

**Impact of Nurses Personality on Patients' Satisfaction; an Occupational  
Focus on Mediating and Moderating Mechanisms**

**By**

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*In the name of Allah,  
the most Gracious, the most Merciful.*

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## **DEDICATION**

With lots of respect, this work is dedicated to my beloved mother (late),

May Allah rest her soul in peace!

**(Ameen)**

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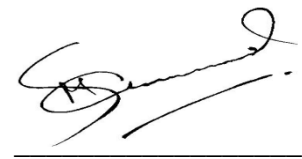
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## **Abstract**

This study explores the dyadic relationship between nurse and patient in public sector hospitals of Pakistan. The relationship was addressed in terms of analyzing hospitalized patients' satisfaction suffering from certain dread diseases and nurses' personality traits, emotional intelligence, job involvement and spirituality at work. Data was collected in time lags through questionnaire filled by 408 nurses providing services to corresponding patients, and analysis of the data was performed through SPSS 21 and AMOS 21 latest techniques.

Findings indicate that extraversion, conscientiousness, agreeableness and openness to experience are positively associated with patients' satisfaction. However, neuroticism is negatively associated with patients' satisfaction and does not affect emotional intelligence. Apart from neuroticism, the mediating effect of emotional intelligence was found between extraversion, conscientiousness, agreeableness, openness to experience and patients' satisfaction.

Moreover, contrary to the belief that spirituality at work does not moderate the emotional intelligence and patients' satisfaction relationship but job involvement positively moderate the said relationship. Theoretical and practical Implications along with future research for health care sector occupations in developing countries are discussed.

*Keywords:* Personality Traits, Patients' Satisfaction, Emotional Intelligence, Spirituality at Work, Job Involvement, Health Care Sector.

# **CHAPTER # 1**

## CHAPTER # 1

### 1. INTRODUCTION

#### 1.1. Background

The research on personality is as old as human's psychology itself; and researchers continue to deliberate implication of individual's characteristics on predicting behavior (Epstein & O'Brien, 1985). Since 1920s the studies of Hartshorne, May, and colleagues on personality explained the in-depth interest of researchers to encompass a broad trait of personality in predicting individuals' behavior (Hartshorne & May, 1928; Hartshorne, May, & Maller, 1929). The recognition of personality traits in predicting behavior was initially explored by Allport through a list of 17,953 traits by examining individual differences (Allport, 1937). Scholars continue to investigate the antecedents of individuals' behavior through traits perspective for better outcomes at workplace in particular and life in general (Rotter, 1954). The focus on personality traits revealed commendable theories and concepts in the form of need for achievement (McClelland, 1961); self-esteem (Rosenberg, 1965) and growth need strength (Hackman & Oldham, 1975); which provides immense prophecy about individual's behavior effecting others around.

However, the studies by Dudycha (1936) investigated the generalizability of individuals' behavior across situations. Such investigations fueled the debate about the consistency of personality traits over predicted behaviors by trait theorists (Allport, 1931) or to consider behaviors as situational bound by situationistis (Thorndike, 1906). The significance of personality traits on the basis of individual differences was questioned by researchers due to the impact of situation on individuals' behavior affecting others. Mischel (1968) argued that behaviors are situational specific and confined personality traits are not sufficient enough to

predict behavior. The absence of unified definition of personality trait prevailed till 1970s due to counter arguments by trait theorists and situationists (Bandura, 1969, 1977).

Later on in the mid of eighties, researchers started to converge on a manageable numbers of personality traits and models. Staw and Ross (1985) presented the studies on dispositional sources of behaviors but on the flip side Allport's list of 17,953 traits were trickled down into sixteen personality factors by Cattell (1943, 1945) which eventually evolved as five factor model by Tupes and Christal (1961). This five factor model was later replicated by many researchers (e.g.; Borgatta, 1964; Costa & McCrae, 1987; Digman, 1990) commonly known as Big Five personality traits (Goldberg, 1990). Researchers endorsed the unified taxonomy of personality through the utilization of Big Five personality dimensions across individuals (John & Srivastava, 1999). Apart from criticism from few researchers on Big Five, it is the most accepted and widely used personality taxonomy comprising extraversion (e.g.; companionable, talkative and assertive), conscientiousness (e.g.; disciplined, reasonable, obedient), neuroticism (e.g.; anxious, angry, stressed), agreeableness (e.g.; flexible, cooperative, trusting) and openness to experience (e.g.; creative, intellectual, thinker), which allows researchers to examine significant relationships between personality traits and outcomes oriented behaviors of employees working in distinct professions (Barrick & Mount, 1991) .

Since 1980s till present several reviews and Meta analysis conducted by different researchers endorsed the consistency of big five model of personality and its impact on diverse job related outcomes (Judge et al., 2002). Trait theorists encourage using personality traits to predict behaviors effecting individuals in diverse manner (Ciarrochi et al., 2000). The impact of personality traits were explored in different directions, for example, Wille, De Fruyt and De Clercq (2013) emphasized the influence of personality traits on career stages which include



occupational selection, work performance and adjustment. Ho et al. (2004) investigated the impact of personality dimensions on individual's responses to broken promises. Raja et al. (2004) inspected the employee's personality impact on psychological contracts. Nikolaou and Tomprou (2007) argued the impact of personality traits on individuals' inducements at workplace and its effect on peers. Judge et al. (2002) reveals the influence of big five personality dimensions on job satisfaction. Furnham et al. (2005) explained the relationship between personality traits and work values effecting own self and colleagues.

Conversely, the situationaists criticize prediction of behavior on the basis of confined big five personality traits and focused on the influence of situation to predict behaviors. Barrick and Mount (1993) explained the role of autonomy between two big five personality traits and job performance. They argued that employees possessing conscientiousness or extraversion personality trait perform better in less restricted situations thus, seeks high autonomy. Similarly, Stewart (1996) argued that under situation of better rewards structure the extraverts' sales performance increases. Thus, apart from individual differences, situation does influence execution of behaviors. Funder (2001) argued that attention needs to be drawn on all elements of trait encompass personality, situation and behavior. Raja et al. (2004) argued that further research needs to be carried out on personality traits for better prediction of individual behaviors across situations. He added that the relevance of specific situation in organizing personality traits in own-self to create impact on other individuals need to be investigated as well.

The focus on specific context to unveil the influence of big five personality traits on diverse occupations was considered in the Meta analysis conducted by Barrick and Mount (1991). They consider occupational role of police officers, sales executives, skilled/semi skilled labors and front desk officers to determine consistent relationship between behaviors in terms of

service providence and personality traits in diverse situations. The findings of the Meta analysis revealed that inconsistent service quality was evident as per personality traits executed in diverse occupational settings. Paunonen and Ashton (2001) also recommended that big five personality trait varies across situations and occupational roles which resultant in broad service quality standards. Thus, the personality of an individual depicts certain behaviors in line with situational demands and influence service quality

Barrick and Mount (2001) further explained that personality traits varies across situations and affect service standards in accordance to the occupational roles. They emphasized that conscientious and extravert individuals depict significant service quality across all occupations, agreeable individuals showed moderate service performance in structured occupations, openness to experience individuals prefer services in aesthetic occupations and neurotic individuals showed inappropriate services in demanding occupations. Therefore, service providence across different professions is influenced by personality traits. Bono and Vey (2007) argued that the relevance of personality traits, situations and behaviors generate diverse service standards across occupational roles, which needs to be investigated in light of the worth of service quality for customers' satisfaction.

Accordingly, the regulation of personality traits by own-self is more sensitive in jobs relating to customer satisfaction (Farrell, Souchon, & Furden, 2001). In service sector, the way employee manage his/her personality traits depict behaviors which influence feedback mechanisms of customers' satisfaction (Frei & McDaniel, 1998). Researches revealed that customer satisfaction through appropriate personality trait was focused in banking sector, telecom sector, hospitality industry, transportation sector and automobile sector, which unfolds the worth of service quality for sustainability and development. However, across multiple

researches to investigate the affect of big five personality traits on service providence in diverse contexts and sectors, the consideration on health care sector is relatively limited (Lanjananda & Patterson, 2009).

The health care sector is generally researched in terms of physicians' expertise and technological advancements to treat dread diseases of patients (Ford et al., 1997). The performance of health care providers was mainly investigated to analyze their commitment levels to stay affiliated with respective hospitals (Bellou, 2009) but the level of service quality provided in terms of patients' satisfaction was rarely investigated. Such rare investigations effects patients' preference to recommend same hospital to others. This reveals that focus on personality traits and corresponding behaviors of health care providers was limited, which directly affects patients' satisfaction particularly in developing countries as compare to developed countries.

Consequently, across many health care occupations in dynamic health care sector, the health care service provided by nurse attained much attention due to direct dealing of nurses with patients. Nurses supposed to meet patients' expectations in order to convert their ill-being into well-being. The dynamic personality of nurses depicts uncertain behaviors in accordance with patients' situation (Lanjananda & Patterson, 2009). Hence, nursing profession being patients' satisfaction oriented is significant in organizing personality traits in own-self to exhibit expected behaviors across situations (Darby & Daniel, 1999). The caring behavior of nurses originated from personality traits is the hallmark to be successful in this profession. The health care managers need to focus on in-depth understanding of personality traits of nurses to nurture their behaviors for attaining patients' satisfaction in diverse situations

However, the significance of nursing profession could be analyzed by considering the services of Florence Nightingle during Crimean War in 1854. She introduced nursing as a

profession and applies interventions to establish formal education programs to disclose significance of nursing care for the development of society (Woodham-Smith, 1951). The first ever platform for in-depth study about nursing profession was established by Florence Nightingale in 1860 at St. Thoma's Hospital, London named as Nightingale School of Nursing (Pavey, 1953). Later on the United States Civil War in 1861 also stimulates the need for professional nursing care. In 1868, just three years after the end of Civil War the American Medical Association strongly endorsed the development of nursing schools to exploit nurse care for patients' recovery and satisfaction (Larson, 1997). Eventually, the profession of nursing gained momentum and licensed nurses were produced by respective schools of nursing.

The implication of nurse care for patients' satisfaction was acknowledged in developing countries as well and legal standing was provided to gain maximum benefit from nurse caring competencies (Pearson & Peels, 2002). The expansion of technology and latest trends were linked with nursing educational programs and nursing profession became more challenging across the globe. The expertise in modern technology was considered to be the hallmark in curing patients in certain hospitals (Henly & Moss, 2007). With the development in medical care, educated nurses needed to abet in the care of patients with progressively more difficult situations and needs. Thus, nurses' personality traits started influencing patients' level of satisfaction. Williams (1994) defines patient satisfaction as the customer's personal evaluation of expectations fulfillment during treatment in hospital. The handling of nurses primarily contributes more in patient's satisfaction due to care expected from nurses.

The nursing profession being influenced by situational handling of patients is more challenging to assess the impact of nurses' personality traits (Wille et al., 2013). The confined personality traits are not sufficient to predict behaviors of nurses as situation varies due to

diverse condition of patients (Larrabee & Bolden, 2001). Researchers' interest to analyze nurses' personality traits increases, which supports the concept of situation, personality and behavior relationship. Consequently, the research on patients' satisfaction gained thrust as patients evaluate the hospitals on the basis of services provided particularly by nurses, as per their personality characteristics, interpersonal skills, emotional handling and technical abilities (Bryant & Graham, 2002). The patients' believe that it is the nurse who provides post operational treatment to make them feel better in all aspects of health care facilities and such believe strengthens the evaluation of personality traits of nurses to provide appropriate services to patients (George et al., 2013)

Nurses' right assessment of situation with appropriate personality trait could lead to expected behaviors in attaining patients' satisfaction. Bellou (2009) argued that service delivery is essential in many occupations but nursing profession attains much attention due to critical needs of patients in diverse situations, which could lead to improve quality standards of hospital. Therefore, service providing ability of nurses in accordance to their personality traits and situational evaluation was emphasized by researchers in health care sector (Bruce, Bowman & Brown, 1998).

The theory of human caring (Watson, 1985, 2008) provides the basis to examine nurse caring behavior in harmony to their personality traits for achieving patients' satisfaction across situations. Watson (1985) addressed caring as a personality driven behavior originated by the provider and ended at certain level of receivers' satisfaction. Therefore, it is anticipated that nurses with manageable level of personality traits are more likely to place themselves in meeting patients' satisfaction which in turn provide sustainability to hospitals (Block, 2001).

Moreover, the trait activation theory (Tett & Guterman, 2000) also provides the reasoning to examine personality traits of nurses because trait-relevant situational cues were faced by nurses which resultant in expression of their specific trait. Such situational cues were originated from demanding hospital environment, social aspects of nursing profession and task oriented facets which effects patients' satisfaction. The trait activation theory compliments caring behavior of nurses with appropriate utilization of trait in accordance to patients' situation (Woods et al., 2013). The nurse-patient interaction is manifested by trait activation theory as they indulge in a process to express trait when presented with trait-relevant situations cues.

Hence, Ozer and Benet-Martinez (2006) argued that in order to handle diverse traits as per situational demands in hospitals the theoretical underpinning of nurses' personality traits' influence on patients' satisfaction needs to be investigated. Welch (2010) also recommended that investigation on nurses' personality traits in terms of patients' satisfaction needs to be pursued for developing service quality standards in health care settings. Thus in light of above said it is evident that though service quality of nurses was emphasized to meet satisfaction of patients in dynamic health care sector, the existing literature does not broadly explain the association between big five personality traits of nurses and patients' satisfaction. *So, the first gap in literature this study is going to address is the theoretical and empirical association between the big five personality traits of nurses and patients' satisfaction.*

Although the association between big five personality traits of nurses and patients' satisfaction is pertinent in health care sector but several Meta-analysis argued that the influence of big five personality traits on creating meaningful outcomes has gone through the occurrence of moderators and mediators (Barrick & Mount, 1991; McCrae, 1993). In summarizing the Meta-analysis Ciarrochi et al. (2000) explained that the unaccounted variance in correlations between

big five personality traits and outcomes is well above 25%, which endorsed the presence of mediators and moderators. Such mediators and moderators are situational or context specific and hold up the concept of personality, behavior and situation relationship by Judge et al. (2002). Mischel's (1968) idea of strong versus weak situations, the person-organization (PO) fit model (Chatman, 1989), the person-environment (PE) fit model (Murray, 1938; Pervin, 1968), the attraction-selection-attrition framework (Schneider, 1987) and the concept of trait activation process by Tett and Guterman (2000) underline the interactionists perspective to explain that how personality traits mold outcome based behaviors in diverse situations.

From interactionists' perspective, the research in contextual variables is still in its infancy (Funder, 2001) which needs to be explored in making inferences about personality-outcomes relationship at occupational level. Tett and Guterman (2000) asserted that factors related to task and the social environment form discrete context, which can influence personality-outcome relationships for desired satisfaction. Discrete context refers to specific situational variables that influence behavior through mediating and moderating mechanisms across relationships (Tett & Burnett, 2003). This discrete context includes task context and social context; whereas example of task context include meaningful work, autonomy, and affiliation with job and social context include social compactness, social emotional handling and regularizing direct social influence (Johns, 2004)

Therefore, while focusing on social context the application of Job Diagnostic Survey (JDS) was emphasized by Hackman and Oldham (1975) to determine how individuals differ in their responses in dealing with others while addressing emotional aspects of their jobs. The dealing with others (DO) approach in jobs is used to address emotional handling for appropriate behaviors with others. The desired behavior through emotional regularization leads to attain

satisfaction of others and influenced by personality dispositions (Lyubomirsky et al., 2005). The recognition and regulation of emotions in self as per circumstances is vital in accomplishing satisfaction of others (Gannon & Ranzijn, 2005).

Such consideration on emotions revealed the worth of the concept emotional intelligence. This concept was originated from the work of Gardner (1983) who empathized that across multiple intelligence levels the personal intelligence formed by interpersonal intelligence and intrapersonal intelligence leads to perform better. The in-depth investigation on such intelligence levels disclosed the worth of emotions and the term emotional intelligence was developed to examine the ability of managing emotions by Salovey and Mayer (1990). Other than ability of individuals to manage emotions Goleman (1995) explained emotional intelligence in terms of competency to analyze and regulate emotions as per situational demands and social interactions. Later on the social aspects of managing emotions were focused by Bar-on (1997) and he disclosed emotional-social intelligence concept to handle emotions in building good social relations. Moreover, the importance of individuals' trait to exhibit appropriate emotions was emphasized by Petrides, Frederickson and Furnham (2004) who focused on the need to identify personality dispositions for right emotional response with right individual at the right time and place.

Researchers over the last several years have examined the sectors under which emotions are more varied and found strong evidence in service sector because of the direct dealing with customers by handling emotions in self and others (Wolf, Miller, & Devine, 2003). Across many service sectors, the recognition and regulation of emotions in health care sector is deeply focused. Specially nursing profession in dynamic health care sector attained must attention for execution of appropriate emotions as per situational demands and patients' satisfaction (Wolf et



al., 2003). Nursing, as one of the challenging profession in health related jobs, is full of emotional handling due to dealing with patients, particularly suffering from dread diseases (Aradilla-Herrero et al., 2014).

Facing patients expressing their pains, agitation and suffering during long working hours demands more attention towards emotional regulation in an intelligent manner by nurses (Smith, Profetto-McGrath & Cummings, 2009). The lack of control on emotions can lead to irreversible negative effects on both nurses and patients. The two factor theory of emotions by Schachter and Singer (1962) signifies the need to label the emotions in right manner by acknowledging personality traits to execute behaviors in diverse situations. The physical arousal is not sufficient to generate appropriate emotional response as labeling of emotions lead to actionable outcomes.

Therefore, nurses with inadequate understanding of personality traits could not generate meaningful outcomes for patients, unless they recognize and regulate emotions for needful actions. Needleman et al. (2002) argued that awareness of emotional intelligence needs to be spread in service delivering jobs specifically in health care settings where service delivery is directly propositional to competitive advantage. Moreover, the mediating role of emotional intelligence needs to be investigated in social context at workplace to attain satisfaction of all concerned. Quidbach and Hansenne (2009) stated that empathetic abilities of nurses alongside with self awareness and self management skills need to be explored for appropriate execution of emotional intelligence at workplace. Akhter et al. (2000) proposed that health care sector in underdeveloped country like Pakistan need to be explored in context of addressing mediating mechanisms in nurse and patient relationship. ***Thus, this study explores the second theoretical gap by empirically investigating the mediating effect of emotional intelligence between big five personality traits of nurses and patients' satisfaction in public sector hospitals of Pakistan.***

In addition to the importance of social context of job the focus on task context in today's workplace settings is more challenging than before due to technological advancements and enhanced working styles (Barrick, Mount & Judge, 2001). The attainment of satisfaction of others through effective performance at workplace is more difficult in diverse situations of health care sector. This signifies the task context highlighted by Hackman and Oldham (1976) in their Job Characteristic Model (JCM), which describes the level of job involvement of employees in changing circumstances as well. The degree to which an employee internalized the values about work and feels motivated to perform better is known as job involvement (Kanungo, 1982).

Dolke and Srivastara (1988) stated that meaningful features of job and autonomy at workplace inculcate job involvement in challenging situations. The more an employee performs well under varying conditions, the more he/she will be able to gain satisfaction of all concerned. In service sector particularly in health care settings the job involvement is crucial to gain satisfaction of all concerned (Brown, 1996). Therefore, employees working in health care settings are supposed to consider their work as a central life interest to remain involved in their jobs.

Mainly, the nurses working in diverse hospital settings perform well, if they perceive their work as a central life interest and remain involved in their job (Frone, Russell & Cooper, 1995). The active participation in job is thought to ease the achievement of self-respect and recognition of nurses' emotions in diverse situations. The nurses' negative emotions decrease with more involvement in job (Knoop & Robert, (1995). Lazarus (1991) explained that the ability of nurses to comprehend patients' satisfaction relies on emotions of interest to respond patients' problems with persistent behavior. Such behavior demands job involvement of nurses to respond all challenges with courage, knowledge and ability (Yan & Su, 2013).

Manojlovich, Laschinger and Heather (2002) recommended that job involvement increases self-concept and self esteem of nurses by gaining satisfaction of patients. The inner zeal of nurses to be identified with high satisfaction of patients is supported by job involvement. The socio analytic theory to convert identity into desired reputation compliments job involvement of nurses to achieve preferred status in health care sector (Farrell, Souchon & Furden, 2001). Consequently, the job involvement of nurses provides better performance and commitment to hospitals in assorted health care settings.

Dolke and Srivastara (1988) argued that certain antecedents of job involvement were emphasized and it also acts as a predictor for certain organizational outcomes but moderating affect of job involvement is limited. Frone, Russell and Cooper (1995) stated that job security, job performance and job satisfaction of employees increases due to high involvement in job and vice versa. Probst and Tahira (2000) proposed that the causal relationship of job involvement with different variables was addressed, but its moderating affect in situational context attained limited attention. ***Hence, this study has third theoretical contribution to empirically examine the moderating role of job involvement between emotional intelligence of nurses and patients' satisfaction.***

In attaining patients' satisfaction in health care sector the interactionist's perspective stimulates to embrace spirituality at work (Deldado, 2005) as well. The Job Characteristic Model (JCM) by Hackman and Oldham (1976) signifies the need to inculcate spirituality at work (task context) to motivate individuals to perform better through meaningful features of their job. The interest for spirituality at work has grown tremendously among medical professionals over the past years (Puchalski, 2001). In conceptualizing health and healing issues the consequence of spirituality of nurse has now beginning to influence medical profession (Dein, 2005) to achieve

patients' satisfaction. Spirituality is foremost multifaceted and appears to be overlapped with religion but it is a notable matter of investigation at workplace (Pawar, 2009).

The concept of spirituality has frequently being interlinked with religion but they are eventually becoming distinct due to diverse implications (Deldado, 2005; Tuck, Alleyne, & Thinganjana, 2006). Gotsis and Kortezi (2008) argued that spirituality does not necessarily engage religion. The religious affiliation is entirely different from spirituality at work. A number of researchers' defined spirituality at work as a feeling of being connected with self, others and the entire universe (Howard, 2002) and numerous researchers explained spirituality to find higher meaning in life to be considered as higher being. Harrington et al. (2001) argued that expression of emotions, ethics and values through behaviors is derived from individual's spirituality. The organizational researchers are continued to struggle for exploring concrete meanings of spirituality. Thus, across many definitions of spirituality Harlos (2000) provides the operational definition of spirituality at work which is endorsed by many researchers (Hayden, Barbuto, & Goertzen, 2008). He explained that spirituality at work refers to gain inner experience through behavioral analysis, finding meaning in work and exploring a sense of connectedness with others.

Another concept that is tangled with spirituality at work is ethics. The unethical behavior particularly in health care sector and lack of emotional handling has led to an increasing awareness about the need of spirituality at workplace (Giacalone & Jurkiewicz, 2003). Johnson (2004) explained that ethical trainings or tight rules and regulations had not been sufficient to spread ethical behavior at workplace. He argued that it is the sense of meaningful work, feeling others emotions and an intellect of community which serves to provide ethical understanding at workplace. These aspects are mainly derived by understanding importance of spirituality at

workplace (Convey, 2005). Hence, spirituality at work provides the way forward to overcome unethical behavior, therefore, ethics and spirituality at work are different concepts with distinct implications (Mohamed, 2004).

Spirituality at work stimulates to endow with satisfaction of others by controlling depression and anxiety at workplace. Servan-Schreiber (2003) emphasized on the need of spirituality at work for nurses to meet expectations of patients, resulting in patients' satisfaction. Being spiritual enhances inner life satisfaction, attaining meaningful work and promoting high commitment to the profession, which led to attain satisfaction of patients by nurses. Stuart, Deckro and Mandle (1989) emphasized more on the moderating role of spirituality at work as it signifies the task context of the job by enhancing/diminishing the interactions among other relationships. The increase in spirituality at work makes the work more meaningful and creates emotional attachment with job characteristics, which eventually spread satisfaction to all concerned (Elkins et al., 1988)

In nursing research the identity and reputation of nurses is keenly focused due to diverse nursing standards, spiritual concerns and service delivery patterns in different health care settings (Emblen & Halstead, 1993). The socio analytic theory (Hogan, 1983) provides basis for understanding spirituality at work coupled with personality traits and emotions. Harrison (1993) argued that individuals concern about gaining status in life, getting along with other individuals and realizing their position in life by utilizing spiritual and emotional aspects in personality. He added that in order to meet individual concerns the identity and reputation of individual is deeply focused. Hogan (1986) stated that individuals work hard in life to convert their identity into desired reputation. Therefore, the identity of nurses supported by patients, motivate them to

achieve desired reputation by realizing their job dynamics in terms of inner life, meaningful work and sense of community (McGlone, 1990).

