. *Emotional development and emotional intelligence: Educational implications*, 3, 31.
- Mayer, J. D., Caruso, D. R., Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, 27(4), 267–298
- Mayer, J. D., Salovey, P., Caruso, D. R. (2004). Emotional Intelligence: Theory, Findings, and Implications". *Psychological inquiry*, 15(3), 197–215.
- Mayer, J. D., Salovey, P., Caruso, D. R. (2004b). A further consideration of the issues of emotional intelligence. *Psychological inquiry*, 15(3), 249–255.
- Mehrabian, A. (2000). Beyond IQ: Broad-based measurement of individual success potential or" emotional intelligence". *Genetic, social, and general psychology monographs*, 126(2), 133.
- Nakip, M. (2013). *Pazarlama Araştırmalarına Giriş (SPSS Uygulamalı) (Introduction to Marketing Research (SPSS Applied)) (4. Basım)*. Seçkin Yayınları.

- Ng, K. M., Wang, C., Zalaquett, C. P., Bodenhorn, N. (2008). A confirmatory factor analysis of the Wong and Law Emotional Intelligence Scale in a sample of international college students. *International Journal for the Advancement of Counselling*, 30(2), 131–144.
- Ng, S. M., Ke, G. N., Raymond, W. (2014). The mediating role of work locus of control on the relationship among emotional intelligence, organisational citizenship behaviours, and mental health among nurses. *Australian Journal of Psychology*, 66(4), 207–215.
- Paauwe, J., Boselie, P. (2005). 'Best practices... in spite of performance': just a matter of imitation?. *The International Journal of Human Resource Management Group*, 16(6), 987–1003.
- Petzold, M. B., Plag, J., Ströhle, A. (2020). Dealing with psychological distress by healthcare professionals during the COVID-19 pandemic. *Der Nervenarzt*, 91(5), 417–421.
- Qualter, P., Ireland, J., Gardner, K. (2010). Exploratory and confirmatory factor analysis of the Schutte Self-Report Emotional Intelligence Scale (SSREI) in a sample of male offenders. *The British Journal of Forensic Practice*, 12(2), 43–51.
- Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of clinical psychology*, 58(3), 307–321.
- Richardson, G. E., Neiger, B. L., Jensen, S., Kumpfer, K. L. (1990). The resiliency model. *Health education*, 21(6), 33–39.
- Rutter, M. (1985). Resilience in the face of adversity: Protective factors and resistance to psychiatric disorder. *The British journal of psychiatry*, 147(6), 598–611.
- Salovey, P., Mayer, J. D. (1989). Emotional intelligence. *Imagination, cognition and personality*, 9(3), 185–211.
- Schneider, T. R., Lyons, J. B., Khazon, S. (2013). Emotional intelligence and resilience. *Personality and Individual Differences*, 55(8), 909–914.
- Seligman, M. E., Csikszentmihalyi, M. (2014). Positive psychology: An introduction. In *Flow and the foundations of positive psychology* (279–298). Springer, Dordrecht.
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and individual differences*, 25(2), 167–177.
- Thorndike, E.L. (1920). Intelligence and its uses. *Harper's Magazine*, 140, 227–235.
- Voola, R., Carlson, J., & West, A. (2004). Emotional intelligence and competitive advantage: examining the relationship from a resource-based view. *Strategic Change*, 13(2), 83–93.
- Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., Ho, R. C. (2020). Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *International journal of environmental research and public health*, 17(5), 17–29.
- Werner, E. E., Smith, R. S. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Cornell University Press.
- Wong, C. S., Law, K. S. (2002). Wong and Law Emotional Intelligence Scale. *The Leadership Quarterly*, 13, 243–274.
- Yao, H., Chen, J. H., Xu, Y. F. (2020). Patients with mental health disorders in the COVID-19 epidemic. *Lancet Psychiatry*, 7(4), e21.
- Youssef, C. M., Luthans, F. (2005). A positive organizational behavior approach to ethical performance. *Positive psychology in business ethics and corporate responsibility*, 1–22.

Received 07.02.2021

Вклад эмоционального интеллекта сотрудников в эффективность медицинской организации во время COVID-19: опосредующая роль психологической устойчивости

ПАНИГРАХИ Сучитра

МОХАНТИ Сасмита

Сикша О Анусандхан университет, Одиша, Индия

Аннотация. Эмоциональные проявления работников здравоохранения становятся серьезной проблемой в академическом дискурсе текущего десятилетия. В отчете Всемирной организации здравоохранения (ВОЗ) подчеркивается важность эмоциональной стабильности среди медицинских работников как фактора, влияющего на работу организации сектора здравоохранения. *Цель.* В этом исследовании изучается роль эмоционального интеллекта в производительности, опосредованная психологической устойчивостью, в рамках пандемической ситуации COVID-19 в медицинских организациях в округе Одиша, Индия. *Метод.* Выборка из 103 медсестер государственных и частных больниц Одиша была опрошена с помощью шкалы эмоционального интеллекта Н. Шютте. Шкала включает такие субшкалы, как восприятие эмоций, облегчение познания, понимание эмоций и управление эмоциями. *Выводы.* Регрессионный анализ показал, что эмоциональный интеллект работников здравоохранения может быть предиктором эффективности организации в отрасли здравоохранения. Медсестры различных больниц умеют решать новые задачи, они также умеют адаптироваться к любой ситуации, они могут распознать свои сильные и слабые стороны, а также могут ценить хорошее настроение в трудные времена. Факторный анализ методом главных компонент показал, что восприятие и понимание эмоций, а также облегчение познания используются для общей регуляции работы больницы. *Ценность результатов.* Уровень эмоционального интеллекта, который демонстрируют медсестры в больнице, значительно влияет на эффективность организации, поскольку большая часть медсестер выступает в качестве центральной опоры больницы, они имеют чувство понимания и могут критически анализировать поведение пациентов, тем самым сводить к минимуму проблемы на территории больницы. Это исследование поможет руководителям больниц управлять эмоциями медсестер, которые работают под его или их руководством.

Ключевые слова: эмоциональный интеллект, показатели эмоционального интеллекта, шкала измерения эмоционального интеллекта Шютте, психологическая устойчивость, эффективность организации, субъективная производительность, медсестры, COVID-19, пандемия.