This perspective stimulates to inculcate spirituality at work for nurses to achieve satisfaction of patients. Tischler, Biberman and McKeage (2002) endorsed to explore the significance of spirituality at work to gain satisfaction of patients by controlling emotions and personality characteristics. Researchers showed that spirituality at work has a significant effect on attaining satisfaction level and it is far enriched than other management concepts (Emblen & Halstead, 1993). Hence, the interrelationship of spirituality at work with many concepts was addressed but the study of its moderating effect is limited. *Therefore, this study has fourth theoretical contribution to empirically examine the moderating effect of spirituality at work between emotional intelligence of nurses and patients' satisfaction.*

## **1.2. Statement of the Problem:**

This study addressed the theoretical and practical problems regarding big five personality traits relation with patients' satisfaction under various moderating and mediating mechanisms. In theoretical aspect the problem regarding personality-situation-behavior relationship is explored in terms of analyzing behaviors originated due to trait-relevant situational cues, which is in accordance with trait activation theory by Tett and Guterman (2000). The difficulty that emotions could be managed in a right manner, if an individual analyze physiological arousal of emotion and utilize cognitive skills to label the emotions as per situation is addressed through two-factor theory of emotions by Schachter and Singer (1962). Moreover, the dilemma that how individuals' identity could be converted into individuals' reputation for better performance and accurate self-awareness is also examined through socioanalytic theory by Hogan (1983).

In practical aspect the influence of big five personality traits is considered on service sector occupational roles. Particularly the interactionists' perspective to consider the influence of situational variables in analyzing personality traits for predicting behaviors is focused which was inadequate across service sector occupations. The personality-situation relevant cues in occupations of health care sector were rarely examined in perspective of providing satisfaction to patients. The personality traits assessment of nurses to exhibit desired behaviors is crucial because of patients' satisfaction during dread disease treatment in hospitals. Therefore, this study conducts a comprehensive empirical analysis of the impact of nurses' big five personality traits on patients' satisfaction and upholds the dyadic relationship between nurse and patient.

On the other hand the concept of patients' satisfaction was mainly researched in perspective of attaining happiness in ideal situations but specific satisfaction level with nursing care during the dread disease treatment of patients has seldom examine by researchers. The ill-being state experienced by patients during dread disease treatment has gone through certain mediating and moderating mechanisms between nurse and patient dyadic relationship. Thus, this study examined the mediating role of emotional intelligence and moderating role of spirituality at work along with job involvement of nurses for achieving patients' satisfaction.

Furthermore, this study explores the contextual settings of public sector hospitals in Pakistan by focusing on nurses' awareness about their personality traits, emotional intelligence, spirituality at work and job involvement to attain patients' satisfaction in challenging situations. The patients' satisfaction mainly researched in developed countries for improving quality standards of hospitals is investigated in developing country like Pakistan, where dyadic relationship between nurse and patient was rarely examined to augment quality of hospitals.

### **1.3. Research Questions:**

The main purpose of this study is to explore the dyadic relationship between nurse and patient in challenging contextual situations. The occupational mechanisms of nurses and satisfaction level of patients during dread disease treatment in public sector hospitals of Pakistan is deeply focused. Accordingly, in order to attain the purpose an effort is put forth to answer the following research questions:

#### **Research Question 1:**

How extraversion is related with patients' satisfaction and does emotional intelligence mediate the relationship between extraversion and patients' satisfaction?

#### **Research Question 2:**

How conscientiousness is related with patients' satisfaction and does emotional intelligence mediate the relationship between conscientiousness and patients' satisfaction?

#### **Research Question 3:**

How neuroticism is related with patients' satisfaction and does emotional intelligence mediate the relationship between neuroticism and patients' satisfaction?

#### **Research Question 4:**

How agreeableness is related with patients' satisfaction and does emotional intelligence mediate the relationship between agreeableness and patients' satisfaction?

#### **Research Question 4:**

How openness to experience is related with patients' satisfaction and does emotional intelligence mediate the relationship between openness to experience and patients' satisfaction?

#### **Research Question 6:**

How extraversion is associated with emotional intelligence?



**Research Question 7:**

How conscientiousness is associated with emotional intelligence?

**Research Question 8:**

How neuroticism is associated with emotional intelligence?

**Research Question 9:**

How agreeableness is associated with emotional intelligence?

**Research Question 10:**

How openness to experience is associated with emotional intelligence?

**Research Question 11:**

How emotional intelligence is associated with patients' satisfaction?

**Research Question 12:**

Does job involvement positively moderate the relationship between emotional intelligence and patients' satisfaction?

**Research Question 13:**

Does spirituality at work positively moderate the relationship between emotional intelligence and patients' satisfaction?

**1.4. Research Objectives**

Following are the research objectives of this study:

- i. Examine the influence of big five personality traits of nurses on patients' satisfaction during dread disease treatment of patients in diverse hospital settings.
- ii. Recognition and regulation of emotional intelligence of nurses as a mediator between big five personality traits of nurses and patients' satisfaction.

- iii. Explore spirituality at work and job involvement as moderators between emotional intelligence of nurses and patients' satisfaction.
- iv. Inspect the dyadic relationship between nurses and patients in context of health care services in Pakistan.

### **1.5. Significance of the Study**

Researchers had investigated commendable outcomes of big five personality traits on the basis of individual differences. Majority of the research studies integrates personality traits to analyze its impact on organizational outcomes (Judge et al., 2002) but the application of personality traits in specific situation to predict behavior is still in its infancy (Funder, 2001). Therefore, this study is focused on impact of personality traits in health care outcomes by investigating nurses' personality traits effects on patients' satisfaction in diverse situations. The nurses' profession in health care sector of Pakistan is focused because it directly effects patients' satisfaction due to care received in unusual situations (Akhter et al., 2000). The nurse and patient dyadic relationship creates enormous outcomes for hospital managers to evaluate quality of health being provided by hospital. Zeidner and Hadar (2014) argued that in order to execute quality health care facilities, the balance in nurse and patient relationship acts as a medium to be competitive in dynamic health care sector. Thus, this study explore the satisfaction of patients derived through nurses' personality traits and help hospital administrators to make appropriate decisions for attaining competitive advantage in health care sector of Pakistan.

This study also addresses the occupational mechanisms between dyadic relationship of nurse and patient. The variation in big five personality traits and outcomes relationship is addressed by including mediator and moderators. Thus, nurses' personality traits assessment is

mediated with emotional intelligence of nurses to analyze harmonization of emotions with patients. The importance of patients' satisfaction for considering same hospital in future is obtained and spirituality of nurses at work is examined as a moderator. The zeal of nurses to be motivated and seek solutions of patients' problem with empathic gesture is also determined with job involvement as moderator. The parameters to assess nurses caring behavior is considered in this study in the form of emotional, spiritual and job involvement analysis, which act as a catalyst in future selection and retention of nurses to provide quality services for patients' satisfaction.

Furthermore, the health care sector of Pakistan is explored in unique context of nurses' personality, emotional, spiritual and job involvement analysis by evaluating patients' satisfaction during their dread disease treatment. This contextual analysis followed by empirical assessment shall provide guidelines to concerned administrators, regulatory bodies and councils to reconsider nurses' profession and patients' satisfaction.

#### **1.6. Trait Activation Theory :**

The trait activation theory (Tett & Guterman, 2000) acts as an over arching theory in this study, as it provides the basis to examine individuals' traits originated by handling certain situations. This theory reveals that individual's personality and situation interact together to influence behaviors. The trait-relevant situational cues stimulate behaviors to perform better. Such situational cues are stem from social or task oriented aspects of the job and uphold organizational values. As the dyadic relationship between nurse and patient inculcated several trait-related situational cues therefore; trait activation theory helps to investigate that how nurses engage in the process of trait activation when presented with uncertain situation of patients.

Nurses need to uphold hospital values and supposed to attain patients' satisfaction by meeting social and task oriented aspects of their profession. Nurses need to recognize emotions in own-self and regulate emotions of patients to attain their satisfaction with appropriate level of job involvement and spirituality at work. Thus, this study examine the nurses' personality traits in line with trait-related situational cues to gain patients' satisfaction by managing emotions, spirituality at work and level of job involvement in public sector hospitals of Pakistan.

# **CHAPTER # 2**

## CHAPTER # 2

### 2. LITERATURE REVIEW

#### 2.1. Big five personality traits and Patients' Satisfaction:

The appropriate understanding of the word 'Personality' could be analyzed by experiencing variety of behaviors at workplace due to interaction of distinct individuals (Epstein & O'Brien, 1985). The interaction among individuals reveals diverse interpretation of behaviors and indicates the need to tag behaviors with traits. However, traits vary among individuals and disclose behaviors which are personality specific (Costa & McCrae, 1987). These personality dispositions signify the need to pronounce similar traits to predict behaviors for better management. The research on personality dispositions was started in 1920s with the work of Hartshorne, May, and colleagues to assert a broad trait of personality to predict behaviors but such broad taxonomy of personality serves as a paradox (Hartshorne & May, 1928; Hartshorne, May, & Maller, 1929).

After in-depth studies of individual difference Allport (1937) presented list of 17,953 personality traits to predict behaviors. To explore distinct behaviors of individuals such broad personality traits were nourished into sixteen personality traits which were further classified into five factor model (Tupes & Christal, 1961) for effective utilization. This five factor model was replicated in many researches and provides convenience to predict behaviors as per expected personality trait (e.g.; Borgatta, 1964; Costa & McCrae, 1987; Digman, 1990). The sufficient applicability of five factor model cultivated the traits viewpoint and eventually it is known as big five personality traits (Goldberg, 1990). Among researchers the big five personality traits

consistency is widely accepted, as it acknowledges individual difference and helpful in predicting behaviors.

Later on researchers argued that consistent behaviors are irrational because of the influence of diverse situations on personality traits (Mischel, 1968). Behaviors are supposed to be predicted in unstructured environment as structured environments present defined behaviors which cannot be reliable. Hence, the interactionists approach to explore personality traits due to the influence of situations on behavior is emerged to predict behaviors (Funder, 2001). The essence of situational context to anticipate behaviors through big five personality traits gain endorsement by researchers to advance the study on personality traits and outcomes (Tett & Guterman, 2000). The big five personality traits are encouraged to generate novel outcomes by focusing more on situational variables to strength or weaken the personality and outcome relationship (Tett & Burnett, 2003).

However, the outcome affecting other individuals' satisfaction gained much attention rather than managing personality traits results into self-satisfaction (Ehrhart, 2006). The importance of others' satisfaction has been focused in many professions but nursing professions is significantly considered to gain patients' satisfaction. The health care regulators were deeply concerned about determinants of patients' satisfaction to improve quality standards of hospitals. Generally, the care received by patients leads to their feedback for level of satisfaction and this care is mainly provided by nurses in hospitals (Darby & Daniel, 1999). Thus, nurses behaviors derived from their personality traits are critically focused by researchers to spread care for patients. The situational handlings of patients by nurses through accurate assessment of own personality traits uphold the interactionists' perspective to investigate personality, situation and

behavior relationship (Ehrhart, 2006). This investigation of big five personality traits in connection to patients' satisfaction is explored in this study as under:

### **2.1.1. Extraversion and Patients' Satisfaction:**

Extraversion has appeared as a primary dimension of personality (Costa & McCrae, 1992a). Extraverts have the potential to express wide variety of behaviors as per circumstances, which is considered to be the main apprehension in the field of personality (Funder, 2001). Individuals possess extravert personality trait strive to pursue effective functioning across distinct areas and are able to perform well in challenging situations (Ozer & Benet-Martinez, 2006). The feelings of higher order positive affect makes extraverts much happier than introverts. The positive thinking of events in the surroundings makes extraverts feel positive, which lead them to execute appropriate behaviors. In accordance with affect-level model (Gross et al., 1998) extraverts requires less optimistic inspiration to feel positive experiences in life as compare to introverts.

Hence, the behaviors of extraverts are more reactive in nature as compare to introverts and this is endorsed by affect-reactivity model (Gross et al., 1998). The experience of same positive affect creates strong response of extraverts instead of introverts. This strengthens the roots of affect-reactivity model and extraversion personality trait in Reinforcement Sensitivity Theory (Corr, 2008). The sociability and energetic personality of extraverts guides them to act diligently and strongly with others to create meaningful outcomes. The reinforcement of positive behaviors in response to sensitivity of others' expectations makes extravert personality trait more special than other personality dimensions (Ozer & Benet-Martinez, 2006).



The care for other individuals in harmony to their expectations was deeply considered by extraverts. The positive social environment was developed mainly by extraverts due to their confident interaction with all other individuals (Lieberman & Rosenthal, 2001). The ability to behave as per other individual's requirement is extensively dealt by extraverts. Thus, occupations related to more social interaction seeks extraverts to perform their duties more effectively as compare of others. The service oriented jobs seeking satisfaction of others generally prefer extraverts to perform duties in order to attain satisfaction of clients (Heller et al., 2007). The positive motivation of extraverts strive them to gain satisfaction of own-self and others.

The caring behavior of extraverts with much sensitize stimulation was acknowledged in many professions but it is mainly considered in nursing profession due to strong influence of nurse behavior on patients' satisfaction. Rusting and Larsen (1997) explained that extraverts are energetic, sociable, predictable and confident, which supports them to attain satisfaction of others in dissimilar situations. Jang, Livesley and Vernon (1996) asserted that nurses with high extraversion gain lessons from negative events and enthusiastic to improve performance at workplace. The satisfaction of patients has been acknowledged by nurses who possess extravert trait. They treat patients with care and uphold the caring behaviors in challenging circumstances (Darby & Daniel, 1999).

The nurses with extravert personality trait develop good interpersonal relationship with patients and depict theory of human caring by achieving patients' satisfaction (Watson, 2008). The reinforcement of positive events has been effectively executed by extravert nurse as compare of introvert nurse. The sociality, energetic and confident characteristics of extravert nurse make them better performer as compare to other servicing staff in dynamic hospital environment (Watson, 2003). The nursing profession seeks extraverts to tackle patients with

confidence and care. Thus, it is anticipated that nurses with extravert personality trait apply efforts to attain satisfaction of patients and perform better in diverse situations.

**H1: Extraversion is positively associated with patients' satisfaction.**

### **2.1.2. Conscientiousness and Patients' Satisfaction:**

Conscientiousness personality trait was originated from six composite facets of capability, organize, obedient, thoughtfulness, self-control and achievement-striving, which makes it one of the consistent personality dimensions (Costa & McCrae, 1992). The first five facets replicates the “dependability” aspect of conscientiousness, where as sixth facet reflects the “ambitious” characteristic of conscientiousness (Hough, 1997). The self-confidence, sensibility and internal locus of control is high in individuals possess conscientious personality dimension. The well-organized, determinant and committed characteristics of conscientious individuals enables them to achieve goals with hard-work and devotion.

The two major aspects of dependability and achievement orientation in conscientious individuals are considered to be highly desirable in organizational context (Tett et al., 1999). The challenging circumstances have been tactfully handled by conscientious individuals and they are able to perform better in variety of job occupations. According to Mount and Barrick (1995) the best personality predictor of performance and intellectual achievement is conscientiousness. The conscientious individuals are adaptable to changing situations and they are capable to prepare themselves for a variety of jobs and expertise. The high scope jobs are highly admired by conscientious individuals and motivate them to achieve all job tasks for self-development and organizational growth (Judge & Ilies, 2002).

Consequently, across many occupations the nursing profession being considered as a high scope job is mainly adopted by conscientiousness individuals to perform better in dissimilar situations. The hospital regulators prefer conscientious personality traits in nurses; so that they can perform with confidence and dedication to attain satisfaction of patients (RNAO, 2008). Organ and Ryan (1995) explained that conscientiousness leads to perform extra role behaviors, which results in greater job satisfaction and performance. Therefore, the extra role behavior expected in nursing profession is depicted by nurse, who posses conscientious personality trait.

Researchers revealed that conscientious individual upholds star performance and illustrate motivation by accomplishing satisfaction in self and others (Judge et al., 1998). Hence, the greater scope of nurses' job motivates them to achieve patients' satisfaction, if conscientious personality trait is inculcated by nurse in diverse circumstances of hospital environment (Dempsey et al., 2014). The person-environment misfit generally originated from job stress and challenging job demands could be effectively managed by conscientious individual (Barrick et al., 1993). The high job stress in nursing profession mainly due to the mediating rule between patients' demands and hospital regulators' concerns could be successfully handled by conscientious nurse.

The better performance of conscientious employees facilitates them to receive more attention of top management, which can provide them better access to decision autonomy and resources allocation (Witt et al., 2002). Therefore, better access to resources and greater support of hospital's management will equip conscientious nurse to deal with situational demands more efficiently, leading to lower job stress and gain high satisfaction in self and others. The negative association between conscientiousness and job stress (Bossong, 1994) is carefully dealt by nurses who have greater self-control, coping abilities and thoughtfulness.

Hence, the responsible, gentle, obedient and submissive nature of conscientious individuals guides them to handle job stress and attain satisfaction in self and others (Zyphur et al., 2008). In order to be star performer in every aspect of job, conscientious individuals manage their work activities in correct manner. According to Block (2001) individuals with conscientious personality trait strive to solve problems and struggle hard to achieve satisfaction of others. Therefore, this study foresee that nurses who possess conscientious personality trait are good in treating diverse patients and do not let any worst experience to affect their performance at work. The loyalty, discipline, commitment and high achievement orientation of conscientious nurse could results in greater satisfaction of patients in dynamic hospital settings.

## **H2: Conscientiousness is positively associated with patients' satisfaction**

### **2.1.3. Neuroticism and Patients' Satisfaction:**

Neuroticism is one of the unique personality trait which is associated with stability of emotions. The negative emotions are associated with neurotic individuals as they act nervously, fearfully and unconsciously at workplace (Costa & McCrae, 1987). The pessimistic thinking, anxiety, distrustfulness, vulnerability and depression results in low self-esteem of neurotics (Judge et al., 1998). In most of the researchers the negative affectivity (NA) is interchangeably used with neuroticism. The self-efficacy of neurotics is inadequate which leads to risk aversion and negative behaviors at workplace (Watson & Tellegan, 1985). Hence, challenging jobs inculcating high self-esteem, social interaction and positive approach dispirit neurotics to be part of the organization.

The low self-esteem of neurotics stimulates them to purse jobs which are less challenging. The neurotic individuals are prone to influence by other individuals' experiences in

making career choices (Brockner, 1988). In stressful, challenging and demanding phases at work neurotic individuals felt it difficult to solve problems and seek other individuals to fix their problems (Roberts, Caspi & Moffitt, 2003). The occupational significance has not been considered by neurotic individuals and they took opinions in making occupational decisions. The decision making ability of neurotic individuals is dependent instead of being independent as per occupation. The high scope jobs generally considered as a burden by neurotic individuals. The lack of clarity of job characteristics and inability to meet uncertain demands of the job results in job dissatisfaction of neurotics (Larsen & Ketelaar, 1989). The fearfulness, nervousness, helplessness and uneasiness in neurotic individuals eventually results in unhappiness and comfortless life. Such individuals perceive satisfaction as a super factual phenomenon and consider themselves to be misfit in attaining satisfaction of others (Roberts, Wood & Smith, 2005). Judge et al. (2002) endorsed the inverse relationship between neuroticism and job satisfaction.

Therefore, if neuroticism personality trait is being applied in nursing profession then strong consideration of job satisfaction needs to be examined by hospital regulators. The dealing with others approach is weak in neurotic nurses which stimulates to observe nurse behavior in dynamic hospital settings (Al-Mailam, 2005). The high scope job in nursing profession entails high level of interpersonal skills. The expected behaviors are not executed by neurotic nurse, due to the worsening person-environment fit in demanding circumstances of patients (Berg & Danielson, 2007). The neurotic personality trait of nurses leads to jeopardize patients' treatment due to their inability in meeting patients' demands, which affects satisfaction of patients' in dynamic health care sector.

The simple job with less demanding tasks, inadequate social interaction and unstructured characteristics is generally preferred by neurotic individual. Thus, in case the patients expect less from nurse performing duties in hospital then the neurotic nurse able to perform well (Berg et al., 2012). The volunteer actions in jobs demanding extra role behaviors are considered to be inappropriate by neurotics (Goldberg, 1990). Apart from other jobs a nurse job in practical is ever demanding in terms of meeting patients' satisfaction in diverse situations (Al-Mailam, 2005). Therefore, this study predicts that neurotic nurses treat patients' opinion as personal attack and get nervous with painful condition of patients. In general, nurses with high neurotic personality trait are less likely to gain patients' expectations and satisfaction. Thus, based on above said findings this study seeks to appraise following hypothesis:

**H3: Neuroticism is negatively associated with patients' satisfaction.**

#### **2.1.4. Agreeableness and Patients' Satisfaction:**

The flexible, adaptable, interactive, trustworthy, supportive and empathetic characteristics highlight the agreeable personality trait of an individual (Costa & McCrae, 1988). The social interaction and interpersonal skill is emphasized in agreeable personality trait and individuals possess this trait are considered to be more empathetic with others (Tokar et al., 1998). The agreeable individuals assess others' expectations in appropriate manner to achieve satisfaction of others. The team work at individual and group level is effectively dealt by agreeable individual (Barrick et al., 2001) which leads to the achievement of individual and organizational goals.

Regardless of meaningful significance of agreeableness personality trait at workplace, the research on its association with organizational variables is limited. The agreeableness has not been considered an important variable for job satisfaction (Stewart & Carson, 1995). The self-

satisfaction and satisfaction of other individuals at workplace has rarely been investigated in context of agreeable personality trait. The jobs expecting extra role behaviors for attaining satisfaction of others silently require agreeable personality trait but lack of research in this domain affects performance outcomes of agreeable individual.

Siebert and Kramer (2001) contemplated that agreeable individuals are generally exploited at workplace and need strong motivation to attain high job satisfaction. The adaptable nature of agreeable individuals encourages them to act as per defined tasks and they are unenthusiastic to performance beyond job responsibilities. However, the friendly, flexible and fearless characteristics of agreeable individual are admired in jobs which restrain dealing with others (Jensen-Campbell & Graziano, 2001). The empathic abilities possessed by agreeable individual are acknowledged by employers who have been seeking individuals possessing caring behaviors for others at workplace. The job of nurse being considered as more empathic to understand patients' problems could be effectively managed by agreeable nurse.

Therefore, the lack of research on agreeable personality trait stimulates the opportunity to utilize this trait for improving performance at workplace. The aspects of this trait are encouraging to be investigated in service oriented jobs (Carlo et al., 2005) which entails high adaptability in changing conditions. Thus, nursing occupation being considered as major service leaning job (Gotlieb, 2002) may insist agreeable personality trait to deal with patients. The caring behavior expected from nurses could be possible through effective utilization of agreeable personality trait. The job scope of nurse could be better understood by in-depth focus on all aspects of agreeable personality trait, which may leads to achieve satisfaction of patients (Bellou, 2009). Hence, it is anticipated that the compassionate, tolerant and kind behavior of nurses due to agreeable personality trait helps them to develop satisfaction of patients in diverse situations:

#### **H4: Agreeableness is positively associated with patients' satisfaction**

##### **2.1.5. Openness to Experience and Patients' Satisfaction:**

According to Salgado (1997) an openness to experience personality trait explained the innovative, imaginative, intellectual and superior qualities in individuals. Such individuals would like to experience all stages of life and won't be disappointed from failures in life. The openness to experience individuals prefer jobs related to unstructured work environment, decentralized decision making and high in scope (Holland et al., 1993). The intrinsic motivation and satisfaction is much valued by openness to experience individuals. The defined characteristics of jobs were not considered by openness to experience individuals, due to high interest in innovative aspects of job (Reed et al., 2004).

The procedural ways to perform a job in organizational context was not followed by openness to experience individuals, which leads to poor relationship between openness to experience and job performance (Salgado, 1997). The openness to experience individuals desired to perform a job task in alternate ways rather executing conventional ways to achieve the self-satisfaction and satisfaction of others in different occupations. The openness to experience individuals lack in vocational clarity and they prefer to imagine possibilities in creating new vocations. Such individuals depict continuous commitment in career progression (Siebert & Kramer, 2001) and prefer innovative jobs to achieve high self-esteem in life.

The structured environment within the organizational context like in training sessions, conferences and meetings is not acknowledged by openness to experience individuals (Tokar et al., 1998). The poor relationship between organizational outcomes variables and openness to experience personality trait is mainly due to centralized controlling of employees. Such controlled organizational environment results in dissatisfaction of openness to experience



individuals, which affects satisfaction of clients in service oriented occupations (Barrick et al., 2001). The satisfaction of openness to experience individual emerges only in jobs which reveal high scope and such satisfaction level transmits to others for more achievement and growth (Minbashian et al., 2013).

Therefore, the high job scope in nursing profession to gain satisfaction of patients in diverse situation is generally preferred by openness to experience individuals. The desire to excel in job by executing creative ways in job dynamics is expected to be fulfilled by openness to experience nurse performing duties in hospital settings (Ginsberg et al., 2005). The positive approach of an openness to experience nurse provides motivation to dissatisfied individuals in challenging environment of hospital. Nurses who possess the trait of openness to experience are broadminded and creative. They are more inclined to implement alternative ways to serve a patient with quality standards (Needleman et al., 2002). Nurses who are high in openness to experience consider stressful patient encounters as opportunity to learn and grow (Lanjananda & Patterson, 2009). Hence, it is anticipated that the openness to experience personality trait of nurse stimulates to gain patients' satisfaction in challenging situations.

**H5: Openness to experience is positively associated with patients' satisfaction.**

## **2.2. Big five Personality Traits and Emotional Intelligence:**

Emotional intelligence can be outlined by the work of Aristotle who acknowledged such ability and described it in these words: "Anyone can get angry-that is easy. But to be angry with the right person, to the right degree, at the right time, for the right purpose, and in the right way – this is not easy". Better well being could be possible by emotional intelligence as it is "an array of non cognitive capabilities, competencies and skills that influence one's ability to succeed in coping with environmental demands and pressures" (Bar-On, 1997). People who have positive

emotional reactions to their responsibilities are more likely to be engaged in helping behaviors by griping negative emotions (Goleman, 1995). Therefore, utilization of emotional intelligence skills in different situations by acknowledging personality differences of others attains much attention, rather than treating emotional intelligence as an aptitude (Cote & Miners, 2006).

The individual differences in dissimilar situations were linked with recognition and regulation of emotional intelligence. The way individuals respond emotionally requires the right appraisal of emotions and situations (Mayer & Salovey, 1997). This requires a learned intelligence level, as contrasting to a propensity to behave according to inbuilt personality characteristics. Emotional intelligence provides the way to dig-out perception about one's self which varies across personality dispositions. The hierarchical levels of individual's personality reflect collection of self-perceptions and illustrate the significance of emotional intelligence (Brannick et al., 2009). Emotional intelligence reflects self-perceptions which are located at the bottom of personality hierarchies. Therefore, EI unleashes individual's perception of their own emotional abilities and compliments personality variations across individuals (Sevdalis, Petrides & Harvey, 2007).

The situational factors reflecting individual differences highlight the personality variations. The individual differences explained by big five model of personality supports emotional handling at workplace. Individuals behave and reveal specific traits of their personality. Salovey and Mayer (1990) narrowly focused on emotional skills but others researchers have written about emotional intelligence as a general capacity for social and emotional adaptation, or as an umbrella term to designate a wide array of competencies at workplace (e.g. Bar-On, 2000; Boyatzis, Goleman, & Rhee, 2000; Goleman, 1995, 1998). These

broader views foster social interaction and use of appropriate personality traits to predict certain levels of behavioral outcomes at workplace.

The notion that emotions craft appropriate intelligence and intelligence reveals certain emotions is linked with personality traits, as individual's personality provides the characteristic way to perceive, understand and manage emotions (McCrae & Costa, 1997). The better recognition and execution of emotions leads to the right assessment of personality trait in self and others. Such assessment of personality traits creates awareness about overlapping aspects of emotions and personality, which need to be explored for service oriented jobs in particular and other occupations in general (McCrae, 2000). The occupations of high social interaction need more recognition of emotions for appropriate handling of personality traits as per situation (Digman, 1990). The service oriented jobs like nurse in hospital seems to be much concern about emotional handling in self and others with right personality trait (Aradilla-Herrero et al., 2014). Thus, the deliberations about personality traits to extend the context for emotional intelligence to operate in diverse situations is reviewed and interpreted in this study as under:

### **2.2.1. Extraversion and Emotional Intelligence:**

Extraverts are sociable, confident, expressive, and friendly with others which lead them to recognize emotions in self and others during service interaction in diverse occupations (Judge, Heller & Mount, 2002). The positive thinking of extraverts helps them to be optimistic and encourage them to deal with negative emotions. According to Costa and McCrae (1992) extraverts are liable to act positively which reveals their emotional handling as per circumstances and because of this quality they experience satisfying interpersonal interactions at workplace. As compare to introverts the positive behaviors stimulates extraverts' performance and interactive skills on job. Extraverts are capable to manage stress due to positive social interface and positive

thought process and this inclined them to spread positive emotions in challenging situations (Cherry et al., 2014)

Rogers and Revelle (1998) explained that extraverts are good team players and energetic to perform beyond the routine assigned tasks. The positive attitude and behavior of extraverts make them to perform efficiently to achieve their endeavors with courage and determination (Olson & Weber, 2004). The negativity at workplace in particulate and life in general was not regarded by extraverts and they are enthusiastic to follow positivity for personal development. Their positive spirit stimulates them to act in align with emotional reactions of others. Gasper and Clore (2002) argued that affirmative emotions were depicted by extraverts and they are competent to deal others as per diverse emotional demands. The effective communication, caring behavior and proactive action of extravert individuals make them to achieve rewarding positions at workplace.

Roberts and Robins (2004) enlightened that extraverts are commendable in assessing others' emotions and possess strong empathic ability. They are not proficient in displaying fake emotions and are considered superior in occupations of service providers. The positive approach to get along with others enables extraverts to demonstrate right emotions which results in better outcomes (King & Broyles, 1997). Extravert personality trait in context of hospital environment demands more positive approach to deal with diverse patients. An extravert nurse possesses the ability to handle emotions by tackling stress and depression under any situation (Mount & Barrick, 1995). Extravert personality trait executed by a nurse does not portray fake emotions while interacting with patients and such nurses suppose to have the potential to coincide with satisfaction of patients (Smith, Profetto-McGrath & Cummings, 2009). Therefore, it is expected

that extravert personality trait of nurses supports them to manage emotions for patients' satisfaction

**H6: Extraversion is positively associated with emotional intelligence.**

### **2.2.2. Conscientiousness and Emotional Intelligence:**

Conscientious individuals are disciplined, obedient, responsible, committed, problem solver, well-organized and are consistent in achieving goals (Goldberg, 1993; Salgado, 1997) thus, willing to perform well at workplace. According to Costa and McCrae (1992) the conscientious individuals respect others at workplace and considered to be better performer in team work. The adaptable characteristic of conscientious individuals leads them to adjust in changing situations and to be submissive with other colleagues at workplace (Colquitt & Simmering, 1998). The performance rating of conscientious people is high as compare to neurotic people and they prefer to execute difficult tasks in organizational context. Despite any occupation the performance of conscientious people are high to achieve organizational tasks (Gellatly, 1996).

The positive thinking and disciplined orientation of conscientious people guides them to manage emotions in any occupation. Stewart (1999) explained the negative relationship between conscientiousness and negative emotions. The better performance and high commitment of conscientious people encourage them to be satisfied in their career and this leads to better emotional handling at occupational level (Hough, 1997). The liberty to depict negative emotions in occupations like debt collector, sales retriever and recovery officers was not considered by conscientious individuals and they prefer to handle all job tasks with constructive emotions (Holland, Johnston, Asama, & Polys, 1993). The conscientious individual personality provides

the context of being disciplined in organization to operate emotions in right manner at right time with right individual.

Conscientious people struggle hard to modify their feelings as per circumstances and own their work carefully (Solberg et al., 1994). The ability to meet organizational expectations with dutifulness, dedication and commitment is high in conscientious individual (Barrick et al., 2001). They maintain good social interactions and apply problem solving skills instead of displaying negative emotions in difficult situations. The flexible characteristic of conscientious people supports them to apply small effort in aligning positive feelings to control unconstructive emotions. According to Ones, Viswesvaran and Reiss (1996) the aspects of responsibility and care in conscientious individual stimulates them to deliver sincere emotions in order to meet expectations of others. The fake emotions were not executed by conscientious people, as they perceive that it may affect their service quality and social interactions resulting in bad performance (Reisenzein, 1983).

Consequently, the conscientious personality trait in nursing profession leads to display optimistic emotions which increase service quality in diverse hospital settings. Conscientious nurses are thoroughly focused to complete their tasks and able to regulate emotions to perform better. They analyze emotional responses of patients and perform as per patients expectations. They possess the ability to hold back unhelpful emotions and use intelligence to handle emotions (Wolf, Miller & Devine, 2003). The self-awareness and self-management tactics of conscientious nurses are creditable, which eventually results in handling of emotions in self and express appropriate emotions to patients. Thus, it is expected that in light of above said findings and two factor theory of emotions utilized to accurately label emotions for appropriate action is well executed by nurses, who possess conscientious personality trait.

## **H7: Conscientiousness is positively associated with emotional intelligence.**

### **2.2.3. Neuroticism and Emotional Intelligence:**

Neurotic people are fearful, nervous, helpless, pre-occupied and anxious (Costa & McCrae, 1992) which affects their performance and behavior at workplace. They are unable to solve problems and lacks in social interaction. The unnecessary sensitivity and highly impulsive moods of neurotic individuals prevent them to accomplish job tasks (Lowman, 1996). The negative thinking of neurotics leads them to apply negative emotions in diverse occupational settings. In stressful situations at work, neurotic people express extreme emotional reactions which results in pessimistic performance. Hough et al. (1990) argued that neurotic individuals fluently execute negative emotions which jeopardize the performance of others at workplace

Matthews et al. (2000) found that neurotic individuals spend more time in analyzing negative affects which eventually results into poor handling of job tasks in a positive way. They are preoccupied with job demands and apply fewer efforts to meet the standard of job dynamics. The feelings of stress and nervousness facilitate neurotics to display negative emotions and they require high energy and effort to execute positive emotions (Bossong, 1994). The neurotic people felt more difficulty in managing negative emotions while dealing with customers in stress related events at work. However, the positive relationship was found between neurotic individuals and negative affectivity, especially when they pretend to display fake emotions (Mughal, Walsh, & Wilding 1996).

During the events of anger, stress and strain the neurotic individuals depict fake emotions quite frequently and avoid expressing deep emotions. Thus, what actually neurotic people had felt is difficult to judge by others (Chartrand et al., 1993). The honesty and loyalty expected by the organization is considered by neurotic individuals. They are habitual in expressing negative

emotions and found it difficult to be positive and confident in meeting job tasks. Solberg et al. (1994) stated that the recognition and regulation of emotions as per job demands and organizational requirements was not fulfilled by neurotic individuals. The unstable emotional act of neurotics makes it complex to handle inner feelings and they tend to express uncertain emotions at workplace (Judge et al., 2002).

Accordingly to Spector, Jex, and Chen (1995) neurotic individuals display negative emotions in all occupations as they are unable to manage emotions as per circumstances. The accurate assessment of emotional demands of others and expression of positive emotions is considered to be a pre-requisite for effective performance in service sector. Therefore, the positive relationship between neuroticism and negative affectivity stimulates that service sector is not suitable for neurotic individuals (Bellani et al., 1996). The health care sector being considered as vital service sector to meet patients' demands seeks individuals with positive emotional reactions. Thus, neurotic people are considered to be misfit in occupations like nurse and physician who need to be positive with patients in any situation.

The neurotic personality trait of nurse seems to be emotionally unstable, nervous, slightly frustrated and worried in dynamic hospital a setting which leads to display negative emotions (Larsen & Ketelaar, 1989). The constructive emotional state of nurses with neurotic trait is unpredictable and they seem to be consistent in displaying negative emotions. Therefore, on the basis of arguments stated above, it is anticipated that a neurotic nurse display negative emotions more frequently and if in any case neurotic nurse have to execute positive emotions they require immense effort to instill emotions in an intelligent way.

**H8: Neuroticism is negatively associated with emotional intelligence.**



#### **2.2.4. Agreeableness and Emotional Intelligence:**

According to McCrae and Costa (1991) such individuals are able to develop and maintain positive relations and are significantly provoked to spread emotional bounding. The characteristics of being adaptable, tolerant, flexible, trustworthy, forgiving and caring stimulates agreeable individuals to perform job tasks with confident and enthusiasm (Brand & Egan, 1989). They maintain good relations with other employees and clients in service oriented occupations. The agreeable individual attains personal satisfaction in solving problems and develops social interactions. Such individuals were supported by others and are successful in their careers (Swanson & Gore, 2000). The positive emotional responses of agreeable individuals prevent them to feel negative which results in developing empathetic abilities for helping others.

According to Judge and Cable (1997) the containment of negative emotions and avoidance of fake emotions has successfully been applied by agreeable individuals in challenging situations. The stressful conditions were analyzed by agreeable individuals and they are eager to solve complex problems. The agreeable individuals perform extra role behaviors at work and prefer occupations which are high in scope. They are able to accept challenges and perform effectively to meet the job demands (Johnson, 1997). The good interpersonal skills of agreeable individuals stimulate their team work performance and other employees at workplace feel comfortable with their positive emotions (Barrick et al., 2001).

Apart from better performance and team work spirit the agreeable individuals were considered to be active in managing emotions. Seibert and Kramer (2001) stated that the flexible and adaptable characteristic of agreeable individual enables them to exert less effort in regulating and recognizing emotions as per circumstances. The emotional state of agreeable individuals is

linked with their inner feelings and they prefer to be kind and generous with others. Caldwell and Caldwell and Burger (1997) argued that there is a strong correlation between agreeableness personality trait and tendency to care for others. The agreeable individuals exert more effort to regulate emotions as they value to be along with other people. The forgiving nature of agreeable individuals guides them to ignore negative emotional states of others and help them to relate positive emotions for better relations in future.

The disadvantages to indulge in negative emotions were understood by agreeable individuals and they tried their level best to display positive emotions in demanding situations. Their trusting and forgiving nature helps them to tackle emotions of others and congregate them to maintain relationships (Austin, Saklofske & Egan, 2005). Thus, nurses with empathic abilities have the potential to face challenges and able to treat patients by developing trusting relationship (Quoidbach & Hansenne, 2009). The recognition and regulation of emotions is expected to be appropriately handled by nurses who possess agreeable personality trait. The flexibility and adaptability generated from agreeable personality trait is supposed to help nurses to excel in their profession by coping negative emotions in diverse hospital settings.

**H9: Agreeableness is positively associated with emotional intelligence.**

#### **2.2.5. Openness to Experience and Emotional Intelligence:**

Openness to experience inculcates individuals, who are innovative, broad minded, artistic, curious and creative (Barrick & Mount, 1991). This type of individuals is used to carry out work activities as per their own ways and interpret positive experiences to achieve future endeavors. Holland et al. (1990) found that highly open individuals are able to perform better as

they feel less pressure in stressful situations. They are inclined to peruse innovative ways to achieve job tasks and perform beyond the call of defined job description (Holland et al.,1993). The open individuals engaged in proactive planning and generate meaningful outcomes at workplace. They are competent enough to take initiatives and act diligently to accomplish goals. The ambitious, excited and imaginative aspect of open individual thrust them to perform better than earlier and they consistently improve their job dynamics (Reed, Bruch, & Haasel, 2004).

McCrae and Costa (1997) explained that open individuals explore new opportunities to learn and excel in high scope occupations and feel underestimated in occupations of limited scope. The open individuals desired to perform better in occupations which are more challenging and demanding in diverse domains (Sebert & Kraimer, 2001). The flexibility and determination of open individuals lead them to adjust in any situation which highlights their positive social interaction with other people (Minbashian et al., 2013). The quick decision making skill of open individuals in uncertain situations stimulates them to act enthusiastically to solve problems, instead of being complaining like narrow minded people. They are open to take new experiences and keen to engage in unusual tasks to cultivate their performance at workplace (Hayes et al., 1994).

Apart from distinct performance, the emotional states of other people are acknowledged by open individuals and they display variety of emotions to express their feelings and moods. The open individuals are capable to analyze personality dispositions and able to deal with emotional demands to excel in their profession (Schutte et al., 1998). In service oriented profession, the open individuals are interested more in regulating emotions to execute creative patterns at work with mutual consent of others around (Blegen, Goode & Reed, 1998). Thus, nurses being in the profession of esteemed service quality are likely to have openness to

experience personality trait to serve patients with out of box approaches. The nurses are considered to be skilled in regulating emotions as per circumstances. The knowledge acquiring, grooming and emotional handling skills in openness to experience nurses are anticipated to be high as compare to their peers in hospital.

**H10: Openness to experience is positively associated with emotional intelligence.**

### **2.3. Emotional Intelligence and Patients' Satisfaction:**

The degree of fulfilling expectations of patients during treatment in certain hospital environment determines the satisfaction of patients. The level of care received by the patients particularly by nurses in dynamic hospital settings would results in the recommendation of same hospital to others (Jha et al., 2008). The better nurse to patient ratios to provide sufficient cure for patients' pain, stimulates more positive response of patients to recommend the same hospital to others (Nel et al., 2013). The interpersonal aspects during care of patients provide strong willingness to recommend the hospital to others (Klinkenberg et al., 2011). The courtesy, respect and generosity shown by nurses during pain relief period of patients also uphold the recommendation of hospital to others.

The patients' perception to receive care by nurses during post operationalization period is similar among patients who get admission in a particular hospital for the first time or possess earlier experience of hospitalization (Oetker-Black & Petrochuk, 2012). Therefore, patients' education, age, gender and religion do not affect patients' satisfaction to receive care by nurses (Schoenfelder et al., 2011). However, the features of hospital to provide high level care for patients affect satisfaction level of patients. The type, infrastructure, management style and

environment of hospital do create influence on caring behaviors of nurses to attain satisfaction of patients (Elliott et al., 2012).

The recommendation of hospital to others mainly due to care receive by patients through respective nurse signifies the nurse responsibility to handle patients with confidence and compassion (Chatterjee et al., 2012). The clarity of job scope and empowerment to nurse leads towards better execution of responsibilities and linked with high satisfaction of patients. Suhonen et al. (2012) argued that rotation based duties of nurse result in less satisfaction of patients as compare to individualize nursing care for respective patients. The depiction of doing everything that a nurse could possibility do to provide care results in better satisfaction of patients, apart from just providing pain relief treatment to patient (Gardner et al., 2009).

The nurse caring behavior with in-depth feeling of patients' pain leads toward higher satisfaction of patients (Nel et al., 2013). The nurse empathic abilities resultant from emotional intelligence stimulates their caring behaviors. The more a nurse is aware of emotional recognition the better would be the performance in dynamic hospital environment (Aiken et al., 2012). The emotionally intelligent nurse posses the trait to craft their abilities to handle problems with courage, determination and positivity. According to Harper and Jones-Schenk (2012) the emotional intelligence of nurse does not differ due to age, gender, education and religion. The nursing profession by default expects nurse to be emotionally intelligent irrespective of demographic characteristics. Even the characteristics of patients do not affect the level of care provided by nurse. Apart from nurses' kindness, all patients supposed to be responded with right emotional reaction which could results in recommendation of hospital to others (van Dusseldorp et al., 2011)

Nurses who reported recognition of emotional intelligence indicated that they hold more ethical behavior at workplace (Deshpande & Joseph, 2009). The high commitment, job retention and efficient performance were related with emotional awareness of nurses. The self-compassion was also related with emotional intelligence of nurses. The situational anxiety in demanding hospital environment is found to be less in emotionally intelligent nurses (Nooryan et al., 2012). The painful conditions of patients were well understood by emotionally intelligent nurses and lead them to treat patients with empathy, care and affection (Quoidbach & Hansenne, 2009). The self-awareness and self-management of emotionally intelligent nurses encourage them to groom in their profession and they tend to serve with appropriate emotional response as per situational demands (Nooryan et al., 2012). Thus, patients' satisfaction could be high if nurse provides care with emotional intelligence.

**H11: Emotional intelligence is positively associated with patients' satisfaction.**

#### **2.4. Mediating Role of Emotional Intelligence between Big five Personality Traits and Patients' Satisfaction:**

Apart from above said investigation of personality traits to act as an antecedent for emotional intelligence and create affect on patients' satisfaction, the mediating role of emotional intelligence was encouraged to explore in different contexts as well (Petrides & Furnham, 2001). This requires more sophisticated understanding of emotional intelligence to facilitate the relationship between two or more constructs. Thus, analyzing the conception of words "Emotional" and "Intelligence" leads to reveal the work of Gardner (1983) who proposed the idea that there was not just one type of intelligence that is vital for satisfaction in self and others, but a broad range of intelligences with certain diversities do guide to achieve goals in life. He argued that out of multiple intelligences the personal intelligence formed particularly by

interpersonal intelligence and intrapersonal intelligence proceeded as main domain for other intelligences. Consequently, the in-depth studies on interpersonal intelligence and intrapersonal intelligence disclosed the worth of emotions and the term emotional intelligence was developed to analyze the ability of managing emotions in self and others (Salovey & Mayer, 1990).

Mayer and Salovey (1997) focused on developing ability to handle emotions to distinguish individuals, and to utilize this ability to channelize one's intelligence and deeds. Apart from developing ability to recognize emotional intelligence, Goleman (1995) explained emotional intelligence as a competency to analyze, manage and regulate emotions in self and others. Goleman (1998) presented the model on emotional intelligence based on competency assessment and disclose the worth of self-awareness, self-management, social awareness and relationship management. The significance of emotional intelligence for better performance at workplace, superior satisfaction in life and leadership development was stimulated due to the work of Daniel Goleman (Boyatzis, Stubbs & Taylor, 2002).

Research on competency based models of emotional intelligence indicated that emotional response could be different in diverse situations and social interactions. Thus, diverse social exchanges influence emotional intelligence in varied manners. Bar-On (1997) aims to inculcate social exchange in emotional intelligence and presented the model of emotional social intelligence. The emotional-social intelligence is a cross-section of interrelated emotional and social competences that determines how efficiently individuals recognize and express themselves, comprehend others' emotions and cope with daily life demands (Bar-On & Parker, 2000). Bar-On (1997b) provides determinants of emotional-social intelligence i.e.; intrapersonal skills, interpersonal skills, stress management, adaptability and general mood, which contributes to handle well-being which is subjective in nature. Therefore, the determinants of emotional

social intelligence model interact together and help to utilize emotions with required degree of intelligence, which results in right assessment of personality traits for attaining satisfaction in self and others (Bar-On, 2003).

Furthermore, the worth of emotional intelligence to augment performance and attain satisfaction was acknowledged by various researchers (Diener et al., 1995; Donaldson-Fiedler & Bond, 2004; Kozma et al., 2000; Pavot et al., 1998). However, recent studies proposed significance of individual's trait to execute appropriate emotional intelligence. Petrides, Frederickson, and Furnham (2004) asserted the need to analyze self-perceptions to apply emotional intelligence at all levels. They explained that emotional intelligence concerns the collection of emotional self-efficacy which is located in individual's personality. The ability aspect of emotional intelligence is purely performance oriented as it concerns the emotion-related cognitive ability that ought to be measured via maximum performance. Whereas, the focus on trait to apply emotional intelligence attains much attention of researchers as it discover the individual's perceptions of their own emotional abilities (Petrides & Furnham, 2006).

Hence, the preceding review presents the brief advancement of emotional intelligence which is recommended to be investigated in dynamic contexts to achieve satisfaction across occupations (Nikolaou & Tsaousis, 2002). The progression in the concept of emotional intelligence stimulates its utilization to facilitate other constructs in recognizing and regulating emotions in self and others. Mainly the service oriented occupations were recommended to be explored in context of managing individual differences with demanding emotional tactics to achieve satisfaction in self and others (O'Connor & Little, 2003). The high interpersonal interactions in service oriented jobs uphold the regulations of emotions for executing right behavior with right individual. Thus, mediating role of emotional intelligence in managing



personality dispositions to achieve of satisfaction of patients' in diverse hospital settings is explored in this study as under:

#### **2.4.1. Mediating Role of Emotional Intelligence between Extraversion and Patients' Satisfaction:**

Extraverts are marked to be socially engaged with other individuals. They enjoy interacting with other individuals, indulge in problem solving processes, broad minded and possess strong social skills to tackle other individuals (Rusting & Larsen, 1997). Their enthusiasm to be optimistic in life events leads them to handle unpleasant emotional reactions of others. The extravert individuals display positive emotions in any situation which enhances their performance at workplace. Saucier and Goldberg (1998) explained that certain features of emotional intelligence i.e.; self-confidence, empathetic behaviors, expression of feelings, thoughts and beliefs to preserve one's rights in optimistic manner partly cover extraversion personality trait of an individual.

According to Mathews et al. (2004) extraverts are capable to tailor in dynamic social situations as compare to introverts but there is limited evidence that extraverts possess strong emotional intelligence competencies than an introvert. They discussed that extravert have the advantage of being confident in dealing with others, able to compete with others but in the mean time an extraverts have the disadvantage of being intolerant and dominant with others. The extravert does not gain foremost benefit in close relationships (Fitness, 2001). Introverts perform better in private relationships and are competent to uphold systematic environment. Such central aspect of extraverts in contrary to introverts stimulates execution of emotional intelligence in occupations of social contact (BarOn, 1997).

Hence, nursing profession being considered as significant social contact occupation due to direct dealing with patients in certain situations indicate appropriate handling of emotions by extraverts (Laschinger & Leiter, 2006). The extravert nurse is expected to attain satisfaction of patients by acknowledging the worth of emotions. The right utilization of emotional intelligence helps extravert nurse to overcome dissatisfied occasions and enhances their competences to handle negative emotions (Manojlovich & Laschinger, 2002). The proper labeling of patients' emotional reactions by an extravert nurse leads to better satisfaction of patients, which encourages awareness of being emotionally intelligent at workplace (Reisenzein, 1983). On the basis of above said arguments it is anticipated that emotional intelligence mediates extravert personality trait of nurse to attain satisfaction of patient:

**H12: Emotional intelligence mediates the relationship between extraversion and patients' satisfaction**

#### **2.4.2. Mediating Role of Emotional Intelligence between Conscientiousness and Patients' Satisfaction:**

Conscientious individuals aim to achieve against measures and expectations. Their determination, discipline, responsibility and submissiveness able them to regulate, control and direct emotions as per changing situations (Block, 2001). According to McCrae (2000) the subscales of emotional quotient inventory i.e.; socially responsible and solving problems appear to complement personality dimension of conscientiousness. The emotional competence model of Goleman (1998) also supplements the affects of conscientious personality trait on regularizing emotions in self and others. The more an individual is responsible and discipline the better emotional handling is expected in dissimilar situations.

The emotional aspect of being motivated to perform well at workplace and be kind with others was linked with conscientious personality trait (Colquitt & Simmering, 1998). The consistent positive behavior at workplace is resultant from appropriate handling of emotions in any occupation. The empathetic characteristic of conscientious individuals motivates them to deal others at work with patience, calmness and carefulness. The variations in other individuals' behaviors are successfully analyzed by conscientious people and they are proficient in acknowledging emotional tendencies in diverse occupation (Sansone, Wiebe & Morgan, 1999). The challenging behaviors of other individuals at work do not affect conscientious people to perform better and they remain determinant to achieve their occupational goals (Hogan, Hogan & Murtha, 1992).

Consequently, the nurses with conscientious personality trait pursue planned activities in challenging situation and avoid impulsive behaviors. The balanced behavior of conscientious nurse is derived through in-depth assessment of emotions, which may lead them to acquire satisfaction of others (Robertson & Callinan, 1998). The detached emotional states are expected to be reviewed by conscientious nurse, which helps them to gain more satisfaction of patients. Hence, this study predicts that nurses with conscientious personality trait are supposed to be responsible, disciplined and determinant in achieving patients' satisfaction by acknowledging the worth of emotional intelligence.

**H13: Emotional intelligence mediates the relationship between conscientiousness and patients' satisfaction**

**2.4.3. Mediating Role of Emotional Intelligence between Neuroticism and Patients' Satisfaction:**

Neurotic individuals tends to feel emotional instability through anger, stress and depression which is also reversed quoted as emotional stability by experiencing positive emotions in life (Costa & McCrae, 2006). The neurotic individuals are not good performers, as they feel threaten in demanding situations rather to feel positive in solving stressful situations. They are generally unable to manage stress at workplace and prefer to perform effortless tasks (Espejo et al., 2011). The anxious characteristic of neurotic people stimulates them to avoid taking initiatives at workplace and attaining satisfaction with better performance.

The non-encouraging acts and dissatisfied nature of neurotic people affects other individuals' performance as well. Barnhofer et al. (2011) states that lack of focus on satisfaction of others highlights deprived empathic abilities in neurotic individuals, which need to be considered especially in occupations of service orientation. The composite inner feelings of gloominess display unexpected emotional reactions by neurotics, but they pretend to act positively in traumatic situations (Bono & Vey, 2007). The ability to cope with threats at workplace is considered by neurotic people and generally they depict hostility rather to examine the strategy of threat prevention and positive emotional responses. Lavee and Ben-Ari (2004) argued that people with high neurotic personality trait are insensitive to emotional intelligence and incapable to handle situations with confidence.

The aspects of emotional intelligence to stay happy, self-confident, empathetic, motivated, self-controlled and self-regulated are not adapted by neurotic individuals. Such non-adapted attribute of neurotic individuals lead to adverse feedback by clients and results in dissatisfaction of services provided by neurotics (Bono & Vey, 2007). The clients' satisfaction being significant in health care sector stimulates thorough evaluation of service providers' personality trait for better emotional reactions at work. Thus, instable emotional reactions of

neurotic individual directly affect patients' satisfaction in demanding hospital environment. As per Sleutel (2000) the nurses scoring high in neuroticism are emotionally reactive and feeling threatened even in ordinary situations, where as low scoring in neuroticism are better performers and react through positive emotions.

Consequently, the service delivery particularly by nurse in challenging situations needs appropriate emotional handling by acknowledging personality trait. The satisfaction of patients would be possible with low neurotic personality trait resultant from better emotional management. According to Judge and Wantabe (1993) the deficient satisfaction in achieving goals of life is correlated with high neuroticism and stimulates the need of emotional undertaking for attaining and experiencing satisfaction. Hence, this is anticipated that nurses with neurotic personality trait experience reciprocal affect of emotions in treating their patients, which stimulates in-depth understanding of emotional intelligence in hospital environment:

**H14: Emotional intelligence mediates the relationship between neuroticism and patients' satisfaction**

#### **2.4.4. Mediating Role of Emotional Intelligence between Agreeableness and Patients' Satisfaction:**

The individual differences and synchronization of emotions for social harmony is effectively dealt by agreeable individuals. The pro-social behavior and energetic interpersonal skills are executed by agreeable individuals (Carlo et al., 2005) who guide them to be more concerned with other individuals' satisfaction level. McCrae's (2000) stated that facets of sympathy and generosity in agreeable individuals corresponds them with emotional intelligence features of being empathic and kind with other individuals. The emotional proximity and satisfying relationships are effectively maintained by agreeable individuals.

Mathews et al. (2004) explained that empathetic attributes of emotional intelligence facilitate agreeable individuals to perform better at workplace by upholding better interaction with others. The agreeable individuals comprehend difficult situations and are capable to attain satisfaction of others by solving complex problems with mutual consensuses Goleman, (1995). However, Bar-On (2000) found that agreeable individuals could not perform better in all difficult situations, as they have to bear disadvantages in conflicting situations. They tend to inclined with other individuals in competing conditions which results in gaining less advantage of being agreeable.

Therefore, Mathews et al. (2004) argued that an emotionally intelligent person supposed to handle social encounters for their own advantage, despite having agreeable personality trait. Such recognition and standardization of emotional intelligence leads to handle difficult situations with better assessment of advantages/disadvantages of all concerned. The little evidence of being disagreeable with agreeable personality trait by wining satisfaction of others needs to be explored in dynamic occupational context (Jensen-Campbell & Graziano, 2001). The situational context of being kind, empathetic and caring with patients in nursing profession attains limited attention of researchers in developing countries like Pakistan.

The challenging hospital setting particularly in public sector hospitals of Pakistan makes it difficult for agreeable nurse to attain satisfaction of patients. Thus, emotional intelligence serves the purpose to mold agreeable personality trait as per situational demands which results in better satisfaction of all concerned (Schmit et al., 2007). The generosity, courtesy, trustworthiness and compassion executed by agreeable nurse guides them to perceive right emotional tendencies in patients (Kooker, Shoultz & Codier, 2007). Nurses with high agreeable personality trait are willing to align themselves with dissimilar patients. Hence, it is expected that nurses with

agreeable personality trait can easily get along with patients and able to tolerate stressful patients by utilizing the worth of emotional intelligence.

**H15: Emotional intelligence mediates the relationship between agreeableness and patients' satisfaction**

#### **2.4.5. Mediating Role of Emotional Intelligence between Openness to Experience and Patients' Satisfaction:**

The individuals experiencing distinct emotions, unusual working styles, unstructured communication and curiosity in affairs of life highlighted the openness to experience personality trait (McCrae, 1987). The open individuals are more willing to consider novel ideas at workplace instead of following conventional ways to perform a job task. The creative ways to pursue and complete tasks by open individuals motivate others to fulfill responsibilities rather complaining about procedures to perform better (McCrae & Costa., 1997). The non-conservative nature of open individuals stimulates them to handle stressful situations and maintain their performance beyond the call of defined job description.

The better performance by open individuals is generally executed in unstructured environment. The commitment and satisfaction level of open individuals also increases if organizational environment upholds their creative contributions. The satisfaction of others is more valued by open individuals because of their high empathetic abilities (Costa & McCrae, 1992). They have the tendency to incline their inner feelings with the feelings of other individuals to behave in a non-traditional way. The open individuals are more tilt towards cognitive intelligence which enhances their imaginative skills (Ackerman & Heggestad, 1997). According to McCrae and Costa (1997) the openness to experience personality dimension is

strongly related to some aspects of emotional intelligence because of its unusual characteristics to perceive, think and behave.

The focus of open individuals to respond as per situational demands with distinct behaviors by valuing satisfaction of others makes this personality dimension broader than mere intellect. The non-intellective aspects revealed by open individuals create better assessment of emotions in self and others (Schutte et al., 1998). The better aesthetic appreciation by open individuals originates from harmonization of emotions with other individuals (Salovey & Mayer, 1990). Such behavior depicts better empathic abilities in open individuals as compare to narrow minded individuals (Vitello-Cicciu, 2002). Despite any type of occupation the open individual display unique ways to perform, appreciate and interact, which inspire others to improve their qualities.

According to Vakola et al. (2004) the performance and emotional reactions of open individuals was focused more in occupations i.e., art, design and development whereas there is limited studies on their performance and emotional balance in service oriented occupations. Watson (2006) enlightened that the ability to explore new performance aspects with openness to experience trait to handle different satisfaction levels with dissimilar emotional reactions needs to be explored in service oriented jobs depicting caring behaviors. Therefore, requirement of caring behavior in nursing profession with right emotional intelligence may discloses that an openness to experience trait in nurses help them to adopt unconventional ways to deal with patients. This is predicted that the unrestrained nature of nurses with openness to experience personality trait guides them to attain satisfaction of patients with optimum utilization of emotional intelligence.



**H16: Emotional intelligence mediates the relationship between openness to experience and patients' satisfaction.**

## **2.5. Moderating Role of Job Involvement between Emotional Intelligence and Patients' Satisfaction**

Although patients' satisfaction is expected to be influenced with nurses' emotional tendencies and personality traits, the extant literature in health care sector provides intimation for moderating mechanisms as well (McGlone,1990). In order to attain patients' satisfaction in challenging hospital environment the level of job involvement of nurses in particular and physicians in general was emphasized by researchers (Yan & Su, 2013). The hospital productivity and effectiveness was indirectly influenced by attitudinal variable of job involvement (Carson et al., 1995). The context specific research on job involvement is also emphasized to explore change in attitudes in accordance with situation (Wanyonyi, 2014). The dedication with hospital setup and satisfaction with work-related characteristics could be increased through high level of job involvement. The belief of nurses that their career goals are compatible with the hospital goals could be strength by inculcating job involvement attributes. Chay and Aryee (1999) stated that high level of job involvement enhance meaningfulness of work, which results in attaining satisfaction of all concerned at work place.

On the other hand, the construct of job involvement was conceptualized in many ways, and linked with job related attitude, behavior and intentions (Robbins, 1996) to be applied in specific context of the job. The debate was in vogue that whether job involvement is one-dimensional or multi-dimensional. Allport (1943) explained it in terms of level of participation of individuals in their jobs. The needs fulfillment, prestige and autonomy gained from the occupation were linked with job involvement. Dubin (1956) explained that individuals' central life interest could be

determined by level of their involvement in jobs. The extent to which individuals gain personal satisfaction was linked with job involvement.

The third conceptualization of job involvement was argued by Gurin and colleagues' (1960) by focusing on self-actualization through employment situation. Bass (1960) considered that individuals' job involvement would increase with better self-determination and emotional recognition by experiencing that their work contributes to organizational success. Later on Vroom (1962) explained job involvement as the degree to which perception of performance was linked with the self-concept. The self-esteem of an individual depicting high job involvement would be affected with good and poor performance at workplace. The individuals' perception of performance at workplace was consistent with existing concepts of themselves and results in centrality of job involvement (Vroom, 1964). French and Kahn's (1962) also presented the similar concept by considering totality of job performance as a main attribute to job involvement.

Furthermore, Lodahl and Kejner (1965) explained job involvement as degree of psychological satisfaction and self-image development among individuals. They emphasized on the multi-dimensional aspects of job involvement by referring it with individuals' inner assessment of beliefs, values and emotions to pursue work in demanding conditions (Montes-Berges et al., 2014). According to Lawler and Hall's (1970) work-related activities needs to be considered as important part of life which supports to meet individuals' needs by actively involved in diverse aspects of the job. They emphasized on the cognitive abilities of individual to stay involved in the job. Saleh and Hosek (1976) also unleashed the multi-dimensional aspects of job involvement by explaining it in terms of essential life interest, active participation, self-esteem acknowledgement and performance with consistent self-concept.

Consequently, Kanungo (1982b) emphasized that the psychological recognition of individuals' cognitive state define job involvement in dynamic workplace settings. The better the individuals' ability to recognize and regulate cognitive aspects of his/her emotional tendency, the better would be the level of job involvement (Zhang, 2014). This definition was endorsed by Blau (1985) as he argued that job involvement is deeply related with psychological state of an individual. Blau and Boal (1987) advanced the argument by emphasizing on the direct relationship between psychological life and job involvement intensity of an individual. The deep engagement, concern and association with job could be enhanced through peaceful psychological state of an individual to stay involved in all domains of the job.

Paullay and colleagues (1994) also recommended the job involvement explanation in terms of psychological life, emotional handling and self-image determination to perform better at workplace and to attain satisfaction of all concerned. The causes of job involvement in terms of situational influences, work interdependence and personal characteristics guide individuals to be aware of psychological and emotional states of themselves (Brown, 1996). The irrelevant connection of individuals' demographics with job involvement tilts its main impact on certain consequences effecting organizational climate. The job involvement affects performance, commitment and satisfaction of an individual to stay associated with same occupation (Brown & Leigh, 1996). The organizational desirable behaviors are influenced by individual's involvement level in job.

Netemeyer et al. (1997) asserted that individual's positive perception about organizational environment creates a climate of mutual trust and involved them in job tasks. The more an individual perceive the organization as supportive and providing opportunities for reward the better would be the job involvement. This organizational climate encourages individual to be

aware of their workplace behaviors by handling emotional responses. Such emotional recognition and regulation increases positive behaviors and enables individual to attain satisfaction of all concerned by utilizing moderating effects of job involvement (O'Driscoll & Randall, 1999). The tendency of exploratory behaviors of employees when confronted with situations describing complexity discloses intensity of moderating aspects of job involvement (Randall et al., 1999).

Therefore, nurses' job to respond complex situations with resourceful solutions emphasizes the need to inculcate job involvement along with other situational variables. The attracting features at work as explained by Hackman and Oldham (1976) in their job characteristics model also encourage high level of job involvement. The job involvement of nurses facilitates them to learn and grow in diverse health care settings. The passion of nurse to have a trustworthy reputation in patients entails involvement in job to acquire needful emotions and behaviors expected by patients (Lin, Chiu & Hsieh, 2001). The socio analytic theory to convert identity into reputation upholds job involvement of nurses to respond patients' problem with inventive ways (Gordon & Holden, 1998). The emotionally intelligent nurse is more empathetic towards patient to attain self-esteem by gaining patients' satisfaction.

The aforesaid review describes that although broad concepts, antecedents and consequences of job involvement were explored in many domains but its moderating aspect in specific organizational climate, focusing particular intelligence in emotions to reveal satisfaction of all concerned has rarely investigated (Chay & Aryee, 1999). The researchers exploring organizational effectiveness argued that investigation needs to be pursued to utilize moderating role of job involvement in uncertain conditions (Diefendorff et al., 2002), where satisfaction attainment determines star performance. Thus, this study anticipates moderating role of job

involvement in demanding hospital climate for effective execution of emotions by nurses to achieve patients' satisfaction:

**H17: Job involvement positively moderates the relationship between emotional intelligence and patients' satisfaction**

## **2.6. Moderating Role of Spirituality at Work between Emotional Intelligence and Patients' Satisfaction**

Apart from involvement level of job, the demanding role of nurse during ill-being treatment of patients makes their work more purposeful as compare to other occupations. Therefore, realization of meaningfulness in nursing profession is endorsed by researchers through the execution of spirituality at work (Soeken,1989). The word spirituality derived from the word spirit highlights the individual's recognition of job worth in routine and challenging workplace settings. The concept of spirituality has different meanings and implications as per context of time, place and perception (Narayanasamy, 1999).

According to Stoll (1989) the universal definition of spirituality at work does not exist and even the dimensions of spirituality are diverse. However, in nursing literature the Roger's nursing model provides the significance for spirituality at work. This model engages nurses to develop consensus about purpose of spirituality at work and to implement dimensions of spirituality with eagerness (Malinski,1991). The mixed opinions of spirituality interrelationship with religion, ethics and sects were encountered by Elkins et al. (1988) and Roger's nursing model (1990) arguments by focusing on core aspects of spirituality at work. They emphasized on spirituality at work as a transcendent dimension of awareness about self, others, nature, life and anything individual considers as vital. The spirituality at work is considered as a humanistic

phenomenon to get along with other individuals, revealing meaningfulness in occupations and gaining inner life satisfaction.

Elkins et al. (1988) described spirituality at work with multi dimensional perspective and provide nine major aspects to emphasize on its significance. These nine aspects includes “transcendence” as belief in self to unleash inner strength, “purpose in life” as in-depth confidence to explore meaning in life, “mission” as sense of responsibility, “sacredness” as conviction that life a blessing to unfold inner potential, “material values” as ultimate satisfaction is caring for others rather materialistic importance, “altruism” as principle of social justice, “idealism” as obligation of actualizing positivity in all aspects of life, “awareness of tragic” as self-awareness of other individuals’ suffering and emotional responses, “fruits of spirituality” as realization of connectedness with others and the universe.

The definition of spirituality at work and dimensions which illuminated it by Elkins et al. (1988) encompasses the nursing profession to identify and standardize self-characteristics in dynamic health care sector. In this perspective Roger (1990) explained spirituality at work in terms of nurse awareness to explore meaningful features in their profession by setting a mission in life. Roger’s nursing model disintegrates nine dimensions of Elkins et al. (1988) into four dimensions to encourage nurses for establishing objectivity in their profession. These dimensions inculcates “confidence” by considering meaning of life, “self-actualization” by focusing of positive aspects of life, “interconnectedness” by feeling pain of others and “transcendent” by believing that life is sacred.

After explaining the conceptually congruent explanations of spirituality at work by Rogers and Elkins, the worth of upholding spiritual aspects at work could be understood by nurses in particular and others in general (McSherry, 1998). The assessment of nursing literature of the

past decade discloses a surge of research about relevance of nursing with emotional gratitude and satisfaction of others in health care settings (Rew, 1989). The nursing profession demands to unleash inner potential by setting purpose in life and creating a sense of connectedness with others. The depiction of such purpose was established by the founder of nursing profession, Florence Nightingale, known as a great spiritual figure that pursued her responsibilities beyond the deceptive humankind for eventual reality, set an ultimate purpose in life and serve patients beyond apparent divisions (Calabria, 1990).

Therefore, the decline of principals of neighborhood, public groups and extended family gatherings needs to be understood by nurses to be considered their profession as an ultimate source of setting purpose in life (Conger, 1994). The researchers' argument that spirituality at work plays a vital role in self-regularization (Cash & Gray, 2000) need to be considered by nurses for satisfaction to self and others. In health care settings spirituality acts as a primary source of better health, as nurses' spirituality at work inculcates satisfaction in their patients (Harrison, 1993). The spiritual belief to be connected with a community enhances meaningful work and provide basis to govern emotions (Kim et al., 2000). Reed (1992) wrote that nurses supposed to consider the neglected spiritual dimensions as it inclined their emotional reactions as per satisfaction of diverse patients.

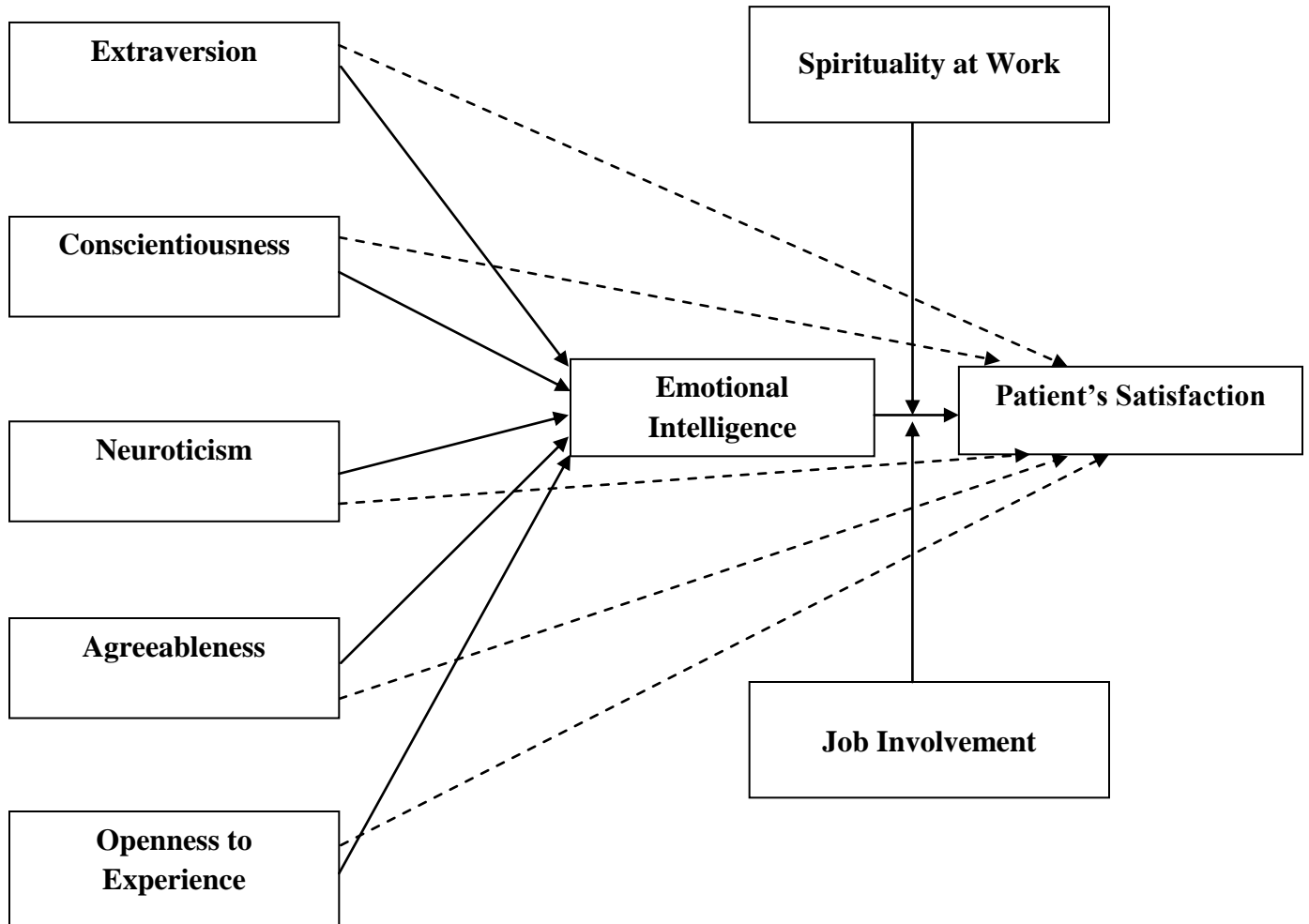
The Hackman and Oldham (1976) job characteristics model also endorsed the significance of work with true spirit as per diverse occupational demands. The social analytical theory to convert identity into reputation by getting along with others, achieving purpose in life and realizing one's position in life also signifies the worth of spirituality at work coupled with emotional awareness and satisfaction. Thus, it can be argued that if nurses perform duties with emotional gratitude and spirituality at work then it can develop feeling of less estrange in diverse

environments, extend sense of community, provide inner life satisfaction and meaningfulness (Emblen & Halstead, 1993), which is anticipated for providing satisfaction to patients in dynamic health care sector.

**H18: Spirituality at work positively moderates the relationship between emotional intelligence and patients' satisfaction.**



## 2.7. Research Model:



## **2.8. Research Hypothesis:**

**H1:** Extraversion is positively associated with patients' satisfaction

**H2:** Conscientiousness is positively associated with patients' satisfaction

**H3:** Neuroticism is negatively associated with patients' satisfaction

**H4:** Agreeableness is positively associated with patients' satisfaction

**H5:** Openness to experience is positively associated with patients' satisfaction

**H6:** Extraversion is positively associated to emotional intelligence.

**H7:** Conscientiousness is positively associated to emotional intelligence.

**H8:** Neuroticism is negatively associated to emotional intelligence.

**H9:** Agreeableness is positively associated to emotional intelligence.

**H10:** Openness to experience is positively associated to emotional intelligence.

**H11:** Emotional intelligence is positively associated with patients' satisfaction

**H12:** Emotional intelligence mediates the relationship between extraversion and patients' satisfaction

**H13:** Emotional intelligence mediates the relationship between conscientiousness and patients' satisfaction

**H14:** Emotional intelligence mediates the relationship between neuroticism and patients' satisfaction

**H15:** Emotional intelligence mediates the relationship between agreeableness and patients' satisfaction

**H16:** Emotional intelligence mediates the relationship between openness to experience and patients' satisfaction

**H17:** Job involvement positively moderates the relationship between emotional intelligence and patients' satisfaction

**H18:** Spirituality at work positively moderates the relationship between emotional intelligence and patients' satisfaction

# **CHAPTER # 3**

## CHAPTER # 3

### 3. METHODOLOGY

#### 3.1. Research Methods:

Research method is a set of technique, principle, and rule for regulating a given discipline in a systematic way. In order to regulate social sciences discipline Neuman (2006) argued that quantitative research method is preferred to uphold positivist viewpoint, as compare to ontology and epistemology view points. The knowledge growth through specific utilization of theories, research design, data, hypotheses testing and measurement analysis is dealt in quantitative research method. Thus, this study pursued quantitative research method as hypotheses were anticipated based on theories, literature gaps, problems statement and collection of unbiased numeric evidence for analysis; which eventually provides interpretation of hypothesis and reliability of data collected (Guba, 1990).

#### 3.2. Research Design:

The quantitative research method was pursued by conducting a survey to obtain feedback of respondents through questionnaires. The survey comprises of quantitative research explains observable fact in numeric form which can be measured to analyze the degree of association among variables (Wiersma & Jurs, 2005). There are two types of research survey designs e.g.; descriptive and relational survey designs (Rungtusanatham et al., 2003). Relational surveys are used to empirically study the relationship between variables and descriptive surveys are used to study to present state of affairs. Relational survey design is considered to be the suitable way because data is collected from sample and after appropriate analysis of respondents' perception; estimation is formed about the entire population (Kerlinger & Lee, 2000).

Therefore, relational survey was carried out in this study by collecting cross sectional feedback from respondents. The self-administered questionnaires were utilized to obtain respondents feedback in the form of completely filled questionnaires. The feedback of respondents was processed to detect the nature of relationship among the variables i.e. Big five personality traits, emotional intelligence, job involvement, spirituality at work and patients' satisfaction.

### **3.3. Population (Nurses)**

In the era of ever increasing population, the health care services are crucial across the globe. Especially in developing country like Pakistan, the health care services are much challenging due to non-stable economic, political and natural factors. Mainly the middle class and lower middle class people face complexities in attaining better health care service provided by conventional public sector hospitals. Across different occupations in health services, the role of nurses is more critical due to front end dealing with patients hospitalized during dread disease treatment. According to World Health Organization (2015), the nurse to patient ratio in Pakistan is far below than required. The Pakistan Nursing Council although made rules and regulations to maintain better nurse to patient ratio for better health care delivery but facts are contradictory to all expectations and procedures.

Thus, in order to examine the nurses view point about health care services provided to patients suffering from many dread diseases, the public sector hospitals' registered nurses were selected. The following renowned public sector hospitals spread geographically across Pakistan were targeted to obtain feedback of nurses serving in these dynamic hospitals:

1. Pakistan Institute of Medical Sciences, Islamabad.

2. Benazir Bhutto Hospital, Rawalpindi.
3. Allied Hospital, Faisalabad.
4. Mayo Hospital, Lahore.
5. Nishtar Hospital, Nishtar Road, Multan.
6. Civil Hospital, Karachi.
7. Sindh Government Lyari General Hospital, Karachi.
8. Government Hayatabad Medical Complex, Peshawar.
9. Ayub Teaching Hospital, Abbottabad.
10. Bolan Medical Complex (BMC) Hospital, Quetta.

#### **3.4. Sample One (Nurses):**

The process of acquiring subset from entire population to generalize the results for population is done through sampling (Singleton & Straits, 2005). Therefore, a representative sample is required to collect data for further analysis which eventually provides results for entire population. The most widely used technique of sampling is probability sampling to provide equal chance of selection for all population members (Wiesma & Jurs, 2005). On the other hand when entire population could not be accessed then probability sampling is not considered as equal chance of selection of all members of the population is not possible. In this study probability sampling is not suitable because it is not possible to access all nurses of public sector hospitals for possible random sampling selection.

As this study focused on registered nurses who were engaged in providing services to dread disease patients, therefore; non-probability sampling was applied in this study to collect data from targeted population of nurses in public sector hospitals of Pakistan. The judgmental sampling was applied to collect data from those nurses who had been frequently performing

duties to treat dread disease patients in uncertain environment of public sector hospitals of Pakistan.

### **3.5. Questionnaires (Nurses):**

The following questionnaires were adopted and adapted as per scope of this study and distributed to targeted sample of nurses:

#### ***3.5.1. The Big Five Personality Traits:***

The Big Five Personality traits were measured by the scale developed by John and Scrivastava, (1999). This scale comprises of 44 items with subscales: extraversion, agreeableness, openness to experience, neuroticism and conscientiousness possess 8, 9, 10, 8 and 9 items, respectively. The Cronbach's alpha reliability for subscales is 0.88, 0.86, 0.82, 0.84, and 0.83, respectively. The respondents were encouraged to answer items e.g. extraversion include "I am skilled in handling social situation", conscientiousness include "I make plans and stick to them", neuroticism include "I am filled with doubts about things", agreeableness include "I am concerned about others" and openness to experience include "I get excited by new ideas".

#### ***3.5.2. Emotional Intelligence:***

The scale developed by Schutte et al. (1998) was used to measure emotional intelligence. Nurses were encouraged to answer about recognition and regulation of emotions, while acknowledging the emotional tendencies of patients in public sector hospitals. This scale consists of 33 items and a sample item includes "I easily recognize my emotions as I experience them" and "I present myself in a way that makes a good impression on others". The Cronbach's alpha of 0.90 for 33 items was reported by Schutte et al. (1998).



### ***3.5.3. Spirituality at Work:***

Spirituality at work was measured using 17 items adopted from scale developed by Rego et al. (2007). The Cronbach's alpha of the scale is 0.85. The questions related to sense of community, meaningfulness of work and inner life effects inculcated in spirituality at work scale were answered by respective nurses. The sample items include "People in my community feel as if they were part of a family" and "I feel that the members of my team/group care about each other"

### ***3.5.4. Job Involvement:***

The scale developed by Kanungo (1982) was used to measure job involvement. This scale comprises of 10 items with Cronbach's alpha of 0.88, which stimulates to provide impartial answer regarding degree of contribution in occupational tasks to uphold performance. The sample items filled by nurses include "Most of my interests are centered on my job" and "I consider my job to be very central to my existence".

### ***3.6. Pilot Testing:***

The startup examination to verify the feasibility of research instruments used in this study was determined through pilot testing. The deficiency in the questionnaire items as per scope of the study was assessed through pilot testing. Welman and Kruger (1999) emphasized on the conduct of pilot study before main study to reveal the defects in questionnaire items and measurement procedures. Oppenheim (1992) also explained the importance of pilot testing to have indemnity for the conduct of detail study and analysis, which eventually provide reliable and authentic findings.

Thus, total 300 nurses and corresponding patients were targeted and guided for feedback in the form of filled questionnaires. After consisted follow-ups total 214 questionnaires were retrieved duly completed in all aspects, yielding a response rate of 71.33%. All the items in the questionnaire were responded by using five-point Likert response scale, where 1 corresponds to “strongly disagree” and 5 corresponds to “strongly agree.” The Cronbach’s Alpha Reliability retrieved from pilot study is mentioned below:

**Table 3.1**

*Reliabilities from pilot study*

<b>Research Variable</b>	<b>No. of items</b>	<b>Cronbach’s Alpha Reliability</b>
Extraversion	08	0.691
Conscientiousness	09	0.714
Neuroticism	08	0.708
Agreeableness	09	0.683
Openness to Experience	10	0.747
Emotional Intelligence	33	0.756
Spirituality at Work	17	0.731
Job Involvement	10	0.724
Patient Satisfaction	25	0.793

The overall participation of respondents in pilot study was commendable and suitable for the conduct of study with large sample size. Thus, 600 questionnaires were distributed to targeted nurses and corresponding patients in public sector hospital and 457 were received back by hand, out of which 408 were complete in all aspects, resulted in a response rate of 68%. Such sample size from targeted population is sufficient in accordance with Krejcie et al. (1970) tabular representation of determining sample selection from population for research activities. The Cronbach's Alpha Reliability retrieved from main study is mentioned below:

**Table 3.2**

*Reliabilities from Main Study*

<b>Research Variable</b>	<b>No. of Items</b>	<b>Cronbach's Alpha Reliability</b>
Extraversion	08	0.835
Conscientiousness	09	0.811
Neuroticism	08	0.737
Agreeableness	09	0.803
Openness to Experience	10	0.827
Emotional Intelligence	33	0.866
Spirituality at Work	17	0.890
Job Involvement	10	0.886
Patient Satisfaction	25	0.844

### 3.7. Validity Analysis of Measurement Model:

Confirmatory Factor Analysis (CFA) was used to justify the measurement model (Anderson & Gerbing, 1988) which consisted of nine (9) latent variables: Ex, Con, Neu, Agr, Open, EI, Sp, JI and Pat satis. The main objective of confirmatory factor analysis is to test the data fitness and validity with other psychometric characteristics in accordance to the hypothesis of measurement model. The combination of different fit indices: model chi-square, normed fit index (NFI), non-normed fit index (NNFI), root mean square error of approximation (RMSEA), and comparative fit index (CFI) were used to assess the model fit.

Insignificant chi-square value shows a good model fit, for NFI, NNF and CFI with values 0.95 and above being considered as a good fit (Hu & Bentler, 1999; Kline, 2005), while the value of RMSEA was below or closer to 0.05 indicating a good model fit (Kline, 2005). The measurement model provided an excellent fit to the data:  $\chi^2$  (64 df)= 62.70,  $p > 0.05$ ; NFI=0.95; NNFI=0.96; CFI=0.95; RMSEA=0.04 shown in Table 3.3). These CFAs results showed that nine-factor model had satisfactory discriminant validity. Moreover, all the items loaded significantly on their respective latent factors, which is in accordance with Cua et al. (2001) explanation that factor loadings ranging from 0.64 to 0.95 are considered as practically significant construct.

**Table 3.3**  
***Measurement Model***

Model	$\chi^2$	df	RMSEA	NFI	NNFI	CFI
Nine Factors (Hypothesized Model)	62.70*	64	.04	.95	.96	.95

\*  $p > 0.05$ , \*\*  $p < 0.01$

### **3.8. Procedure:**

The self-administered questionnaires were distributed to targeted nurses' sample performing duties to treat patients who were suffered from dread diseases. The hospital administrators/medical superintendents (MS) were approached and briefed about scope of this study and after obtaining their consent the Head Nurse was taken on board to access registered nurses for data collection. As each nurse could not attend particular patient for longer period of time due to huge number of patients in public sector hospitals therefore; frequent visits of particular nurse for particular patient was insured through duty roster of nurses. In order to ensure that the questionnaires were filled by the same nurse providing services to corresponding patient the questionnaire of targeted nurse and corresponding patient was marked with the ward and bed number of dread disease patient with the help of duty roster.

The questionnaires were filled in two time lags in accordance with the recommendation of Carmeli et al. (2010) study to enable better occurrence of cause and effect relationship among concerned variables. This eventually results in establishing better dyadic relationship between nurse and corresponding patient as well. During first time lag the feedback of nurses regarding their personality traits were obtained. After one week gap the second time lag was pursued and all items of questionnaires were briefed to the nurses for obtaining impartial feedback. In brief, the steps followed during data collection are as under:

1. Registered nurses (RN) performing duties as a regular employee in the public sector hospital were approached through administrators/medical superintendent (MS).
2. The duty roster of nurse treating respective patient for at least one week was considered under the consent of Head Nurse.

3. The questionnaire of nurse was marked with the ward and bed number of concerned patient under the supervision of Head Nurse.
4. Consent of RN nurse was also obtained to provide valued feedback on questionnaire.
5. The particular nurse providing services to specific dread disease patient for few days was insured through duty roster of nurse, duly endorsed by nursing administration section/Head Nurse.

### **3.9. Questionnaire Management:**

There are number of ways to manage questionnaire e.g. researcher can obtain answers of questions through interview, through telephonic calls or by sending questionnaires by post etc. Such ways to manage questionnaire for data collected becomes clear with precision of research questions, research objectives, target population, sampling technique and resources constraints (Bennett & Ritchie, 1975). The cognitive involvement of respondents is also crucial for accurate data collection. The significance and expected implication of research makes respondents motivated to actively participate in responding all questions with interest and sincerity.

Therefore, this study utilized self-administered questionnaire to actively engage targeted nurses to respond with in-depth interest in providing answers for better implications. The response of targeted nurses was encouraged through respective Head Nurses to obtain impartial feedback of nurse quality of service for dread disease patient.

### **3.10. Characteristics of Sample One:**

The demographic characteristics of sample one comprises of registered nurses providing services to dread disease patients are as under:

**Table 3.4**

*Qualification of sample one respondents*

<b>Qualification</b>	<b>Frequency</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Diploma	184	45.1	45.1
BSN Degree	126	30.9	76.0
M.Sc Degree	77	18.9	94.9
MPhil Degree	21	5.1	100.00

**3.10.1. Qualification:**

The table shows that 45 % of nurses were obtained diploma, 31% nurses had BSN degree, 19 % were masters and 5% obtained MPhil degree. This depicts that majority of the nurses completed initial qualification and started working in respective public sector hospitals to service critical patients in particular. The qualification assured that all nurses were educated enough to understand and participate in data collection for better implications of this study.

**Table 3.5***Age of sample one respondents*

<b>Age (In years)</b>	<b>Frequency</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
18-24	105	25.7	25.7
25-31	203	49.8	75.5
32-38	68	16.4	91.9
39 & above	33	8.1	100.00

**3.10.2. Age:**

The table shows that majority of nurses were middle aged and mature ones to provide impartial feedback in the form of filled questionnaire. The nurses belongs to higher age group mainly engaged in backend operational affairs in respective hospitals and patients suffering from dread diseases were dealt by young and middle age nurses, respectively.

**Table 3.6***Marital Status of sample one respondents*

<b>Marital Status</b>	<b>Frequency</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Married	305	74.8	74.8
Un-married	103	25.2	100.00



### 3.10.3. Marital status

The table shows that marital status of maximum nurses was married which indicates that they have to look after their family affairs as well in addition to their performance in public sector hospitals while serving to crucial patients.

**Table 3.7**

*Gender of sample one respondents*

<b>Gender</b>	<b>Frequency</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Female	346	84.8	84.8
Male	62	15.2	100.00

### 3.10.4. Gender:

The table depicts that nursing profession is female dominant and male were not encourage to opt this profession as a career.

**Table 3.8***Experience of sample one respondents*

<b>Experience</b> <b>(In years)</b>	<b>Frequency</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
1-5	197	48.3	48.3
6-10	135	33.1	81.4
11-15	61	12.5	93.9
16 & above	34	6.1	100.00

**3.10.5. Experience:**

The table shows that nurses possessed more initial career experience in respective public sector hospitals. The length of service of nurses falls while attaining high experience in this profession.

**3.11. Population (Patients):**

In the prevailing unhinged situation of developing country, Pakistan the basic needs of people are much more precious than attaining well-being in life. People belong to middle class and lower middle class status finds it hard to meet their daily expenses. The low gross domestic product (GDP) and high inflation rate stimulate in-depth struggle for better survival. Apart from many basic needs the health care issues are more crucial, particularly when people suffered with dread diseases. People find it hard to attain appropriate services from public sector hospitals. The

prohibited status of services by nurses and doctors alongside questionable hygiene condition in public sector hospital of Pakistan makes it more challenging to attain patients' satisfaction.

Thus, this study target patients who were suffering from dread diseases and opt public sector hospital for appropriate treatment. The renowned public sector hospitals spread geographically across Pakistan were selected to obtain feedback regarding satisfaction level of dread disease patients in perspective of services provided by nurse during dread disease treatment.

### **3.12. Sample Two (Patients):**

Although there were many types of patients in public sector hospitals but this study focused on patients who suffered from dread disease i.e. hepatitis, heart attack, organ transplant, kidney failure, stroke and cancer etc . Non-probability sampling was considered to acquire data from dread disease patients, as it is not possible to access all patients in respective public sector hospitals. The judgmental sampling technique was applied to obtain feedback from particular patient who had experienced service quality of nurse during dread disease treatment in hospital. The dyadic relationship between patient and nurse was pursued through recurrent interaction between patient and nurse in challenging conditions of public sector hospital.

### **3.13. Questionnaire (Patients):**

The following questionnaire was adopted and distributed to targeted sample of patients:

#### ***3.13.1. Patients' Satisfaction:***

The patients' satisfaction was measured with the scale developed by Hinshaw and Atwood (1982). The patients hospitalized due to dread disease treatment were encouraged to

give feedback regarding expected care and actual care received from nurses resulting in their satisfaction level to consider same hospital in future. The sample items extracted from 25 items of this scale includes “I feel free to ask the questions from nurse” and “The nurse makes a point to show me how to carry out the doctor’s orders.” The Cronbach’s alpha reliability of 25 items was reported as 0.92 to measure patient’s satisfaction level.

### **3.14. Procedure:**

The hospital administrators/medical superintendents (MS) were approached to access patients who were hospitalized due to dread disease treatment and experienced service quality of nurse by establishing one to one relationship. The hospitalized patients’ suffering from dread diseases was briefed about scope of this study. All questionnaire items were explained to targeted patients and attendants of patients were also encouraged to support in obtaining impartial feedback of patient. The self-administered questionnaire duly marked with ward and bed numbers of patient were distributed to targeted patients who had experienced interaction with designated nurse. After one week gap from first time lag, the questionnaires were filled in second time lag, where in nurses filled their remaining questionnaires regarding emotional intelligence, spirituality at work and job involvement and patients were encouraged to provide feedback regarding services delivered by designated nurse. The frequent interaction between patient and nurse was ensured through duty roster and the dyadic relationship between nurse and patient was ensured through ward and bed numbers mentioned on the questionnaires, which were matched accordingly, before obtaining feedback. In brief, the steps followed during data collection are as under:

1. The hospitalized patients who were under treatment of dread disease were ensured through hospital administration.
2. The patient hospitalized for at least one week and being treated by deployed nurse as per duty roster was considered.
3. Consent of hospitalized dread disease patient was obtained to seek their valued feedback regarding deployed nurse behaviors and service quality.
4. The questionnaire of patients were marked with same ward and bed number as mentioned on designated nurse questionnaire to insure one to one interaction between nurse and corresponding patient.
5. The permission from concerned quarters of hospital and patient's attendant was obtained before collecting data from respective patients.

### **3.15. Questionnaire Management:**

In order to motivate respondents to give impartial feedback, the scope of this study was briefed to targeted patients which results in better cognitive involvement and self-interest to fill questions regarding their level of satisfaction. The self-administered questionnaire was used to obtain patients' feedback about services provided by designated nurse during their period of hospitalization. The questionnaires were distributed to those corresponding patients who were under treatment due to dread disease and served by designated nurse who had already targeted for data collection. The 408 fully completed questionnaires which were received from respective nurses' leads to the completion of patients' questionnaire as well. This equality of filled questionnaire from patients and nurses was insured by punctuality of timings to uphold the dyadic relationship between nurse and patient. Therefore, the patient was rigorously followed up to complete the questionnaire on the same day, date and time when nurse handed over the fully

completed questionnaire during time lag two, which eventually resulted in same response rate of 68%.

### **3.16. Characteristics of Sample Two:**

The demographic characteristics of sample two comprises of hospitalized dread disease patients are as under:

**Table 3.9**

*Qualification of sample two respondents*

<b>Qualification</b>	<b>Frequency</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Intermediate or less	214	52.5	52.5
Graduation	116	28.4	80.9
Masters	51	12.5	93.4
MPhil & above	27	6.6	100.00

#### **3.16.1. Qualification:**

The table shows that all patients were literate enough to provide impartial feedback regarding nurses' service quality. The majority of patients completed intermediate and graduation level of education and rest of them had Masters' Degree. However, the MPhill qualified patients were rare to prefer public sector hospitals for dread disease treatment.

**Table 3.10***Age of sample two respondents*

<b>Age (In years)</b>	<b>Frequency</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
8-24	20	4.9	4.9
25-31	41	10.0	15.0
32-38	123	30.1	45.1
39 & above	224	54.9	100.00

**3.16.2. Age:**

The table shows that patients suffering from various dread diseases were elder in age. The young and middle age patients were fewer in numbers and seem to be safe from dread diseases. This depicts that nurses had to treat more old aged patients in comparison to middle and young aged patients in respective hospitals.

**Table 3.11***Marital Status of sample two respondents*

<b>Marital Status</b>	<b>Frequency</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Married	394	96.6	96.6
Un-married	14	3.4	100.00

### 3.16.3 Marital status:

The table shows that marital status of maximum patients was married which indicates that patients had diverse number of dependents. The patients had to look after their family apart from suffering with dread disease.

**Table 3.12**

*Gender of sample two respondents*

Gender	Frequency	Valid Percent	Cumulative Percent
Male	339	83.1	83.1
Female	69	21.8	100.00

### 3.16.4 Gender:

The table depicts that mainly male patients were able to be hospitalized in respective public sector hospitals and female patients were least hospitalized for dread disease treatment.

**Table 3.13**

*Hospitalized duration*

Hospitalized duration (In weeks)	Frequency	Valid Percent	Cumulative Percent
1-4	334	81.9	81.9
5-8	53	13.0	94.9
9-12	12	2.9	97.8
13 & above	9	2.2	100.00



### **3.16.5. Hospitalized duration:**

The table shows that majority of dread disease patients spend less time (in weeks) in hospitals. The dread diseases of patient were treated through relevant operation and subsequent service delivery by nurse wherein the pro-long post hospitalization care was dealt by patients.

### **3.17. Control Variables:**

Although the demographic variables provide reasonable information about characteristics of samples but in the mean time it affects the proposed relationships. The demographic variable comprises of qualification, age, marital status, gender, duration and experience possessed high probability to influence the proposed associations among variables. According to Allworth and Hesketh (1999) the demographic variables need to be controlled for in-depth analysis about hypothesized relationships in research study. The demographic differences on the basis of belongingness from diverse culture, situation, ethics and beliefs etc are most likely to affect opinion about a phenomenon (Hunter & Hunter, 1984) resulting in controlling demographic variables to obtain impartial answers of questions asked in a research study.

Earlier studies on nurses' self report assessment recommended controlling demographic variables (Collin & Henderson, 1991). Such controlling stimulates more authentic assessment of nurses as they were capable to answer each question on the basis of actual performance delivered in dissimilar hospital settings. Therefore, nurses input utilized in this study regarding their personality traits, emotional intelligence, job involvement and spirituality at work was obtained by controlling their demographic status.

The patients' demographic characteristics are much broad and complex as in most of the cases they travel from their native places to reach designated hospital in seeking cure for the

dread disease. The patients' satisfaction in perspective of nursing care in diverse hospital settings is independent of demographic characteristics. Ford et al. (1997) argued that demographic states of patients need to be controlled whenever patients are involved in answering research questions. This shall strengthen the findings of the research study, as patients only provide input regarding actual experience of treatment received. Thus, demographic variable affects of qualification, age, marital status, gender and hospitalized duration were controlled in this study to obtain reliable results.

One-way ANOVA was conducted to compare patients' satisfaction across demographic variables. The results revealed insignificant differences in patients' satisfaction across qualification ( $F= .72, p > .05$ ), gender ( $F= .05, p > .05$ ), age ( $F= 1.00, p > .05$ ), marital status ( $F= .11, p > .05$ ) and hospitalized duration ( $F= .32, p > .05$ ). In addition to the insignificant values the effect of demographic variables on patients' satisfaction is controlled in this study in accordance with Ford et al. (1997) recommendation to obtain actual effect of predictors on patients' satisfaction.

Moreover, the one-way ANOVA was also conducted to compare emotional intelligence across demographic variables. The results revealed insignificant differences in emotional intelligence across qualification ( $F= .90, p > .05$ ), gender ( $F= 2.40, p > .05$ ), age ( $F= .33, p > .05$ ), marital status ( $F= 3.82, p > .05$ ) and experience ( $F= .51, p > .05$ ). In addition to the insignificant values the effect of demographic variables on emotional intelligence is controlled in this study in accordance with Petrides and Furnham (2001) recommendation to obtain actual effect of predictors on emotional intelligence.

### **3.18. Data Analysis:**

The data was analyzed through SPSS 21, Preacher and Hayes process macro and AMOS 21. Initially the reliabilities test in SPSS 21 was conducted to analyze the internal consistency of each variable. The confirmatory factor analysis was conducted in AMOS 21 to test the data fitness and validity with other psychometric characteristics in accordance to the hypothesis of measurement model. Then, the Pearson correlation was applied in SPSS 21 to analyze the relationship between all variables. The multiple regression analysis was performed to find out the impact of Big five personality traits on emotional intelligence and patients' satisfaction and influence of emotional intelligence on patients' satisfaction, respectively.

After that, the Preacher and Hayes process macro was executed in SPSS 21 to analyze the mediating role of emotional intelligence between Big five personality traits and patients' satisfaction. Subsequently, the moderated regression analysis technique was applied, wherein significant value of beta weight of the interaction terms was analyzed for moderating affects of spirituality at work and job involvement between emotional intelligence and patients' satisfaction.

# **CHAPTER # 4**

## CHAPTER # 4

### 4. RESULTS

#### 4.1 Descriptive Statistics and Correlation Analysis:

The descriptive statistics and correlation analysis of the variables examined in the study are shown in following tables:

**Table 4.1**

*Descriptive statistics*

<b>Research Variable</b>	<b>Mean</b>	<b>Standard Deviation</b>
Extraversion	3.37	0.70
Conscientiousness	3.28	0.67
Neuroticism	2.25	0.61
Agreeableness	3.26	0.52
Openness to Experience	3.56	0.57
Emotional Intelligence	3.49	0.49
Spirituality at Work	2.87	0.32
Job Involvement	3.57	0.64
Patients' Satisfaction	3.61	0.46

**Table: 4.2*****Correlation Analysis***

	1	2	3	4	5	6	7	8	9
1. <i>Extraversion</i>	1								
2. <i>Conscientiousness</i>	.083	1							
3. <i>Neuroticism</i>	.103*	.033	1						
4. <i>Agreeableness</i>	.063	.196**	.185**	1					
5. <i>Openness to Experience</i>	.082	.182**	.211**	.274**	1				
6. <i>Emotional Intelligence</i>	.178**	.018	-.141	.049	.263**	1			
7. <i>Job Involvement</i>	.048	.015	.030*	.060*	.156**	.025	1		
8. <i>Patients' Satisfaction</i>	.287**	.193**	-.196*	.224**	.102*	.115**	.051	1	
9. <i>Spirituality at work</i>	.158*	.216**	-.021	.213	.018**	.027	-.063	.143	1

\*  $p < .05$ , \*\*  $p < .01$

The Table 4.1 representing mean and standard deviation of the variables indicates that the higher value of mean represent participants' feedback towards agreement side of the variable, whereas, lower value of mean represents negative side of the variable by respective feedback of participants.

The mean value of Extraversion (Mean = 3.37, SD = 0.70) depicts that nurses are agreeing with extraversion personality trait while serving patients. The mean value of Conscientiousness (Mean = 3.28, SD = 0.67) reveals that nurses are agreeing that they possess conscientiousness personality trait to follow hospital rule and regulations. The mean value of Neuroticism (Mean = 2.25, SD = 0.61) depict that nurses disagree to an extend with neuroticism to predict emotions and patients' satisfaction. The mean value of Agreeableness (Mean = 3.26, SD = 0.52) shows nurses' consent with their agreeable personality trait to meet patients' concerns. The mean value of Openness of Experience (Mean = 3.56, SD = 0.57) shows that nurses also possess openness to experience personality trait to provide unique solutions to hospital administration and patients.

Furthermore, the mean value of Emotional Intelligence (Mean = 3.49, SD = 0.49) reveals agreement of being emotionally intelligent in diverse hospital settings. The mean value of Job Involvement (Mean = 3.57, SD = 0.64) shows agreement of involvement level of nurses in their job for better outcomes. The mean value of Spirituality at Work (Mean = 2.87, SD = 0.32) shows that nurses are disagree to an extend with spiritual aspects of their profession. The mean value of Patients' Satisfaction (Mean = 3.61, SD = 0.46) reveals that patients are in agreement with nurses behavioral, emotional, involvement and spiritual assessment to provide them quality services in uncertain environment of public sector hospitals of Pakistan.

The Correlation Analysis in Table 4.2 discloses the direction of relationship (either positive or negative) among variables. In this study, correlation analysis shows that all variables are correlated, mostly positive correlated as prescribed in the hypothesis. It depicts that Extraversion, Conscientiousness, Agreeableness and Openness to experience are positively associated to Patients' Satisfaction with value of .287\*\*, .193\*\*, .224\*\*, .102\* and also to Emotional Intelligence with value of .178\*\*, .018\*\*, .049, .263\*\*. Neuroticism is negatively associated to Patients' Satisfaction with value of -.196\* and also to Emotional Intelligence with value of -.141. Emotional Intelligence is positively associated with Patients' Satisfaction having value of .115\*\*.

#### **4.2 Test of Hypothesis 1-5:**

**H1:** Extraversion is positively associated with patients' satisfaction

**H2:** Conscientiousness is positively associated with patients' satisfaction

**H3:** Neuroticism is negatively associated with patients' satisfaction

**H4:** Agreeableness is positively associated with patients' satisfaction

**H5:** Openness to experience is positively associated with patients' satisfaction



**Table 4.3***Multiple regression analysis for determinants of patients' satisfaction*

Predictors	Patients' Satisfaction		
	$\beta$	$R^2$	$\Delta R^2$
Step 1			
<i>Control Variables</i>		.012	
Step 2			
Extraversion	.336***		
Conscientiousness	.121**		
Neuroticism	-.091*		
Agreeableness	.441***		
Openness to Experience	.101**	.627	.615***

---

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

The Table 4.3 represents significant positive relationship of Extraversion, Conscientiousness, Agreeableness and Openness to experience with patients' satisfaction whereas; Neuroticism is negatively associated with patients' satisfaction. The influence of demographic variables i.e. qualification, age, marital status, gender and experience is controlled. Furthermore, the value of

$R^2 = .627$ ,  $F = 67.854$ , and Durbin-Watson = 1.954 which depicts that the impact of other variables on patients' satisfaction is 37.3% with appropriate model fitness and independence of data. The value of tolerance lies above .20 and value of Durbin-Watson also lies between 1.5 to 2.5 which indicates no multicollinearity among variables and strengthens data independence in accordance with Garson (2012) recommendations to analyze multicollinearity and data independence

**H1: Extraversion is positively associated with patients' satisfaction**

The result depicts that extraversion has significant positive association with patients' satisfaction ( $\beta = .336$ ,  $p < .001$ ). Thus hypothesis H1 that extraversion is positively associated with patients' satisfaction is supported.

**H2: Conscientiousness is positively associated with patients' satisfaction**

The result depicts that conscientiousness has significant positive association with patients' satisfaction ( $\beta = .121$ ,  $p < .01$ ). Thus hypothesis H2 that conscientiousness is positively associated with patients' satisfaction is supported.

**H3: Neuroticism is negatively associated with patients' satisfaction**

The result depicts that neuroticism has significant negative association with patients' satisfaction ( $\beta = -.091$ ,  $p < .05$ ). Thus hypothesis H4 that neuroticism personality dimension is negatively associated with patients' satisfaction is supported.

**H4: Agreeableness is positively associated with patients' satisfaction**

The result depicts that agreeableness has significant positive association with patients' satisfaction ( $\beta = .441, p < .001$ ). Thus hypothesis H4 that agreeableness is positively associated with patients' satisfaction is supported.

**H5: Openness to experience is positively associated with patients' satisfaction**

The result depicts that openness to experience has significant positive association with patients' satisfaction ( $\beta = .101, p < .01$ ). Thus hypothesis H5 that openness to experience is positively associated with patients' satisfaction is supported.

**4.3 Test of Hypothesis 6-10:**

**H6:** Extraversion is positively associated to emotional intelligence.

**H7:** Conscientiousness is positively associated to emotional intelligence.

**H8:** Neuroticism is negatively associated to emotional intelligence.

**H9:** Agreeableness is positively associated to emotional intelligence.

**H10:** Openness to experience is positively associated to emotional intelligence.

**Table 4.4***Multiple regression analysis for determinants of Emotional Intelligence*

Predictors	Emotional Intelligence		
	$\beta$	$R^2$	$\Delta R^2$
Step 1			
<i>Control Variables</i>		.015	
Step 2			
Extraversion	.383***		
Conscientiousness	.110*		
Neuroticism	-.150		
Agreeableness	.269***		
Openness to Experience	.097*	.401	.386***

---

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

The Table 4.4 represents significant positive relationship of Extraversion, Conscientiousness, Agreeableness and Openness to experience with emotional intelligence whereas; Neuroticism is negatively associated with emotional intelligence. The influence of demographic variables i.e. qualification, age, marital status, gender and experience is controlled. Furthermore, the value of  $R^2 = .401$ ,  $F = 50.961$  and Durbin-Watson = 1.573 which depicts that the impact of other

variables on emotional intelligence is 59.9% with appropriate model fitness and independence of data (Garson, 2012).

**H6: Extraversion is positively associated to emotional intelligence.**

The result depicts that extraversion has significant positive association with emotional intelligence ( $\beta = .383, p < .001$ ). Thus hypothesis H6 that extraversion is positively associated with emotional intelligence is supported.

**H7: Conscientiousness is positively associated to emotional intelligence.**

The result depicts that conscientiousness has significant positive association with emotional intelligence ( $\beta = .110, p < .05$ ). Thus hypothesis H7 that conscientiousness is positively associated with emotional intelligence is supported.

**H8: Neuroticism is negatively associated to emotional intelligence.**

The result depicts that neuroticism has insignificant negative association with emotional intelligence ( $\beta = -.150, p > .05$ ). Thus hypothesis H8 that neuroticism is negatively associated with emotional intelligence is not supported.

**H9: Agreeableness is positively associated to emotional intelligence.**

The result depicts that agreeableness has significant positive association with emotional intelligence ( $\beta = .269, p < .001$ ). Thus hypothesis H9 that agreeableness is positively associated with emotional intelligence is supported.

**H10: Openness to experience is positively associated with emotional intelligence.**

The result depicts that openness to experience has significant positive association with emotional intelligence ( $\beta = .097, p < .05$ ). Thus hypothesis H10 that openness to experience is positively associated with emotional intelligence is supported.

**4.4 Test of Hypothesis 11:**

**H11:** Emotional intelligence is positively associated with patients' satisfaction

**Table 4.5**

*Regression analysis for emotional intelligence influence on patients' satisfaction*

Predictors	Patients' Satisfaction		
	$\beta$	$R^2$	$\Delta R^2$
Step 1			
<i>Control Variables</i>		.011	
Step 2			
Emotional Intelligence	.508***	.265	.254***

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

The Table 4.5 represents significant positive relationship of emotional intelligence with patients' satisfaction. The influence of demographic variables i.e. qualification, age, marital status, gender and experience is controlled. Furthermore, the value of  $R^2 = .265$ ,  $F = 28.948$  and Durbin-

Watson = 1.913 which depicts appropriate model fitness and independence of data (Garson, 2012).

**H11: Emotional intelligence is positively associated with patients’ satisfaction**

The result depicts that emotional intelligence has significant positive association with patients’ satisfaction ( $\beta = .508, p < .001$ ). Thus hypothesis H11 that Emotional intelligence is positively associated with patients’ satisfaction is supported.

**4.5 Test of Hypothesis 12:**

**H12:** Emotional intelligence mediates the relationship between extraversion and patients’ satisfaction

**Table 4.6**

*Mediation effect of emotional intelligence between extraversion and patients’ satisfaction*

	<b>B</b>	<b>SE</b>	<b>t</b>	<b>p</b>
Extraversion → Patients’ Satisfaction	.669	.032	20.531	.000
Extraversion → Emotional Intelligence	.653	.045	14.256	.000
Emotional Intelligence → Patients’ Satisfaction	.119	.034	3.421	.000
Extraversion → Emotional Intelligence → Patients’ Satisfaction	.591	.039	15.00	.000
Bootstrap results for indirect effect	Indirect effect	LL 95% CI	UL 95% CI	
	.078	.026	.145	

Notes: Un-standardized regression coefficients reported. Bootstrap sample size 1000. LL=Lower Limit; CI= Confidence Interval, UL=Upper Limit

In Step 1 of the mediation model, the regression of extraversion on patients' satisfaction, ignoring the mediator, was significant,  $b = .669$ ,  $p = <.001$ . Step 2 showed that the regression of the extraversion on the mediator (Emotional Intelligence), was also significant,  $b = .653$ ,  $p = <.001$ . Step 3 of the mediation process showed that the mediator (Emotional Intelligence), controlling for extraversion, was significant,  $b = .119$ ,  $p = <.001$ . Step 4 of the analysis revealed that, controlling for the mediator (Emotional Intelligence), extraversion score was a significant predictor of patients' satisfaction,  $b = .591$ ,  $p = <.001$ . Therefore, the indirect effect is .078 which lies between .026 and .145 wherein zero is not present in 95% confidence interval.

**H12: Emotional intelligence mediates the relationship between extraversion and patients' satisfaction**

The results depict that the indirect effect (.078) of emotional intelligence between extraversion and patients' satisfaction lies between .026 and .145. Therefore, zero is not present in the 95% confidence interval. So, it is concluded that emotional intelligence partially mediated the relationship between extraversion and patients' satisfaction, which leads to the consequence that hypothesis H12 is supported.

**4.6 Test of Hypothesis 13:**

**H13: Emotional intelligence mediates the relationship between conscientiousness and patients' satisfaction**



**Table 4.7*****Mediation effect of emotional intelligence between Conscientiousness and patients' satisfaction***

	<b>B</b>	<b>SE</b>	<b>t</b>	<b>p</b>
Conscientiousness → Patients' Satisfaction	.457	.035	12.918	.000
Conscientiousness → Emotional Intelligence	.427	.046	9.264	.000
Emotional Intelligence → Patients' Satisfaction	.120	.031	3.426	.000
Conscientiousness → Emotional Intelligence → Patients' Satisfaction	.336	.036	9.273	.000
Bootstrap results for indirect effect	Indirect effect	LL 95% CI	UL 95% CI	
	.121	.071	.187	

Notes: Un-standardized regression coefficients reported. Bootstrap sample size 1000. LL=Lower Limit; CI= Confidence Interval, UL=Upper Limit

In Step 1 of the mediation model, the regression of conscientiousness on patients' satisfaction, ignoring the mediator, was significant,  $b = .457$ ,  $p = <.001$ . Step 2 showed that the regression of the conscientiousness on the mediator (Emotional Intelligence), was also significant,  $b = .427$ ,  $p = <.001$ . Step 3 of the mediation process showed that the mediator (Emotional Intelligence), controlling for conscientiousness, was significant,  $b = .120$ ,  $p = <.001$ . Step 4 of the analysis revealed that, controlling for the mediator (Emotional Intelligence), conscientiousness scores was a significant predictor of patients' satisfaction,  $b = .336$ ,  $p = <.001$ . Therefore, the indirect effect is .121 which lies between .071 and .187 wherein zero is not present in 95% confidence interval.

**H13: Emotional intelligence mediates the relationship between conscientiousness and patients' satisfaction**

The results depict that the indirect effect (.121) of emotional intelligence between conscientiousness and patients' satisfaction lies between .071 and .187. Therefore, zero is not present in the 95% confidence interval. So, it is concluded that emotional intelligence partially mediated the relationship between conscientiousness and patients' satisfaction, which leads to the consequence that hypothesis H13 is supported.

**4.7 Test of Hypothesis 14:**

**H14:** Emotional intelligence mediates the relationship between neuroticism and patients' satisfaction

**Table 4.8**

*Mediation effect of emotional intelligence between neuroticism and patients' satisfaction*

	<b>B</b>	<b>SE</b>	<b>t</b>	<b>p</b>
Neuroticism → Patients' Satisfaction	.335	.028	11.724	.000
Neuroticism → Emotional Intelligence	.214	.037	7.301	.117
Emotional Intelligence → Patients' Satisfaction	.119	.035	3.437	.000
Neuroticism → Emotional Intelligence → Patients' Satisfaction	.323	.017	2.975	.020
Bootstrap results for indirect effect	Indirect effect	LL 95% CI	UL 95% CI	
	.012	-.027	.041	

Notes: Un-standardized regression coefficients reported. Bootstrap sample size 1000. LL=Lower Limit; CI= Confidence Interval, UL=Upper Limit

In Step 1 of the mediation model, the regression of neuroticism on patients' satisfaction, ignoring the mediator, was significant,  $b = .335$ ,  $p = <.001$ . Step 2 showed that the regression of the neuroticism on the mediator (Emotional Intelligence), was insignificant,  $b = .214$ ,  $p = >.001$ . Step 3 of the mediation process showed that the mediator (Emotional Intelligence), controlling for extraversion, was significant,  $b = .119$ ,  $p = <.001$ . Step 4 of the analysis revealed that, controlling for the mediator (Emotional Intelligence), extraversion scores was a significant predictor of patients' satisfaction,  $b = .323$ ,  $p = <.001$ . Therefore, the indirect effect is .012 which lies between -.027 and .041 wherein zero is present in 95% confidence interval.

**H14: Emotional intelligence mediates the relationship between Neuroticism and patients' satisfaction**

The results depict that the indirect effect (.012) of emotional intelligence between neuroticism and patients' satisfaction lays between -.027 and .041. Therefore, zero is present in the 95% confidence interval. So, it is concluded that emotional intelligence does not mediated the relationship between neuroticism and patients' satisfaction, which leads to the consequence that hypothesis H14 is not supported.

**4.8 Test of Hypothesis 15:**

**H15:** Emotional intelligence mediates the relationship between agreeableness and patients' satisfaction

**Table 4.9*****Mediation effect of emotional intelligence between agreeableness and patients' satisfaction***

	<b>B</b>	<b>SE</b>	<b>t</b>	<b>p</b>
Agreeableness → Patients' Satisfaction	.476	.021	22.360	.000
Agreeableness → Emotional Intelligence	.423	.032	13.186	.000
Emotional Intelligence → Patients' Satisfaction	.124	.032	3.698	.000
Agreeableness → Emotional Intelligence → Patients' Satisfaction	.425	.0251	16.974	.000
Bootstrap results for indirect effect	Indirect effect	LL 95% CI	UL 95% CI	
	.051	.019	.097	

Notes: Un-standardized regression coefficients reported. Bootstrap sample size 1000. LL=Lower Limit; CI= Confidence Interval, UL=Upper Limit

In Step 1 of the mediation model, the regression of agreeableness on patients' satisfaction, ignoring the mediator, was significant,  $b = .476$ ,  $p = <.001$ . Step 2 showed that the regression of the agreeableness on the mediator (Emotional Intelligence), was also significant,  $b = .423$ ,  $p = <.001$ . Step 3 of the mediation process showed that the mediator (Emotional Intelligence), controlling for extraversion, was significant,  $b = .124$ ,  $p = <.001$ . Step 4 of the analysis revealed that, controlling for the mediator (Emotional Intelligence), agreeableness scores was a significant predictor of patients' satisfaction,  $b = .425$ ,  $p = <.001$ . Therefore, the indirect effect is .051 which lies between .019 and .097 wherein zero is not present in 95% confidence interval.

**H15: Emotional intelligence mediates the relationship between agreeableness and patients' satisfaction**

The results depict that the indirect effect (.051) of emotional intelligence between agreeableness and patients' satisfaction lies between .019 and .097. Therefore, zero is not present in the 95% confidence interval. So, it is concluded that emotional intelligence partially mediated the relationship between agreeableness and patients' satisfaction, which leads to the consequence that hypothesis H15 is supported.

**4.9 Test of Hypothesis 16:**

**H16: Emotional intelligence mediates the relationship between openness to experience and patients' satisfaction**

**Table 4.10**

**Mediation effect of emotional intelligence between openness to experience and patients' satisfaction**

	<b>B</b>	<b>SE</b>	<b>t</b>	<b>p</b>
Openness to experience → Patients' Satisfaction	.175	.025	6.927	.000
Openness to experience → Emotional Intelligence	.171	.031	5.492	.000
Emotional Intelligence → Patients' Satisfaction	.120	.036	3.420	.000
Openness to experience → Emotional Intelligence → Patients' Satisfaction	.111	.023	4.766	.000
Bootstrap results for indirect effect	Indirect effect	LL 95% CI	UL 95% CI	
	.064	.039	.096	

Notes: Un-standardized regression coefficients reported. Bootstrap sample size 1000. LL=Lower Limit; CI= Confidence Interval, UL=Upper Limit

In Step 1 of the mediation model, the regression of openness to experience on patients' satisfaction, ignoring the mediator, was significant,  $b = .175$ ,  $p = <.001$ . Step 2 showed that the regression of the openness to experience on the mediator (Emotional Intelligence), was also significant,  $b = .171$ ,  $p = <.001$ . Step 3 of the mediation process showed that the mediator (Emotional Intelligence), controlling for openness to experience, was significant,  $b = .120$ ,  $p = <.001$ . Step 4 of the analysis revealed that, controlling for the mediator (Emotional Intelligence), openness to experience scores was a significant predictor of patients' satisfaction,  $b = .111$ ,  $p = <.001$ . Therefore, the indirect effect is .064 which lies between .039 and .096 wherein zero is not present in 95% confidence interval.

**H16: Emotional intelligence mediates the relationship between Openness to experience and patients' satisfaction**

The results depict that the indirect effect (.064) of emotional intelligence between openness to experience and patients' satisfaction lies between .039 and .096. Therefore, zero is not present in the 95% confidence interval. So, it is concluded that emotional intelligence partially mediated the relationship between openness to experience and patients' satisfaction, which leads to the consequence that hypothesis H16 is supported.

**4.10 Test of Hypothesis 17**

**H17: Job involvement positively moderates the relationship between emotional intelligence and patients' satisfaction**

**Table 4.11**

*Main effect and Moderated regression analysis of emotional intelligence, job involvement and patients' satisfaction:*

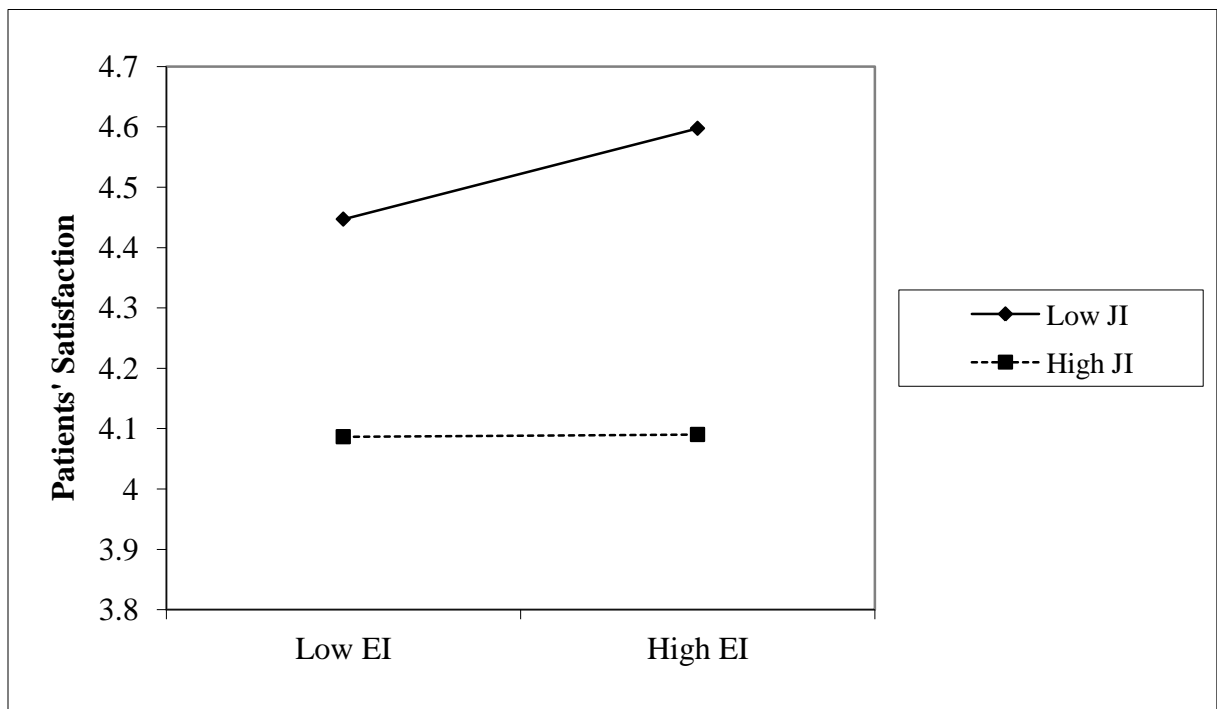
Predictors	Patients' Satisfaction		
	$\beta$	$R^2$	$\Delta R^2$
Step 1			
<i>Control Variables</i>		.012	
Step 2			
Emotional intelligence	.505***		
Job involvement	.092*	.274	.262***
Step 3			
Emotional intelligence x Job involvement	.143**	.292	.018***

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

The Table 4.11 represents that to examine the moderating role of job involvement between emotional intelligence and patients' satisfaction a moderated regression analysis was performed. In the first step, the effect of demographic variables i.e. qualification, age, marital status, gender and experience is controlled. In the second step the variables of emotional intelligence and job involvement were included. These variables accounted for a significant amount of variance in

patients' satisfaction, ( $\beta = .505, p < .001$ ), ( $\beta = .092, p < .05$ ),  $R^2 = .274, F = 72.086$ . Then, the interaction term was added to the moderated regression analysis, which accounted for a significant proportion of variance in patients' satisfaction,  $\Delta R^2 = .018, \Delta F = 10.382, \beta = .143, p < .001$ .

The below mentioned graph also represents moderation effect which strengthens the relationship between emotional intelligence and patients' satisfaction with low job involvement than higher:



**H17: Job involvement positively moderates the relationship between emotional intelligence and patients' satisfaction**

The results depict that job involvement moderates the relationship between emotional intelligence and patients' satisfaction in such a way that the relationship is stronger with low job



involvement than higher. Therefore, the interaction term between emotional intelligence and job involvement reveals the value of  $\Delta R^2 = .018$ ,  $\beta = .143$ ,  $p < .001$ . Hence, hypothesis H17 is supported.

#### 4.11 Test of Hypothesis 18

H18: Spirituality at work positively moderates the relationship between emotional intelligence and patients' satisfaction

**Table 4.12**

*Main effect and Moderated regression analysis of emotional intelligence, spirituality at work and patients' satisfaction*

Predictors	Patients' Satisfaction		
	$\beta$	$R^2$	$\Delta R^2$
Step 1			
<i>Control Variables</i>		.012	
Step 2			
Emotional intelligence	.507***		
Spirituality at work	.044	.267	.255***
Step 3			
Emotional intelligence x Spirituality at work	.170	.269	.002

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

The Table 4.22 represents that to examine the moderating role of spirituality at work between emotional intelligence and patients' satisfaction a moderated regression analysis was performed. In the first step, the effect of demographic variables i.e. qualification, age, marital status, gender and experience is controlled. In the second step the variables of emotional intelligence and spirituality at work were included. The emotional intelligence accounted a significant amount of variance in patients' satisfaction ( $\beta = .507$ ,  $p < .001$ ) where as spirituality at work accounted insignificant amount of variance in patients' satisfaction and ( $\beta = .044$ ,  $p = .302$ ),  $R^2 = .267$ ,  $F = 69.671$ . Then, the interaction term was added to the moderated regression analysis, which accounted an insignificant proportion of variance in patients' satisfaction,  $\Delta R^2 = .002$ ,  $\Delta F = .952$ , and  $\beta = .170$ ,  $p = .328$

**H18: Spirituality at work positively moderates the relationship between emotional intelligence and patients' satisfaction**

The results depict that spirituality at work does not moderates the relationship between emotional intelligence and patients' satisfaction as the interaction term between emotional intelligence and spirituality at work reveals an insignificant value of  $\Delta R^2 = .002$  and the effect of spirituality at work on patient's satisfaction is also insignificant. Hence, hypothesis H18 is not supported.

## 4.12 Accepted/Rejected Hypothesis

**Table 4.13**

*Summary of Hypothesis Acceptance/Rejection*

<b>Hypothesis</b>	<b>Statements</b>	<b>Results</b>
<b>H1</b>	Extraversion is positively associated with patients' satisfaction	<b>Accepted</b>
<b>H2</b>	Conscientiousness is positively associated with patients' satisfaction	<b>Accepted</b>
<b>H3</b>	Neuroticism is negatively associated with patients' satisfaction	<b>Accepted</b>
<b>H4</b>	Agreeableness is positively associated with patients' satisfaction	<b>Accepted</b>
<b>H5</b>	Openness to experience is positively associated with patients' satisfaction	<b>Accepted</b>
<b>H6</b>	Extraversion is positively associated to emotional intelligence.	<b>Accepted</b>
<b>H7</b>	Conscientiousness is positively associated to emotional intelligence.	<b>Accepted</b>
<b>H8</b>	Neuroticism is negatively associated to emotional intelligence.	<b>Rejected</b>
<b>H0</b>	Agreeableness is positively associated to emotional intelligence.	<b>Accepted</b>
<b>H10</b>	Openness to experience is positively associated to emotional intelligence.	<b>Accepted</b>
<b>H11</b>	Emotional intelligence is positively associated with patients' satisfaction	<b>Accepted</b>
<b>H12</b>	Emotional intelligence mediates the relationship between extraversion and patients' satisfaction	<b>Accepted</b>
<b>H13</b>	Emotional intelligence mediates the relationship between conscientiousness and patients' satisfaction	<b>Accepted</b>

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<b>H14</b>	Emotional intelligence mediates the relationship between neuroticism and patients' satisfaction	<b>Rejected</b>
<b>H15</b>	Emotional intelligence mediates the relationship between agreeableness and patients' satisfaction	<b>Accepted</b>
<b>H16</b>	Emotional intelligence mediates the relationship between openness to experience and patients' satisfaction	<b>Accepted</b>
<b>H17</b>	Job involvement positively moderates the relationship between emotional intelligence and patients' satisfaction	<b>Accepted</b>
<b>H18</b>	Spirituality at work positively moderates the relationship between emotional intelligence and patients' satisfaction	<b>Rejected</b>

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<b>Total number of Hypotheses</b>	<b>18</b>
<b>Accepted</b>	<b>15</b>
<b>Rejected</b>	<b>03</b>

# **CHAPTER # 5**

## CHAPTER # 5

### 5. DISCUSSION, CONCLUSION AND IMPLICATIONS

#### 5.1. Research Question 1:

How extraversion is related with patients' satisfaction and does emotional intelligence mediates the relationship between extraversion and patients' satisfaction?

##### 5.1.1. Summary of Results

The results of the hypotheses (H1 and H12) formulated to answer the above mentioned research question disclose that both hypotheses are accepted/supported.

##### 5.1.2. Discussion

The result shows that extraversion personality dimension is positively associated with patients' satisfaction. As extraverts are talkative, social and energetic therefore, while interacting with others they recognize others' expectations (Rusting & Larsen, 1997). Extraverts feel positivity in surroundings and least bothered for negative happenings, which results in representing positive behaviors and emotions with others. As compare to introverts, the extraverts focus more on positive life experiences. In accordance with affect-reactivity model (Gross et al., 1998) the positive experiences of extraverts guides them to react positively with others. An extravert tends to reinforce positive life experiences and acknowledge the sensitive expectations of others. This leads to meet others' expectations with appropriate social interaction and corresponds to reinforce positive experiences at workplace.

The active, energetic and desirable social interaction of extraverts stimulates them to act diligently which resultant in the reinforcement of constructive behaviors in response to sensitivity of others' expectations. Thus, finding of this study upholds Reinforcement Sensitivity Theory (Corr, 2008) as extravert nurse depict positive behaviors in a consistent manner by keeping sensitivity of patients under consideration. The extravert nurses represent more caring behaviors for sensitive patients and tried to reinforce positive events. The sense of care for patients which is a pre-requisite in nursing profession is executed by extravert nurse (George et al., 2013). Lieberman and Rosenthal (2001) also state that extravert individuals exhibit helpful social interaction which stimulates satisfaction of others.

The result also shows that emotional intelligence mediates the relationship between extraversion personality dimension and patients' satisfaction. This finding is supported by the work of Mathews et al. (2004) which states that although extraverts possess strong interpersonal skills but they lacks in being dominant with others. Extraverts are uncomfortable in forceful events despite knowing that the event provides benefit to others. In light of Trait Activation Theory (Tett & Guterman, 2000) the nurses' caring behavior is activated when presented with situational cues of patients' dread disease treatment. Thus, extravert nurses need emotional intelligence to provide suitable care to patients despite getting patients' formal go-ahead. The emotional intelligence of extravert nurses guides them to regulate emotions in self and patients (Laschinger & Leiter, 2006) in order to provide appropriate treatment to patient, which eventually effects patients' satisfaction.

## **5.2. Research Question 2:**

How conscientiousness is related with patients' satisfaction and does emotional intelligence mediates the relationship between conscientiousness and patients' satisfaction?

### **5.2.1. Summary of Results**

The results of the hypotheses (H2 and H13) formulated to answer the above mentioned research question reveal that both hypotheses are accepted/supported.

### **5.2.2. Discussion**

The result depicts that conscientiousness personality trait is positively associated with patients' satisfaction which strengthens the facets of being loyal and disciplined at workplace for better performance (Costa & McCrae, 1992). Apart from meeting job demands the conscientious individuals consider satisfaction of all around at workplace. They are commendable in managing job stress and strive to excel in their profession (Barrick et al., 1993). The more the job is valued by conscientious individuals the better they perform in dynamic organizational settings. The finding is supported with Judge and Ilies (2002) explanation that the high scope jobs generally provide better performance of conscientious individuals and all others at workplace are satisfied with their behavior. Thus, finding of this study concerned for conscientious nurses and corresponding patients' satisfaction is aligned with earlier research on conscientiousness that being obedient, responsible and organized the conscientious nurses consider their job valuable and tried to perform better which results in attaining satisfaction of patients.

The result also shows that emotional intelligence mediates the relationship between conscientiousness and patients' satisfaction. According to Block (2001) the submissive, adaptable, caring and organized characteristics of conscientious individuals guide them to recognize and normalize emotions in self and others. Goleman (1998) emphasized that in order to manage emotions as per circumstances an individual needs to be responsible for his/her actions. This makes an individual conscious in dealing with others and develops empathic



abilities. Such responsibility and concern for others is found in conscientious individuals, which seeks emotional perspectives to behave in accordance with situational demand (Sansone, Wiebe & Morgan, 1999). The motivation of conscientious individuals to excel in their profession complements emotional intelligence to facilitate them in satisfying other individuals' behaviors (Colquitt & Simmering, 1998). Hence outcome of this study reveal that nurses are disciplined and responsible for their actions and solicit emotional intelligence to maintain satisfaction of patients.

### **5.3. Research Question 3:**

How neuroticism is related with patients' satisfaction and does emotional intelligence mediates the relationship between neuroticism and patients' satisfaction?

#### **5.3.1. Summary of Results**

The results of the hypotheses (H3 and H14) formulated to answer the above mentioned research question reveal that H3 hypothesis is accepted/supported and H14 hypothesis is rejected/not supported.

#### **5.3.2. Discussion**

The result depicts that neuroticism is negatively associated with patients' satisfaction. This is supported with the explanation of Judge et al. (1998) that neurotic individuals are pessimistic, nervous and depressed which effects interpersonal relation with others and results in dissatisfaction of others. They possess low self-esteem and generally consider life events as negative. The high scope jobs which inculcate more social interaction and satisfaction of other individuals were not preferred by neurotics (Roberts, Wood & Smith, 2005). They avoid

challenging occupations and pursue jobs which are limited in scope. The consistent negative thoughts of neurotic individuals badly affect their self-efficacy, which results in poor performance at workplace. The finding also strengthens the argument of Watson and Tellegan (1985) that neurotic individuals spread negative affectivity which leads to the dissatisfaction of others' expectations. Thus, this study shows that the expectations of diverse patients in public sector hospitals of Pakistan were not fulfilled by nurses, if they possess neurotic trait.

The inadequate emotional state of neurotic nurses depicts that emotional intelligence does not mediate the relationship between neuroticism and patients' satisfaction. This finding is somewhat aligned with the earlier research work of Costa and McCrae (2006) who emphasized on the instable emotional aspect of neurotic individuals. It was argued by Berg and Danielson (2007) that the fearful, isolated and gloominess attributes of neurotic individuals makes them misfit in demanding workplace environment. Florence Nightingale's environmental theory which is deeply required in nursing profession (Tomey, 1994) to mold own-self as per hospital environment and situation of patient in order to attain their satisfaction is not considered by neurotic nurses. The concept of person-environment fit is not regarded by neurotic nurses in public sector hospitals of Pakistan because they are unable to recognize and regulate emotions as per dynamic environment and consider patients' concerns as personal attack on their occupation.

#### **5.4. Research Question 4:**

How agreeableness is related with patients' satisfaction and does emotional intelligence mediate the relationship between agreeableness and patients' satisfaction?

#### **5.4.1. Summary of Results**

The results of the hypotheses (H4 and H15) formulated to answer the above mentioned research question reveal that both hypothesis are accepted/supported.

#### **5.4.2. Discussion**

The result shows that agreeable personality trait of nurses is positively associated with patients' satisfaction. This is because of the flexible, adaptable and supportive nature of agreeable individuals which stimulates positive actions and reliable interaction with others. Tokar et al. (1998) stated that the occupations which require high interpersonal skills and fulfillment of defined tasks were best executed by agreeable individuals. Therefore, nursing profession upholds the agreeableness to achieve the defined responsibilities by following duty roster and patients' satisfaction. The finding is also supported by the explanation of Barrick et al. (2001) that the consensuses developed by agreeable individuals with others' view points and expectations leads to attain satisfaction of others. Particularly in service oriented occupations the facets of gentleness, forgiveness and patience inherited in agreeable employees' guides them to deal with diverse clients in dissimilar situations (Carlo et al., 2005). Hence, the sympathetic and compassionate characteristics of agreeable nurses guide them to treat respective patient with gentleness and politeness in challenging environment of public sector hospitals of Pakistan.

The result also depicts that emotional intelligence mediates the relationship between agreeableness and patients' satisfaction. This finding is supported by the earlier research work on agreeableness that such individuals often experience disadvantage for being flexible and pleasant with other individuals. Their inherit feature to stay in consensuses with others most likely lead them to face difficulties in conflicting situations (Bar-On, 2000). Therefore, apart from being

gentle, kind, polite and sympathetic, the agreeable individuals need to be emotionally intelligence to assess intensity of being empathetic with right individual at the right time (Mathews et al., 2004). Consequently, in demanding nursing profession a nurse needs to analyze the degree of agreement with patient to handle them in accordance with the execution of standard requirement of dread disease treatment (Dempsey et al., 2014).

The need of emotional intelligence as a mediator to better utilize agreeableness for patients' satisfaction is also supported in light of explanation of HEXACO model presented by Lee and Ashton (2004). They add humility and emotionality facet in agreeableness in addition to the conventional facets of gentleness, politeness and forgiveness. Graziano et al. (2007) also compliment the HEXACO model by arguing that humility and emotionality facet simply provides altruism versus antagonism understanding to handle diverse individuals as per situation. Such thoughtfulness guides the extent to which an individual is empathetic, helpful and soft-hearted with others (Kooker, Shoultz & Codier, 2007). Hence, the addition of facet of humility and emotionality upholds the regulation of emotional intelligence to manage agreeable level with patients by respective nurses, while acknowledging patients' satisfaction to provide them ultimate relief from dread disease by applying needful treatment irrespective of patients' consent.

### **5.5. Research Question 5:**

How openness to experience is related with patients' satisfaction and does emotional intelligence mediates the relationship between openness to experience and patients' satisfaction?

### **5.5.1. Summary of Results**

The results of the hypotheses (H5 and H16) formulated to answer the above mentioned research question reveal that both hypothesis are accepted/supported.

### **5.5.2. Discussion**

The result shows that openness to experience is positively associated with patients' satisfaction. This outcome is in accordance with research conducted on openness to experience by Holland et al. (1993) who stated that the unusual, dynamic and inventive abilities of openness to experience individuals make them superior performers in demanding situations wherein structured ways are not feasible to execute. The high scope jobs seeking extra role behaviors at workplace are suitable for individuals who possess openness to experience trait (Reed et al., 2004). Although nursing profession holds up the defined rules and regulations but while treating patients of varied dread diseases in uncertain hospital settings, the openness to experience trait guide nurses to perceive, think and behave in unusual manner to provide relief to respective patient.

The mediating role of emotional intelligence between openness to experience and patients' satisfaction shows that nurses admired the balance of emotional and rational decisions required while pursuing unique ways to respond patients' concerns. The finding is supported on the basis of argument by Schutte et al. (1998) that empathic ability to imagine in alignment with others' expectations by open individuals infers the occurrence of emotional intelligence. Furthermore, Watson (2006) stated that even though caring behavior is a pre-requisite in nursing profession but innovative pathway to execute such caring behavior with emotional aspect is an evident feature in this profession. Thus, being open minded to treat patients by all means is well

appreciated in nursing profession but concerning limitations as per hierarchy of hospital is also necessary. As emotional intelligence helps to assess right degree of behavior in self and others in accordance with situational demands (Salovey & Mayer, 1990) therefore; acknowledging emotional aspects by nurses who possess openness to experience trait is suitable to augment satisfaction of patients.

## **5.6. Research Question 6:**

How extraversion is associated with emotional intelligence?

### **5.6.1. Summary of Results**

The result of the hypothesis (H6) formulated to answer the above mentioned research question reveal that extraversion is positively associated with emotional intelligence and the hypothesis is accepted/supported.

### **5.6.2. Discussion**

The influence of extraversion on emotional intelligence strengthens the facets of extravert individuals, as they are capable to retain positive emotions in self and others. The appropriate interpersonal interaction of extraverts leads them to be compassionate with others. McCrae (1992) suggested that extraversion provide characteristic way to manage emotional tendencies as per situational demands. The finding is further supported by implicit personality theory as Schneider (1973) emphasized on the right expectation from individuals as per their behaviors, embedded from specific personality trait. Therefore, the strong social interaction of extraverts generates optimistic expectations from extraverts, as they behave positively and avoid fake emotions (Srivastava et al., 2010). Hence, nurses in public sector hospitals admired that being

social, positive and compassionate stimulates emotional intelligence for better performance as per situation.

### **5.7. Research Question 7:**

How conscientiousness is associated with emotional intelligence?

#### **5.7.1. Summary of Results**

The result of the hypothesis (H7) formulated to answer the above mentioned research question reveal that conscientiousness is positively associated with emotional intelligence and the hypothesis is accepted/supported.

#### **5.7.2. Discussion**

The result shows that conscientiousness positively effects emotional intelligence. This is manifested from the high dedication, dutifulness and self-awareness of conscientious individuals, which guide them to be emotionally intelligent (Ones, Viswesvaran, & Reiss, 1996). The conscientious individuals are considered to be best performers in organizational context. They possess the qualities of being disciplined, obedient and committed in diverse organizational settings and accordingly manage other individuals with apposite emotional demands (Stewart, 1999). Conscientious individuals acknowledge individual differences as per situational contexts and preferred to be part of team work to achieve required task with mutual consensuses.

Barrick et al. (2001) also stated that the steadiness and ambitious qualities of conscientious individuals augment emotionally viable tactics in alignment with challenging situations. The finding is further intensified on the basis of socio analytic theory (Hogan, 1983)

which directs to convert individual's identity into reputation by getting along with emotional demands of others and fulfilling responsibilities. The theory explained sequential personality dispositions to generate appropriate emotional response in line with situations. Thus, finding reveals that conscientious nurse' self-awareness and self-management effects emotional intelligence to get along with others for achieving desired reputation in this esteemed occupation.

### **5.8. Research Question 8:**

How neuroticism is associated with emotional intelligence?

#### **5.8.1. Summary of Results**

The result of the hypothesis (H8) formulated to answer the above mentioned research question reveal that neuroticism does not associated with emotional intelligence and the hypothesis is rejected/not supported.

#### **5.8.2. Discussion**

The insignificant relationship between neurotics and emotional intelligence is linked with anxious, fearful, negative and frustrated aspects of neuroticism. The demanding role of jobs, particularly in service sector where commendable social interaction is the hallmark for better performance is not considered by neurotic individuals. Matthews et al. (2000) stated that negative affectivity is depicted by neurotics which reveal that such individuals spend most of their time in unconstructive thinking resultant in poor emotional reactions. The nervousness and pre-occupied mindset results in frustration and neurotic individuals tried to pretend in a positive way by displaying fake emotions.



The frustration aggression theory by Barker et al. (1941) strengthens the finding of this study because neurotic individuals fake emotions indicates their inner frustration which is converted into aggression when they couldn't maintain good relations and attain dissatisfaction of others. Such frustrated mind set could not recognize emotional demands in self and others which eventually effects performance (Karimi et al., 2014). The finding is further supported by Austin et al. (2005) argument that neurotic people could not manage emotions particularly in health care related occupations because of high level of social interaction with patients and huge pressure in responding patients' queries with appropriate emotional reactions.

Hence, nurses acknowledged that frustration, anxiety and emotional instability leads to display unconstructive emotions rather pursuing emotional intelligence in challenging environment of public sector hospitals of Pakistan.

### **5.9. Research Question 9:**

How agreeableness is associated with emotional intelligence?

#### **5.9.1. Summary of Results**

The result of the hypothesis (H9) formulated to answer the above mentioned research question reveal that agreeableness is positively associated with emotional intelligence and the hypothesis is accepted/supported.

#### **5.9.2. Discussion**

The positive association between agreeableness and emotional intelligence strengths the features of agreeable individuals as they are flexible, tolerant and empathetic. Judge and Cable (1997) suggested that positive response of agreeable individuals while interacting with others

depicts that they are capable to handle negative thoughts and consider emotional intelligence as per situation. The agreeable individuals tried their level best to perform better and adjust themselves as per circumstances. They are considered to be problem solvers and competent to handle stressful conditions.

According to Seibert and Kramer (2001) agreeable individuals need small effort to incline their inner feelings with appropriate emotional reactions. This clarifies that agreeable individuals avoid fake and negative emotions. The degree of soft heartedness is perfectly handled by agreeable individuals as per the expectation of others. Hence, nurses in dissimilar hospital settings are capable to handle emotions in an intelligent manner with agreeableness trait.

#### **5.10. Research Question 10:**

How openness to experience is associated with emotional intelligence?

##### **5.10.1. Summary of Results**

The result of the hypothesis (H10) formulated to answer the above mentioned research question reveal that openness to experience is positively associated with emotional intelligence and the hypothesis is accepted/supported.

##### **5.10.2. Discussion**

The openness to experience is positively associated with emotional intelligence because individuals with openness to experience personality are capable to mold their feelings to respond in an unconventional way. The finding is supported with the research conducted by Blegen, Goode and Reed (1998) who emphasized on the interrelationship between emotional intelligence

and aesthetic abilities of openness to experience individuals. They explained that the curious and artistic facets of openness to experience individuals guide them to enhance empathetic ability as per others' emotions. The recognition of others' emotions highlights emotionally intelligent feature in openness to experience individuals. The high scope jobs and learning from new experiences creates emotional maturity in openness to experience individuals (Hayes et al., 1994).

Sebert and Kraimer (2001) further strengthens the finding of this study that broad mindedness, flexible and imaginative characteristics of openness to experience individuals leads them to pursue high scope jobs with appropriate emotional balance to achieve their endeavors. Such individuals undertake innovative ways to solve complex problems and able to manage stress in challenging situations. Therefore, dynamic environment of public sector hospitals with varied emotions of patients stipulate services of nurses with openness to experience trait in order to perform extra role behaviors and solve complexities with productive solutions.

### **5.11. Research Question 11:**

How emotional intelligence is associated with patients' satisfaction?

#### **5.11.1. Summary of Results**

The result of the hypothesis (H11) formulated to answer the above mentioned research question reveal that emotional intelligence is positively associated with patients' satisfaction and the hypothesis is accepted/supported.

### **5.11.2. Discussion**

The finding that patients' satisfaction is positively associated with emotional intelligence strengthens the concept presented by Aiken et al. (2012) to fulfill patients' expectations in uncertain hospital environment with optimum utilization of emotional tactics. The preference of patients to recommend the same hospital to others is related with the service quality provided in the hospital. Such service quality is linked with nurses' performance in dynamic hospital settings to treat diverse patients with humbleness and care (Jha et al., 2008). The nurse caring behavior with in-depth feeling of patients' pain leads toward higher satisfaction of patients.

Therefore, the two-factor theory of emotions (Rogers & Deckner, 1975) supported the positive relationship between emotional intelligence and patients' satisfaction because nurses' feeling of patients' suffering is depended upon cognitive labeling of emotional state of patients, rather focusing only on physical arousal of patients. The right cognitive labeling of patients' pain leads toward appropriate treatment of patients by respective nurse and strengthens the empathetic ability of nurse as well. Gardner et al. (2009) stated that the representation of doing everything that a nurse could possibility do to provide care apart from routine duties is originated from emotional intelligence aspect of nurses and results in better satisfaction of patients.

### **5.12. Research Question 12:**

Does job involvement moderate the relationship between emotional intelligence and patients' satisfaction?

#### **5.12.1. Summary of Results**

The result of the hypothesis (H17) formulated to answer the above mentioned research question reveal that job involvement positively moderates the relationship between emotional intelligence and patients' satisfaction. Thus, the hypothesis is accepted/supported.

### **5.12.2. Discussion**

The acceptance of moderating role of job involvement between emotional intelligence and patients' satisfaction strengthens the findings of Paullay and Colleagues (1994) that individuals' affirmative psychological state, emotional handling and self-image consideration reveals levels of involvement in job and resultant in better performance and attainment of satisfaction of all concerned. The multi-dimensional aspect of job involvement by referring it with individuals' inner assessment of beliefs, values and emotions was emphasized to pursue work in demanding conditions (Zhang, 2014). In order to respond dynamic workplace settings the context of job involvement is focused, despite its attitudinal consequence as psychological recognition of individuals' cognitive state is preferred to mold emotions as per satisfaction of others (Kanungo, 1982b).

The finding is further supported with explanation of Blau and Boal (1987) that the balance of emotional tendencies to gain satisfaction in challenging occupations requires appropriate level of job involvement. The individuals' engagement, motivation and association with particular occupation are dependent on job involvement intensity (Zhang, 2014). The degree of job involvement is linked with expectations fulfillment as Vroom's expectancy theory (Vroom, 1964) describe that individuals exert effort to perform better and expect reward attainment which ultimately fulfill their needs. Therefore, individuals expecting more from the organization but exactly gain less inducements offered by the organization possess low job involvement (Wanyonyi, 2014). Hence, nurses expect more rewards attainment to fulfill their

needs but gain less incentives provided by the hospital, which resultant in their low job involvement level.

The finding is also supported under trait activation theory (Tett & Guterman, 2000) that nurses with low job involvement level still responded to trait-relevant situational cues to attain satisfaction of patients. Such response on situational basis seeks balancing of emotions, which was depicted when nurses handled dread disease patients with more emotional involvement rather high job involvement. Thus, it can be stated that the occupational role and situation influent levels of job involvement and individuals with low job involvement seeks emotional intelligence to perform better. Eventually, the patients' satisfaction was effected with levels of job involvement and emotional intelligence applied by the nurses helps them to perform better in dynamic hospital conditions.

### **5.13. Research Question 13:**

Does spirituality at work moderates the relationship between emotional intelligence and patients' satisfaction?

#### **5.13.1. Summary of Results**

The result of the hypothesis (H18) formulated to answer the above mentioned research question reveal that spirituality at work does not moderate the relationship between emotional intelligence and patients' satisfaction. Thus, the hypothesis is rejected/not supported.

### 5.13.2. Discussion

Although the patients' satisfaction is affected by spirituality at work of nurses (Donley, 1991) but contrary to expectation the moderating role of spirituality at work between emotional intelligence and patients' satisfaction is not supported by this study. It was assumed like other health care sectors of developed countries that nurse in developing country of Pakistan also consider spirituality at work, which can influence emotional intelligence and patients' satisfaction relationship. But the result signify that nurses with somewhat awareness of emotional intelligence does not gain patients' satisfaction because of spirituality at work rather there are other reasons which explain the potency of the relationship. One feasible explanation can be made in terms of conservation of resource theory (Hobfoll, 1989) that a nurse pursuing his/her profession in attainment of desired resources eventually drive them to manage emotions for gaining patients' satisfaction, regardless of applying spiritual aspects of their profession at work.

According to Hobfoll and Freedy (1993), individuals strive to develop, maintain and protect resources. Individuals feel insecure when they lost such resources. This develops a cycle where resources are constantly replenished and utilized. The workplace duties threaten one's resources and extensive experience to such duties will result in assorted behaviors. Thus, the strikes of nurses due to the concerns of insufficient compensation, regularization of appointments, inadequate educational roadmap and harassment at workplace in public sector hospitals of Pakistan indicate resources conservation. The destabilized economic conditions in underdeveloped country stipulate nurses to gain patients' satisfaction; despite considering their commitment level towards hospital, rather they support union commitment to get their rights.

Most of the nurses during their informal discussion point out that nurses mold their emotions to attain patients' satisfaction due to cynical perception towards health care regulations and depict more commitment towards their unions. This is supported by the studies (e.g. Festinger, 1957; Robinson, 1996) that employees less commitment with the organization can be a cause of more commitment with unions and deviant behaviors. Hence, the meaningfulness of work, feeling of sense of community and inner life satisfaction which generates spirituality at work is not recognized by nurses in health care sector of Pakistan.

#### **5.14. Conclusion:**

The results of this study strengthen the dyadic relationship between nurse and patient in unique context of health care sector of Pakistan, as greater part of the hypothesis are accepted. It reveals that majority of the personality traits comprises of extraversion, conscientiousness, agreeableness and openness to experience are positively associated with patients' satisfaction. However, the neurotic personality trait is negatively associated with patients' satisfaction. The results depict that nurse may not engage in same personality trait across dissimilar patients and showed personality dispositions as per situation of patient and provide different association with patients' satisfaction. These findings uphold the situationist's perspective of personality traits that apart from individual differences, situation effects personality and outcome relationship, and results in assorted behaviors of own-self and satisfaction of others.

The impact of big five personality traits on emotional intelligence shows that extraversion, conscientiousness, agreeableness and openness to experience are positively associated with emotional intelligence but neuroticism shows insignificant association with emotional intelligence. These findings generate sufficient support to Petrides et al., (2010) recommendation that individuals' personality provide characteristic way to manage emotional



tendencies across situations. Thus, nurses are able to regulate their emotions in light of personality trait to respond distinct patient in accordance to the situation but negativity or nervousness due to neurotic personality jeopardizes their emotional intelligence.

The result also depicts that emotional intelligence is positively associated with patients' satisfaction. This finding justified Suhonen et al. (2012) recommendation that in-depth empathetic abilities resultant from emotional intelligence of nurse helps to understand patients' expectations in challenging environment of hospitals. Therefore, the nurses performing duties in distinctive context of public sector hospitals of Pakistan valued emotional intelligence to treat diverse patients suffering from dread diseases.

The mediating role of emotional intelligence between big five personality traits and patients' satisfaction reveals that nurses with neurotic trait do not consider emotional intelligence for patients' satisfaction. However, the personality traits of extraversion, conscientiousness, agreeableness and openness to experience are mediated by emotional intelligence for achieving patients' satisfaction. These findings indicates that nurses in public sector hospitals of Pakistan have to confront situations where they need to attain patients' satisfaction, which is draining them sensitively, and as a consequence they recognize and regulate emotional intelligence.

Furthermore, the job involvement positively moderates the relationship between emotional intelligence and patients' satisfaction but contrary to expectation the spirituality at work does not moderates the said relationship. These findings show that nurses in public sector hospitals pursue their responsibilities to attain patients' satisfaction and remain engaged in their job while expecting to be rewarded in line with nurses in private sector hospitals and non-profit organizations. Such expectations thrust them to show fulfillment of duties but they are least bothered for considering their occupation as meaningful, which can affect their inner lives, so

that they are able to represent a community. Thus, spirituality at work to mold emotions as per patients' demands is not regarded by nurses.

## **5.15. Theoretical and Practical Implications:**

### **5.15.1. Theoretical Implications:**

The dyadic relationship between nurse and patient attain limited attention of researchers particularly in health care sector of developing countries like Pakistan. This study contributes in the body of knowledge by exploring the influence of situation on personality dispositions for depicting certain behaviors. The concept of analyzing trait-relevant situational cues predicted from trait activation theory (Tett & Guterman, 2000) to perform better is supported by this study. The situation of dread disease patients was considered while interacting with particular nurse. The social and task oriented aspects of nurses were investigated with the concepts of emotional intelligence, job involvement and spirituality at work. The personality traits of nurses were analyzed in the unique context of public sector hospitals in terms of achieving patients' satisfaction. Thus, the predictors of patients' satisfaction also revealed through this study, as nurses' personality traits and emotional intelligence directly influence satisfaction of patients in particular situation, which was not examined earlier in developing countries.

This study contributed in attaining better satisfaction of others by focusing on cognitive handling of emotions in line with personality traits across situations. The empirical evidence for emotional intelligence mediation between major personality traits of nurses and patients' satisfaction is predicted from two-factor theory of emotions (Rogers & Deckner, 1975), which stated that appropriate cognitive label of emotions results in better satisfaction. This study also

reflects the relationship between “recognition of identity” and “regulation of reputation” for better performance at workplace, which is predicted from socioanalytic theory (Hogan, 1983).

Nurses stated that better identity of their profession leads to enhance their reputation which resultant in better job involvement and vice versa. Moreover, spirituality at work is deeply required in health care sector but this viewpoint is not fulfilled by this study. Such finding provides an eye opener for health care regulators to address nurses’ concerns, so that they will be able to attain better satisfaction of patients in dynamic setup of hospitals, across developing countries. Such findings provide sufficient pathways for health care regulators to attract and retain servicing staff, which are capable to attain patients’ satisfaction with appropriate handling of personality traits, emotions, spirituality at work and involvement level in job.

#### **5.15.2. Practical Implications:**

The findings of this study contribute significantly in our understanding of rationale to realize patients’ satisfaction, nurses’ handling of personality traits, emotional intelligence, job involvement and non-recognition of spirituality at work in Pakistan where inadequate knowledge exists about this phenomenon. Therefore, the following recommendations may help decision makers in health care sector to manage nurses’ workplace behaviors on proactive basis to gain appropriate level of patients’ satisfaction:

- i. Reconsideration of nurses’ compensation mechanism by regulating performance and job evaluation to gain their commitment with respective hospital environment, rather increasing their union commitment.

- ii. Develop action plans for awareness about nurses' education and significance of profession in demanding situations of Pakistan, where instability and violence affects health care sector as well.
- iii. Selection of nurses by developing advanced recruitment and selection procedure to insure in-depth implication of spirituality at work and emotional intelligence.
- iv. The social sciences courses e.g. personality assessment, emotional intelligence and workplace spirituality needs to be added in curriculum of nurses for better understanding of their occupational dynamics.
- v. Conduct of annual or bi-annual Human Resources Audit to insure accountability at all quarters of hospitals, particularly the nurses serving to corresponding patients.
- vi. Develop strategies to overcome conflicting interests of hospital administration, which lead to the establishment of nurses' unions and strikes.
- vii. Nurses' individual difference needs to be analyzed as per situation for appropriate behavior through certain personality traits.

#### **5.16. Limitations and Future Research:**

Although the findings of the study are fruitful to understand dyadic relationship between nurse and patient in perspective of personality traits, emotional intelligence, job involvement, patients' satisfaction and spirituality at work, but there are certain limitations which may be addressed by the future researchers. First of all the data was collected from limited sample; a

more diverse sample may lead to comprehensive information on the matter. The generalize affects of this study are inconsistent with the non-developing countries due to dissimilar culture as stated by Kalat and Shiota (2007) that expression of individual's viewpoint is influenced through culture.

Secondly, nurses performing duties to serve dread disease patients were considered in this study; whereas nurses serving in emergency department, administration department and cardiac department etc of public and private sector hospitals supposed to be considered to evaluate the dyad of nurse and patient in a broader perspective. Thirdly, other variables affecting dyadic relationship between nurse and patient may be investigated through diverse antecedents of emotional intelligence and patients' satisfaction along with other moderating and mediating mechanisms for strengthening health care sector of developing countries like Pakistan. The future researchers also consider different sectors for examining the influence of situation on dissimilar behaviors instead of focusing on individual differences for personality dispositions.

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# Appendix I

**Questionnaire**  
**(Part-I)**

Dear Nurse!

I am a PhD Candidate at Capital University of Science and Technology (CUST), Islamabad and conducting research on “*Impact of Nurses Personality on Patients’ Satisfaction; An Occupational Focus on Mediating and Moderating Mechanisms*”.

Please fill the below mentioned questionnaire by providing an impartial opinion about your personality traits in first time lag and emotional intelligence, job involvement and spirituality at work in second time lag to make this research successful.

Your feedback will be kept strictly confidential and will only be used for research purposes. If you would like to have the findings of this research, please send a request at [sarmad175@hotmail.com](mailto:sarmad175@hotmail.com)

In this regard your cooperation is highly appreciated. Thanking you in anticipation

Muhammad Sarmad  
PhD-Candidate, CUST

**Demographics**

1. What is your highest qualification?

Diploma	BSN Degree	M.Sc Degree	MPhill Degree
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

2. What is your age?

18-24 years	25-31 years	32-38 years	39 years & above
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

**3. What is your Martial Status?**

Married	Un-married
<b>1</b>	<b>2</b>

**4. What is your gender?**

Male	Female
<b>1</b>	<b>2</b>

**5. How long you have been employed in this Hospital?**

1-5 years	6-10 years	11-15 years	16 years & above
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

**RATING SCALE**

**1=Strongly disagree 2=Disagree 3=Neutral 4=Agree 5= Strongly Agree**

**Big five personality**

**Extraversion**

<b>1</b>	I feel comfortable around people.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>2</b>	I make friends easily.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>3</b>	I am skilled in handling social situation.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

- |   |                                               |   |   |   |   |   |
|---|-----------------------------------------------|---|---|---|---|---|
| 4 | I am the life of the party.                   | 1 | 2 | 3 | 4 | 5 |
| 5 | I know how to captivate people.               | 1 | 2 | 3 | 4 | 5 |
| 6 | I start conversations.                        | 1 | 2 | 3 | 4 | 5 |
| 7 | I warm up quickly to others.                  | 1 | 2 | 3 | 4 | 5 |
| 8 | I talk to a lot of different people at party. | 1 | 2 | 3 | 4 | 5 |

**Conscientiousness**

- |   |                                 |   |   |   |   |   |
|---|---------------------------------|---|---|---|---|---|
| 1 | I am always prepared.           | 1 | 2 | 3 | 4 | 5 |
| 2 | I pay attention to details.     | 1 | 2 | 3 | 4 | 5 |
| 3 | I get chores done right away.   | 1 | 2 | 3 | 4 | 5 |
| 4 | I carry out my plans.           | 1 | 2 | 3 | 4 | 5 |
| 5 | I make plans and stick to them. | 1 | 2 | 3 | 4 | 5 |
| 6 | I complete successfully.        | 1 | 2 | 3 | 4 | 5 |
| 7 | I do things according to plan.  | 1 | 2 | 3 | 4 | 5 |
| 8 | I am exacting in my work.       | 1 | 2 | 3 | 4 | 5 |
| 9 | I finish what I start.          | 1 | 2 | 3 | 4 | 5 |

**Neuroticism**

- |   |                                      |   |   |   |   |   |
|---|--------------------------------------|---|---|---|---|---|
| 1 | I dislike myself.                    | 1 | 2 | 3 | 4 | 5 |
| 2 | I am often down in the dumps.        | 1 | 2 | 3 | 4 | 5 |
| 3 | I have frequent mood swings.         | 1 | 2 | 3 | 4 | 5 |
| 4 | I panic easily.                      | 1 | 2 | 3 | 4 | 5 |
| 5 | I am filled with doubts about thing. | 1 | 2 | 3 | 4 | 5 |

- |   |                            |   |   |   |   |   |
|---|----------------------------|---|---|---|---|---|
| 6 | I feel threatened easily.  | 1 | 2 | 3 | 4 | 5 |
| 7 | I get stressed out easily. | 1 | 2 | 3 | 4 | 5 |
| 8 | I often feel blue.         | 1 | 2 | 3 | 4 | 5 |

**Agreeableness**

- |   |                                             |   |   |   |   |   |
|---|---------------------------------------------|---|---|---|---|---|
| 1 | I believe that others have good intentions. | 1 | 2 | 3 | 4 | 5 |
| 2 | I respect others.                           | 1 | 2 | 3 | 4 | 5 |
| 3 | I accept people as they are.                | 1 | 2 | 3 | 4 | 5 |
| 4 | I make people feel at ease.                 | 1 | 2 | 3 | 4 | 5 |
| 5 | I am concerned about others.                | 1 | 2 | 3 | 4 | 5 |
| 7 | I trust what people say.                    | 1 | 2 | 3 | 4 | 5 |
| 8 | I sympathize with others feeling.           | 1 | 2 | 3 | 4 | 5 |
| 9 | I am easy to satisfy others.                | 1 | 2 | 3 | 4 | 5 |

**Openness to Experience**

- |   |                                                  |   |   |   |   |   |
|---|--------------------------------------------------|---|---|---|---|---|
| 1 | I believe in the importance of art.              | 1 | 2 | 3 | 4 | 5 |
| 2 | I have a vivid imagination.                      | 1 | 2 | 3 | 4 | 5 |
| 3 | I tend to vote for liberal political candidates. | 1 | 2 | 3 | 4 | 5 |
| 4 | I carry the conversation to a higher level.      | 1 | 2 | 3 | 4 | 5 |
| 5 | I enjoy thinking about things.                   | 1 | 2 | 3 | 4 | 5 |
| 7 | I can say things beautifully.                    | 1 | 2 | 3 | 4 | 5 |
| 8 | I enjoy wild flights of fantasy.                 | 1 | 2 | 3 | 4 | 5 |
| 9 | I get excited by new ideas.                      | 1 | 2 | 3 | 4 | 5 |

10 I am inventive 1 2 3 4 5

**Emotional intelligence:**

- |    |                                                                                                    |   |   |   |   |   |
|----|----------------------------------------------------------------------------------------------------|---|---|---|---|---|
| 1  | I know when to speak about my problems to others                                                   | 1 | 2 | 3 | 4 | 5 |
| 2  | When I am faced with obstacles, I remember times I faced similar obstacles and overcame them       | 1 | 2 | 3 | 4 | 5 |
| 3  | I expect that I will do well on most things I try                                                  | 1 | 2 | 3 | 4 | 5 |
| 4  | Other people find it easy to confide in me                                                         | 1 | 2 | 3 | 4 | 5 |
| 5  | I find it hard to understand the non-verbal messages of other people*                              | 1 | 2 | 3 | 4 | 5 |
| 6  | Some of the major events of my life have led me to re-evaluate what is important and not important | 1 | 2 | 3 | 4 | 5 |
| 7  | When my mood changes, I see new possibilities                                                      | 1 | 2 | 3 | 4 | 5 |
| 8  | Emotions are one of the things that make my life worth living                                      | 1 | 2 | 3 | 4 | 5 |
| 9  | I am aware of my emotions as I experience them                                                     | 1 | 2 | 3 | 4 | 5 |
| 10 | I expect good things to happen                                                                     | 1 | 2 | 3 | 4 | 5 |
| 11 | I like to share my emotions with others                                                            | 1 | 2 | 3 | 4 | 5 |
| 12 | When I experience a positive emotion, I know how to make it last                                   | 1 | 2 | 3 | 4 | 5 |
| 13 | I arrange events others enjoy                                                                      | 1 | 2 | 3 | 4 | 5 |
| 14 | I seek out activities that make me happy                                                           | 1 | 2 | 3 | 4 | 5 |
| 15 | I am aware of the non-verbal messages I send to others                                             | 1 | 2 | 3 | 4 | 5 |
| 16 | I present myself in a way that makes a good impression on others                                   | 1 | 2 | 3 | 4 | 5 |
| 17 | When I am in a positive mood, solving problems is easy for me                                      | 1 | 2 | 3 | 4 | 5 |
| 18 | By looking at their facial expressions, I recognize the emotions people are experiencing           | 1 | 2 | 3 | 4 | 5 |

19	I know why my emotions change	1	2	3	4	5
20	When I am in a positive mood, I am able to come up with new ideas	1	2	3	4	5
21	I have control over my emotions	1	2	3	4	5
22	I easily recognize my emotions as I experience them	1	2	3	4	5
23	I motivate myself by imagining a good outcome to tasks I take on	1	2	3	4	5
24	I compliment others when they have done something well	1	2	3	4	5
25	I am aware of the non-verbal messages other people send	1	2	3	4	5
26	When another person tells me about an important event in his or her life, I almost feel as though I have experienced this event myself	1	2	3	4	5
27	When I feel a change in emotions, I tend to come up with new ideas	1	2	3	4	5
28	When I am faced with a challenge, I give up because I believe I will fail*	1	2	3	4	5
29	I know what other people are feeling just by looking at them	1	2	3	4	5
30	I help other people feel better when they are down	1	2	3	4	5
31	I use good moods to help myself keep trying in the face of obstacles	1	2	3	4	5
32	I can tell how people are feeling by listening to the tone of their voice	1	2	3	4	5
33	It is difficult for me to understand why people feel the way they do*	1	2	3	4	5

\*These items are reverse scored.

**Job Involvement:**

1	The most important things that happen to me involve my present job	1	2	3	4	5
2	To me, my job is only a small part of who I am	1	2	3	4	5
3	I am very much involved personally in my job	1	2	3	4	5
4	I live, eat and breathe my job	1	2	3	4	5
5	Most of my interests are centered around my job	1	2	3	4	5

- |    |                                                                                    |   |   |   |   |   |
|----|------------------------------------------------------------------------------------|---|---|---|---|---|
| 6  | I have very strong ties with my present job which would be very difficult to break | 1 | 2 | 3 | 4 | 5 |
| 7  | Usually I feel detached from my job                                                | 1 | 2 | 3 | 4 | 5 |
| 8  | Most of my personal life goals are job-oriented                                    | 1 | 2 | 3 | 4 | 5 |
| 9  | I consider my job to be very central to my existence                               | 1 | 2 | 3 | 4 | 5 |
| 10 | I like to be absorbed in my job most of the time                                   | 1 | 2 | 3 | 4 | 5 |

**Spirituality at work:**

- |    |                                                                                            |   |   |   |   |   |
|----|--------------------------------------------------------------------------------------------|---|---|---|---|---|
| 1  | People in my community feel as if they were part of a family                               | 1 | 2 | 3 | 4 | 5 |
| 2  | My profession promotes the creation of a spirit of a community                             | 1 | 2 | 3 | 4 | 5 |
| 3  | I feel that the members of my team/group support each other                                | 1 | 2 | 3 | 4 | 5 |
| 4  | I feel that the members of my team/group care about each other                             | 1 | 2 | 3 | 4 | 5 |
| 5  | I feel that the members of my team/group are linked by a common purpose                    | 1 | 2 | 3 | 4 | 5 |
| 6  | I feel positive about the values prevailing in my organization                             | 1 | 2 | 3 | 4 | 5 |
| 7  | People feel good about their future with the organization                                  | 1 | 2 | 3 | 4 | 5 |
| 8  | My organization respects my inner life                                                     | 1 | 2 | 3 | 4 | 5 |
| 9  | My organization helps me to live in peace/harmony with myself                              | 1 | 2 | 3 | 4 | 5 |
| 10 | The leader of my organization try to be helpful to the larger social good of the community | 1 | 2 | 3 | 4 | 5 |
| 11 | My work is connected with what I think is important in life                                | 1 | 2 | 3 | 4 | 5 |
| 12 | I see a connection between my work and the larger social good of my community              | 1 | 2 | 3 | 4 | 5 |
| 13 | When working, I feel helpful for the whole society                                         | 1 | 2 | 3 | 4 | 5 |



- |           |                                                       |          |          |          |          |          |
|-----------|-------------------------------------------------------|----------|----------|----------|----------|----------|
| <b>14</b> | I experience joy in my work                           | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>15</b> | Most days, I feel joy when coming to work             | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>16</b> | My spiritual values are not valued in my workplace    | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>17</b> | In my workplace, there is no room for my spirituality | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |

**Questionnaire**  
**(Part-II)**

Dear Patients!

I am a PhD Candidate at Capital University of Science and Technology (CUST), Islamabad and conducting research on “*Impact of Nurses Personality on Patients’ Satisfaction; an Occupational Focus on Mediating and Moderating Mechanisms*”.

Please fill the below mentioned questionnaire by providing an impartial opinion about your satisfaction level in terms of nurses’ service oriented behavior to make this research successful.

Your feedback will be kept strictly confidential and will only be used for research purposes. If you would like to have the findings of this research, please send a request at [sarmad175@hotmail.com](mailto:sarmad175@hotmail.com)

In this regard your cooperation is highly appreciated. Thanking you in anticipation

Muhammad Sarmad  
PhD-Candidate, CUST

**Demographics**

1. What is your highest qualification?

Intermediate or less	Graduation	Masters	MPhill & above
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

2. What is your age?

18-24 years	25-31 years	32-38 years	39 years & above
-------------	-------------	-------------	------------------

**1**                                      **2**                                      **3**                                      **4**

3. What is your Martial Status?

Married                                      Un-married

**1**                                      **2**

4. What is your gender?

Male                                      Female

**1**                                      **2**

5. How long you have been hospitalized due to dread disease treatment?

1-4 weeks                                      5-8 weeks                                      9-12 weeks                                      13 weeks & above

**1**                                      **2**                                      **3**                                      **4**

### **RATING SCALE**

**1=Strongly disagree    2=Disagree    3=Neutral    4=Agree    5= Strongly Agree**

#### **Patients' Satisfaction:**

<b>1</b>	The nurse should be more attentive than he/ she is.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>2</b>	Too often the nurse thinks I can't understand the medical explanation of illness so he/she doesn't bother to explain.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>3</b>	The nurse is pleasant to be around.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>4</b>	I feel free to ask the questions from nurse.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>5</b>	The nurse should be more friendly than he/she is.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

- |           |                                                                                                           |          |          |          |          |          |
|-----------|-----------------------------------------------------------------------------------------------------------|----------|----------|----------|----------|----------|
| <b>6</b>  | The nurse is a person who can understand how I feel.                                                      | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>7</b>  | The nurse explains things in simple language.                                                             | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>8</b>  | The nurse asks a lot of questions, but once he/she finds the answers, he/she doesn't seem to do anything. | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>9</b>  | When I need to talk to someone, I can go to the nurse with my problems.                                   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>10</b> | The nurse is too busy at the desk to spend time talking to me.                                            | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>11</b> | I wish the nurse would tell me about the results of my tests more than he/ she does.                      | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>12</b> | The nurse makes a point to show me how to carry out the doctor's orders.                                  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>13</b> | The nurse is often too disorganized to appear calm.                                                       | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>14</b> | The nurse understands in listening to a my problems.                                                      | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>15</b> | The nurse gives good advice.                                                                              | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>16</b> | The nurse always knows what he/she is talking about.                                                      | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>17</b> | It is always easy to understand what the nurse is talking about.                                          | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>18</b> | The nurse is too slow to do things for me.                                                                | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>19</b> | The nurse is just not patient enough.                                                                     | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>20</b> | The nurse is not precise in doing his/her work.                                                           | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>21</b> | The nurse gives directions at just the right speed.                                                       | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>22</b> | I'm tired of the nurse talking down to me.                                                                | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>23</b> | Just talking to the nurse makes me feel better.                                                           | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>24</b> | The nurse always gives complete enough explanations of why tests are ordered.                             | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>25</b> | The nurse is skillful in assisting the doctor with procedures.                                            | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |