# EMOTIONAL INTELLIGENCE AND PSYCHOLOGICAL ADJUSTMENT OF NURSES SERVING IN EMERGENCY AND NON-EMERGENCY WARDS

By

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# DEPARTMENT OF PSYCHOLOGY UNIVERSITY OF SARGODHA, SARGODHA

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# EMOTIONAL INTELLIGENCE AND PSYCHOLOGICAL ADJUSTMENT OF NURSES SERVING IN EMERGENCY AND NON-EMERGENCY WARDS

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#### ABSTRACT

The study investigated the relationship between emotional intelligence and psychological adjustment in nurses serving in emergency and non-emergency wards of private and government hospital. A purposive sample comprised of 200 nurses, 100 from emergency wards and 100 from non-emergency wards of private and government hospitals was drawn (M = 25.6, SD = 3.4). Bar-On EQ-i was used to measure emotional intelligence of nurses. This scale was translated into Urdu by using standard procedure in order to ensure the suitability of EQ-i for current sample. An indigenously developed scale named as Psychological Adjustment Scale was used to measure the psychological adjustment designated sample (Sabir, 1999). A demographic form was used to obtain information about variables of interest e.g., Wards (emergency/non-emergency), Hospital (private/government), Professional experience, and Marital status. A pilot study was conducted on the same sample in order to estimate the inter-correlation and reliability of the scales. These scales were administrated on the sample in groups of 5 to 10 nurses in hospital setting. Results of pilot study indicated that both EQ-i ( $\alpha = .90$ ) and Psychological Adjustment Scale ( $\alpha = .83$ ) are highly reliable. Correlation Matrix revealed that Emotional Intelligence was significantly correlated with Psychological Adjustment (.78, p <. 0001). In addition, psychological adjustment, professional experience and hospitals emerged as significant predictors of emotional intelligence of nurses. Wards were neither significantly correlated with any of the variable of interest included in this research nor predicted EQ. It was anticipated that marital status would be proved as another contributory factor. Though it was revealed thorough MANOVA that marital status had significant effect on emotional intelligence and psychological adjustment but it remained non-significant when differences were computed among married nurses in emergency and non-emergency wards. Findings of current study can help in selection of nurses. This study can help in drawing the attention of health professionals towards the role of private and government hospitals in providing physical as well as psychological health services. The results are discussed in the light of specific cultural context of Pakistan.

### **CHAPTER I**

### **INTRODUCTION**

Recently, there has been a substantial amount of research on emotional intelligence (EI) in multidisciplinary settings (Ciarrochi & Deane, 2001). For example, psychologists have attempted to revive understanding about EI within the scientific perspective (Adams, 1998). In nursing and health sciences, questions about therapeutic interactions, leading to more humanistic-oriented care that promotes healing, have been discussed with reference to EI (Molter, 2003). Emotional intelligence implies important personal and interpersonal skills in nurse's therapeutic use of self-critical manifestation that motivates the search for a deeper understanding of professional nursing identity (Akerjordet & Severinsson, 2004).

Every clinical nursing involvement requires a great aptitude for emotional intelligence, as well as the ability to balance the rational and the emotional mind in an insightful manner. Emotional intelligence in nursing education is considered the heart of the art (Freshwater & Stickley, 2004). The overall meaning of Emotional intelligence in nursing and in an educational background should be further clarified by empirical research on the subject of knowledge development, thus ensuring patient safety. However, some authors have questioned what constitutes emotional intelligence, the terminology used to describe the phenomenon and the methods used to measure it (Dulewicz, Higgs, & Slaski, 2003).

Emotional intelligence has become a major topic of interest for the researchers, educationists and psychologists and it gained sheer attention after the publication of Emotional intelligence (Goleman, 1995). Publications began to appear in the twentieth century with the work of Edward Thorndike on social intelligence in 1920. Many of these early studies focused on describing, defining and assessing socially competent behavior (Chapin, 1942; Doll, 1935; Moss & Hunt, 1927; Moss, Hunt, Omwake, & Ronning, 1927; Thorndike, 1920). Wechsler (1940/1943) described the influence of non-intellective factors on intelligent behavior. Moreover, he argued that our models of intelligence would not be complete until we can sufficiently describe these factors.

Since the time of Thorndike (1920), numbers of different conceptualizations of emotional and social intelligence (ESI) have appeared which have created an interesting mixture of confusion, controversy and opportunity regarding the best approach to define and measure this construct. In an effort to clarify the confusions about emotional intelligence, the Encyclopedia of Applied Psychology (Spielberger, 2004) recently suggested that there are presently three major conceptual models of emotional intelligence: (a) the Salovey-Mayer ability based model is the first one which defines this construct as the ability to perceive, understand, manage and use emotions to facilitate thinking, measured by an ability-based measure (Mayer & Salovey, 1997; Mayer, Salovey & Caruso, 2002) (b) Goleman Competency based model which views this construct as a wide array of competencies and skills that drive managerial performance, measured by multi-rater assessment (Goleman, 1998; Boyatzis, Goleman, & HayGroup, 2001), and (c) the Bar-On Trait based model which describes a cross-section of interrelated emotional and social competencies, skills and facilitators that impact intelligent behavior, measured by self-report (Bar-On, 1997a/1997b/2000) within a potentially expandable multi-modal approach including interview and multi-rater assessment (Bar-On & Handley, 2003a, 2003b).

#### **Ability based Model of Emotional Intelligence**

Bar-On and Handley define emotional intelligence as the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions. This model comprised of three components a) appraising and expressing emotions in the self and others, b) regulating emotion in the self and others, c) using emotions in adaptive ways. Although these processes are common to everyone, the present model also addresses individual differences in processing styles and abilities. Such individual differences are important for two reasons; firstly, there has been a century-long custom among clinicians in recognizing that people differ in the capability to understand and express emotions, secondly, such differences may be rooted in underlying skills that can be learned and thereby, contribute to people's mental health (Salovey, & Mayer, 1990).

#### Appraisal and expression of emotion

The processes underlying emotional intelligence are initiated when affect-laden information first enters the perceptual system. Emotional intelligence allows for the

accurate appraisal and expression of feelings and stable laws may govern them. These emotional appraisals, in turn, determine various expressions of emotion. One medium through which emotions are appraised and expressed is language. Learning about emotions depends in part upon speaking clearly about them. This social learning interacts with the ability to introspect and form logical propositions on the basis of those introspections.

From an evolutionary viewpoint, it was important that people must be able to perceive emotions not only in themselves, but also in those around them. Such perceptual abilities assure smoother interpersonal cooperation by permitting the monitoring of displeasure. There are several indications that individual differences exist in the interpretation of emotions through facial expressions. A particularly exciting communality among the people having ability of emotional appraisal and expression is that they engender empathetic understanding which is the ability to comprehend another's feelings and to re-experience them as their own (Salovey, & Mayer, 1990).

### **Regulation** of emotion

People experience mood at direct and reflective level. In their reflective experience, individuals have entrance to knowledge regarding their own and others moods. This experience, in part, represents a willingness and ability to monitor, evaluate, and regulate emotions (Salovey, & Mayer, 1990).

There is an array of experiences that one has about one's moods, these metaexperiences of mood can be conceptualized as the result of a regulatory system that monitors, evaluates, and sometimes acts to change mood (Mayer & Gaschke, 1988). Emotional intelligence includes the ability to regulate and alter the affective reactions of others. For example, an emotionally intelligent orator can elicit strong reactions in an audience. Similarly, an emotionally intelligent job candidate understands the contribution of behaviors such as promptness and dress in creating a favorable impression (Jones, 1964).

#### Utilizing emotional intelligence

Individuals also differ in their ability to control their own emotions in order to solve problems. Moods and emotions subtly but systematically influence some of the components and strategies involved in problem solving. First, emotional swings may facilitate the production of multiple future plans. Second, positive emotion may alter memory organization so that cognitive material is better incorporated and varied ideas are seen as more related (Isen, 1987). Third, emotion provides interrupts for complex systems, popping them out of a given level of processing and focusing them on more pressing needs. Moods such as anxiety and depression, for example, may focus attention on the self (Pyszczynski & Greenberg, 1987; Wood, Saltzberg, & Goldsamt, 1989). Finally, emotions and moods may be used to motivate and assist performance at complex intellectual tasks (Alpert & Haber, 1960; Cantor, Norem, Niedenthal, Langston, & Brower, 1987; Showers, 1988).

One central aspect of personality is the mood swing wherein individuals differ in the frequency and amplitude of their shifts in leading affect (Eysenck, 1982; Larsen, Diener, & Emmons, 1986). People in good moods perceive positive events as more likely and negative events as less likely to occur and the reverse holds true for people in unpleasant moods (Bower, 1981; Salovey & Birnbaum, 1989). They may be more likely to generate a larger number of future plans for themselves and thereby be better prepared to take advantage of future opportunities (Mayer, 1986). Mood may also help out problem solving by virtue of its impact on the organization and use of information in memory (Salovey & Mayer, 1990).

Furthermore, third component states that attention is directed to new problems when powerful emotions occur. Thus, when people attend to their feelings, they may be directed away from an ongoing problem into a new one of greater immediate importance. Mood may be used to motivate persistence at challenging tasks (Salovey, & Mayer, 1990).

### **Re-conceptualization of Ability Based Model of Emotional Intelligence**

Reviewing the literature on EI, one finds that Mayer and Salovey's ability model is the theoretical approach that has generated the largest number of researches published in peer-review journals (Matthews, Zeidner & Roberts, 2002; Geher, 2004). The interest of the scientific community in this model is based on several reasons: 1) the solid and justified theoretical base, 2) the novelty of the measurement compared to other approaches, and 3) its systematic evaluation and support by empirical data obtained from basic and applied fields (Fernandez-Berrocal & Extremera, 2006). Moreover, the critics of the concept consider Mayer and Salovey's model a genuine approach to the study of intelligence that could add interesting information in the knowledge of motional intelligence paradigm (Matthews, Zeidner, & Roberts, 2002). Although there was a previous theoretical approach (Salovey & Mayer, 1990) the most accepted proposal is the one that considers Emotional intelligence as a mental ability, specifically: Emotional intelligence involves the ability to perceive accurately, appraise, and express emotion, to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth (Mayer & Salovey, 1997).

Re-conceptualized model comprises four abilities: perception, assimilation, understanding, and regulation of emotions. Concisely, emotional perception consists on the ability to perceive emotions on the self and others, and also on objects, art, stories, music, and other stimulus. The assimilation of emotions is the ability to generate, use, and feel emotions as necessary to communicate feelings, or to use them in other cognitive processes. Emotional understanding is related to the ability to understand emotional information, how emotions combine and shift across time, and the ability to appreciate emotional meanings. Finally, emotional regulation refers to the ability to stay open to feelings, to monitor and regulate one's and other's emotions to promote understanding and personal growth (Fernandez-Berrocal & Extremera, 2006).

These four branches are hierarchal organized, perceiving emotions is at the most basic level, and managing emotions is at the highest and most complex level in the hierarchy, therefore, the ability to regulate one's and other's emotions is built on the bases of the competencies of the three other branches e.g., perception, assimilation, understanding. In this sense, the methodology for the assessment of EI is based on performance or ability measures, in line with the assessment methodology used to measure other intelligences i.e., math intelligence or logic-spatial intelligence (Fernandez-Berrocal & Extremera, 2006) because EI represents an intelligence system focused on the processing of emotional information and it must be part of other traditional and well-established intelligences (Mayer, Caruso, & Salovey, 1999).

Although the authors initially developed self-reported measures for the assessment of the concept (Trait Meta-Mood Scale, TMMS; Salovey, Mayer, Goldman, Turvey, & Palfai, 1995), their biggest efforts have been focused on the design and development of ability measures or performance-based measures, culminating in the development of Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) (Mayer, Salovey, & Caruso, 2002; Mayer, Salovey, Caruso, & Sitarenios, 2001/2003). This instrument provides an indicator of

people's emotional performance level in different items that evaluate the ability to perceive emotions in faces, pictures, and abstracts designs; the ability to assimilate emotions in several thinking and decision making processes; the ability to understand simple and complex emotions, their combinations and the shift of emotions; and finally, the ability to manage and regulate owns and other's emotions (Fernandez-Berrocal & Extremera, 2006).

#### **Goleman Competency Based Model 1995**

Undoubtedly, the term EI was brought to light by Daniel Goleman's book and by his statements regarding its influence upon many areas of our lives (Goleman, 1995). In his first book, Goleman stated that EI comprises of five essential elements: 1) knowing one's emotions; 2) managing emotions; 3) motivating oneself; 4) recognizing emotions in others, and 5) handling relationships (Fernandez-Berrocal & Extremera, 2006).

Goleman (1998) presented his second book, proposing a theory of performance in organizations based on his competency based model of EI. This model was developed to predict the effectiveness and personal outcomes in workplace and organizational fields. The model is based on several competencies, which were identified by researches conducted in hundreds of organizations; these competencies are considered characteristics of the most brilliant and successful employees (Goleman, 2001). Currently, the model presents four major domains, which are subdivided into 20 competencies (Boyatzis, Goleman, & Rhee, 2000; Goleman, 2001): 1) Self-Awareness, comprising Emotional self-awareness, Accurate self-assessment, and Self-confidence; 2) Social Awareness comprising Empathy, Service orientation, and Organizational awareness; 3) Self-Management comprising Self-control, Trustworthiness, Conscientiousness, Adaptability, Achievement drive, and Initiative; and finally, 4) Relationship Management which comprises Developing others, Influence, Communication, Conflict management, Leadership, Change catalyst, Building bonds and Teamwork and collaboration (Fernandez-Berrocal & Extremera, 2006).

According to Goleman, each one of these four dimensions is the base to develop other learned abilities or competencies necessary in the organizational field. For example, the Selfawareness domain provides the bases for development of learned competencies such as to perform an accurate self-assessment of advantages and disadvantages in decision-making processes, which is necessary when an executive play his leading role in his work team. For Goleman (2001), an emotional competence is a learned capability based on emotional intelligence that results in outstanding performance at work.

This idea of learned competence is essential to understand Goleman's proposal. Thus, EI as defined by Mayer and Salovey represents our potential to dominate specific emotional abilities, from Goleman's proposal, emotional competencies by themselves represent the level at which a person dominates specific abilities or skills based on his EI level and makes him/her more effective in his work (Goleman, 2001).

In order to evaluate social and emotional competencies in the organization, 360<sup>°</sup> methodology or measures based on evaluation of external raters is used. This methodology is easier and quicker than other methods of measurement such as personal interview, and it is also wider because it provides a general indicator of 20 emotional competencies regarding the work performance using just one instrument. Besides, this instrument shows higher security and reliability than others because it allows the comparison between the employees' perception of his/her own competencies and other employee's and boss' perceptions of these competencies (Boyatzis, et al., 2000). The instrument used to evaluate Goleman's model is the Emotional Competence Inventory 2.0 (ECI 2.0), which is based on 360<sup>°</sup> methodology and is shown to be valid and reliable in the workplace and organizational fields. The ECI consists on 110 items, where 3 items is the minimum number to evaluate each competence. The ECI comprises two ways of evaluation: a self-reported measure where people are asked to estimate their performance in each one of the competencies, and an evaluation by external raters, such as work mates or superiors (Boyatzis et al., 2000; Sala, 2002; Fernandez-Berrocal & Extremera, 2006).

#### **Bar-On Trait Model of EQ**

The Bar-On model provides the theoretical bases for the emotional quotient inventory (EQ-i), which was originally developed to assess various aspects of this construct as well as to examine its conceptualization. According to this model, emotional-social intelligence is a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands. The emotional and social competencies, skills and facilitators refer to five key components: (a) the ability to recognize, understand and express emotions and feelings (b) the ability to understand how others feel and relate with them; (c)

the ability to manage and control emotions; (d) the ability to manage change, adapt and solve problems of a personal and interpersonal nature; and (e) the ability to generate positive affect and be self-motivated (Bar-On, 2006).

Consistent with this model, to be emotionally and socially intelligent is to effectively understand and express oneself, to understand and relate well with others, and to successfully cope with daily demands, challenges and pressures. This is based, first and foremost, on one's intrapersonal ability, which refers to awareness about one's emotions, to understand one's strengths and weaknesses, and to express one's feelings and thoughts non-destructively. On the interpersonal level, emotional and social intelligent encompasses the ability to be aware of others' emotions, feelings and needs, and to establish and maintain cooperative, constructive and mutually satisfying relationships. Third domain refers to adaptability that includes problem solving, flexibility and reality testing. To adjust in the society, one must be able to show flexibility in one's ideas, thoughts, feelings and behavior and he or she should be quick in solving the problems on immediate bases, to accomplish these tasks, correspondence between one's internal experience and external situation is very essential. Stress management domain requires traits like tolerance and impulse control while mood domain includes happiness and optimism (Shujja & Malik, 2009). Ultimately, being emotionally and socially intelligent means to effectively manage personal, social and environmental change by realistically and flexibly coping with the immediate situation, solving problems and making decisions. To do this, one need to manage emotions so that they work for him and not against him, and one need to be sufficiently optimistic, positive and self-motivated (Bar-On, 2006).

The EQ-i is a self-report measure of emotionally and socially intelligent behavior that provides an estimate of emotional-social intelligence. The EQ-i was the first measure of its kind and the most widely used measure of emotional-social intelligence (Bar-On, 2004). High score on EQ-i predicts effective functioning in meeting daily demands and challenges. On the other hand, low EQ scores suggest an inability to be effective performer and the possible existence of emotional, social and/or behavioral problems (Bar-On, 2006).

#### Practical implication of Bar-On model

Studies revealed that Bar-On model of emotional intelligence is a strong predictor of physical health, psychological health, social interaction, performance at school (Parker et al., 2004; Swart, 1996), performance at workplace (Bar-On, 1997b, 2004/2006; Bar-On,

Handley, & Fund, 2005; Ruderman & Bar-On, 2003), self-actualization (Bar-On, 1988/2006), and subjective well being (Cattell, Eber & Tatsuoka, 1970; Krivoy, Ben-Arush, Bar-On, 2000; Bar-On, 2005).

#### **Comparison of Trait Model with Ability Model of Emotional Intelligence**

Recent work (Petrides & Furnham, 2000a, 2001) provides theoretical arguments suggesting that trait and ability EI should be regarded as distinct. Indeed, O'Connor and Little (2003) and Warwick and Nettelbeck (2004) provide empirical support for the idea that trait and ability models measure EI in separate manner. This raises a difficulty for EI researchers, as authors of performance based EI measure appear to reject trait EI theory. They argue that their questionnaires are able to measure abilities, competencies and skills (Perez, Petrides & Furnham, 2005). This perspective creates a major difficulty for interpreting the findings of EI research when the performance-based measures are used (Qualter & Gardner, 2007).

There are obvious differences between the ability and dispositional approaches to the study of EI, for example, trait EI is conceptualized as a non-cognitive capability (Bar-On, 1997; Petrides and Furnham, 2001; Saklofske, Austin, & Minski, 2003), there are only weak or nonsignificant associations between measures of trait EI and cognitive intelligence (Newsome, Day & Catano, 2000; Derksen, Kramer & Katzko, 2002; Saklofske, Austin, & Minski, 2003; Zeng & Miller, 2003). This contrasts with findings of a positive, although still relatively weak, association between ability based EI and measures of crystallized intelligence (Mayer, Salovey & Caruso, 1999; Roberts, Zeidner, & Matthews, 2001; MacCann, Matthews, Zeidner & Roberts, 2003) and verbal IQ (Mayer et al., 1999; Barchard & Hakstian, 2004). Trait EI has been found to be correlated with measures of personality (Saklofske et al., 2003), this is not true for ability based EI (Roberts, Zeidner, & Matthews, 2001; Lopes, Salovey & Straus, 2003). The relationships between trait Emotional intelligence and personality traits raises questions regarding the distinctiveness of trait Emotional intelligence from the personality domain, the main ideas are if trait Emotional intelligence is no more than a repackaging of well-established personality traits then it is unlikely to be a useful tool in EI research (Saklofske et al., 2003). These problems were also commented by Mayer and Cobb (2000), who argued that trait EI seems to be a catchall phrase that includes anything involving motivation, emotion and good character. There is considerable support from these corelational studies for the notion of two different types of EI. It may be unlikely that one type of EI can be increased without increasing the other. Nevertheless, useful evaluation of the success of educational interventions can only be implemented if the measures used relate to the model of EI adopted (Qualter & Gardner, 2007).

Researchers are adopting the different theoretical positions, have produced commercially available assessment measures for older adolescents and adults e.g., Mayer–Salovey–Caruso Emotional Intelligence Test (MSCEIT), an ability based measure of EI; Bar-On Emotional Quotient Inventory (EQ-i), a trait measure. The technical manuals for these instruments provide data to support their reliability and validity. However, research has failed to support the factor structure of the EQ-i and some argue that the claims made by Bar-On in the technical manual are unclear (Palmer, Manocha, Gignac & Stough, 2003). Similarly, although evidence for the factor structure of the four-branch model of ability EI is mounting (Day & Carroll, 2004; Mayer, Salovey, Caruso, & Sitarenios, 2003), there are researchers (Matthews, Zeidner and Roberts, 2002; MacCann, Matthews, Zeidner, & Roberts, 2003) who have criticized its construct validity (Qualter & Gardner, 2007).

Bar-On has also developed an instrument for use with children aged 6–16 (EQ-i-YV), and a youth version of the MSCEIT, the Adolescent Multifactor Emotional Intelligence Scale (AMEIS; Salovey, Mayer & Caruso, 2002) has been designed for 10–17-year-olds, but is only available to academic researchers. Surprisingly, little research has been conducted using either of these measures (Qualter & Gardner, 2007).

Whether or not, trait EI is distinct from personality, and ability EI different from general intelligence, remains in question. Also, it would be wrong to suggest that trait EI and ability EI are in the same stage of development and underpinned by similarly large and robust findings. All of the ability EI data come from a single test (MSCEIT), which, unlike any other cognitive ability test, comprises items and tasks that are difficult to score because of a lack of agreed consensus. This is one of the reasons why cognitive ability researchers have either ignored or even condemned the notion of ability EI (e.g., Eysenck, 1998; Brody, 2004). However, sufficient evidence is available to support the proposition that trait EI and ability EI are distinct from each other, although interestingly they do predict life success in similar ways (Qualter & Gardner, 2007).

### **Implications for Emotional Intelligence**

It was hypothesized that there would be a positive relationship between psychosocial health and emotional intelligence. Lopes, Brackett, Nezlek, Schutz, Sellin and Salovey (2004)

suggest that the capacity to decode, understand and regulate emotions (dimensions of emotional intelligence) is associated with social and emotional adaptation. Lopes et al., (2004) conclude their research into the relationship between emotional intelligence and social interaction with the suggestion that a person can contribute to his or her social interactions by developing a better understanding of emotion management strategies. The results of this research leave the distinct impression that emotional intelligence is interwoven with social and emotional adaptation, and social adaptation and emotional adaptation are associated with psychosocial health (Newman & Newman, 2006).

### **Psychological Adjustment**

The concept of adjustment was originally a biological one and was the foundation of Darwin's theory of evolution. In biology, the term usually implies adaptation. The biological concept of adaptation has been borrowed by the psychologists and renamed as adjustment. Wolman (1973) defined adjustment as a melodious relationship with the environment, involving the ability to satisfy most of one's needs and meet most of the burden, physical and social, which are put upon one.

Adjustment can be defined as the subjective experiences that are related with and result from attempts of adaptation, and that also stimulate further adaptation. Adjustment, therefore, essentially refers to the general concept of well-being, which is an affective assessment of one's life condition. In line with this explanation, previous researchers have included a wide range of outcome measures of adjustment, including self-awareness and self-esteem (Kamal & Maruyama, 1990), mood states (Stone, Feinstein, & Ward, 1990), and health status (Babiker, Cox, & Miller, 1980). Other typical measures of adjustment involve subjective experiential constructs that refer to well-being, such as anxiety, mood, depression, subjective well-being, satisfaction and happiness.

Psychosocial means the interaction between social factors and the psychological system. The psychological system based upon the mental processes that a person needs in order to gain meaning from experiences and to take action. Social factors are better understood when viewed in context of societal system and broken down into societal influences e.g., social roles, rituals, cultural and social expectations, leadership styles, communication patterns, family organization, religious ideologies, economic fluctuations, war, peace, and exposure to favoritism, and prejudice to other groups. Hence,

psychosocial theory is the theory of cognitive, emotional and social growth that is the result of the interaction between the social expectations that confront the individual through out life span, and the person's competencies with which he meets these challenges. Subsequently, a psychosocial crisis is the result of stress, people experience when they perceive conflict between societal expectations and their own competencies (Newman & Newman, 2006). Successful resolution of the psychosocial crises encountered during the various stages of development result in psychosocial adjustment or the psychologically healthy interaction between an individual and his or her societal or environmental context (Faul, 1995).

#### **Theoretical Perspectives**

The emphasis on systems and the environment is important because psychosocial theory is deeply rooted in the interaction between biological, societal and psychological systems as emerged in the environmental context. In view of human beings, this self-organizing ability of the system means that behavioral change takes place when the system as a whole is ready for it (Von-Bertalanffy, 1968). Different models of psychological adjustment have explained the interaction between systems and environment.

### Dynamic Systems Theory

The term dynamic system is defined as any complex organization that is composed of multiple parts, each with its own function but also involved in a pattern of mutual influences with other parts (Schaffer, 2006). The essence of the whole, according to Von-Bertalanffy (1968), lies in the relationship of its parts and therefore, the system is able to maintain equilibrium and bring change.

A primary process guiding system change is adaptation; the system modifies or adapts to prevent inadequacy as a result of environmental fluctuations (Newman & Newman, 2006). This adaptive self-regulation is the system's response to environmental change, using feedback mechanisms.

A person is part of a group. He/she is also composed of subsystems namely physical, cognitive, emotional, social, and self-systems. The larger system can change, intrude and place demands on individuals, enforcing adaptive convention and reorganization between the subsystems as an effort to achieve stability (Newman & Newman, 2006). Human behavior

takes place in a multi-layered setting (Schaffer, 2006). Bronfenbrenner's (1993) ecological model may serve to clarify this complexity to some extent.

#### The Ecological Model

Bronfenbrenner (1977/1993/1999) defined the ecology of human development as the scientific study of the progressive, mutual accommodation between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, and this process is affected by the relations between these settings, and by the larger contexts in which the settings are embedded (Brehm, Kassin, & Fein, 2005). Bronfenbrenner (1977) distinguished between the microsystem, mesosystem, exosystem, macrosystem, and Chronosystem.

#### The Microsystem

The microsystem represents the interaction between child and immediate environment, and is described by Bronfenbrenner (1999) as roles, behavioral patterns, and interpersonal relations as the developing individual experiences it in the immediate environment, which is a setting with specific physical, social and symbolic features.

#### The Mesosystem

The mesosystem represents relations and processes that occur between two or more settings and the developing person. Information, knowledge and attitudes link two or more microsystems through the mutual developmental impact of the one on the other (Gardiner & Kosmitzki, 2002).

#### The Exosystem

This system describes processes between two or more settings, at least one of which does not contain the developing person, but in which events occur that have an indirect influence on the immediate setting in which the person develops. The exosystem represents the community, the occupations and workplaces of the parents, and the extended family (Gardiner & Kosmitzki, 2002).

#### The Macrosystem

This is the most complex system, consisted of the customs, values, and laws that have an important influence on the developing person's culture. According to Bronfenbrenner (1993) the macrosystem is consisted of the pattern of micro-meso- and exosystems characteristic of a given culture, subculture, or other extended social structure, with reference to the belief systems, resources, hazards, lifestyles, opportunity structures, life course options and patterns of social interchange that are rooted in such systems.

#### The Chronosystem

Researchers refer in this regard to research work from a life course perspective (Clausen, 1993/1986; Elder, 1974) and to Steinberg's (1989/1988/1986) in which he studied the relationship between the timing of puberty and its effects on the relationships within the family, particularly the closeness or distance between parent and adolescent (Gardiner & Kosmitzki, 2002).

#### Super and Harkness Model

Super and Harkness (1980) viewed child as developing within a three-component. Schaffer (2006) defines developmental niche as a child's place within a particular community, as determined by the multiple cultural influences on child development prevailing in that community. These influences are in physical and social context, culturally determined customs regarding childrearing and the psychology, (belief systems, developmental expectations) of the parents or primary care givers (Gardiner & Kosmitzki, 2002). The interactions of the three components or niche, along with the mutual adaptation between the niche and the individual, provide the dynamics within which an individual develops.

#### Social Role Model

One definition of social role is any set of behaviors that has a socially agreed-upon function and an accepted code of norms (Biddle, 1979; Biddle & Thomas, 1966). Social roles associate people to society and people change their behavior to conform to societal expectations. Each role is supported by other roles and its function is determined by other roles to which it is related. Roles are reciprocally linked e.g., parent and child, employer and employee. This reciprocity is linked to the interdependence of people at different psychosocial stages (Newman & Newman, 2006). In a study of 300 middle-aged women who held multiple roles and this role multiplicity was contributing to their enhanced life satisfaction (Christensen, Stephens & Townsend, 1998 as cited in Berk, 2007).

### Variables Influencing Psychosocial Adjustment

Many variables have significant influence on the psychological adjustment of employee at work place including the self, the environment and socio-cultural influences (Brehm, Kassin, & Fein, 2005).

### The self

James (1890) undertook the first scientific analyses into the self and distinguished between the I-self (the self as organizer and interpreter of experiences) and the Me-self (our definition of ourselves regarding personal qualities, being of a certain age, gender and ethnicity). According to Schaffer (2006), I-self is now referred to self-awareness, and the Me-self as self-concept. Researchers proposed the concept of "looking glass self" to metaphorically described adult self-esteem as social-psychologically determined because others' opinion of self plays a significant role in the development of one's self-appraisal (Harter, 2006; James, 1890 as cited in Schaffer, 2006).

### The Self-concept

The self-concept develops through the ability to see oneself as a distinct entity, through mirroring oneself in others as researchers consider five sources of the self-concept, namely, introspection, our perceptions of our own behavior, and the influences of other people, autobiographical memories and cultural influences. By utilizing these sources, people develop a specific mental representation of themselves (Brehm et al., 2005; Schaffer, 2006). This is the representation of those sources, which are highly relevant in the search for psychosocial adjustment (Faul, 1995).

#### Self-esteem

William (1890) defines self-esteem as the ratio of what one actually accomplishes to what one is supposed to accomplish, in given potentials. There are conflicting views on selfesteem and healthy psychological functioning. Researchers investigated the link of subjective well-being and enhanced self-confidence to high self-esteem, but he also cites findings that high self-esteem undermines healthy self-views by recognition of one's positive and negative qualities (Myers & Diener, 1995; O'Brien & Epstein, 1988 as cited in Goldman, 2006). Self-esteem as a variable in psychosocial functioning is of extreme importance because it serves to direct behavior as high self-esteem has long been associated with healthy psychological adjustment (Etaugh & Bridges, 2004).

### Environmental influences

Social psychology is the scientific study of how people think about, influence and relate to one another. All of this thinking, influencing and relating, happen within the context of situations and environmental influences. From a developmental perspective, many people have to find their way through negative environmental influences e.g., poverty, physical and mental abuse and emotional hardship and rejection. These settings have a significant impact on self-esteem and self-respect, and further influencing psychosocial adjustment (Saarni, 2002).

Environmental influences in the workplace can be psychosocially excellent or psychosocially pathological and can therefore impact employees' psychological adjustment (Gilbreath, 2004). Supervisors can create a psychosocially healthy work environment by minimizing role stress and uncertainty (Gilbreath, 2004). Other contributions to psychosocially healthy work environments include balance between subsystems to prevent burnout (Theorell, 2003), balance between job demands and control (Karasek, 1990), enhancing employee self-efficacy through positive feedback and ensuring that employees enjoy the ultimate person-environment state (Gilbreath, 2004).

#### **Socio-cultural factors**

Socio-culture factors are the norms, rules, roles, beliefs, values, rites and customs of a society that influence psychosocial development and adjustment. Culture is a guiding force, which prescribes certain roles and settings and brings certain meaning to actions (Newman & Newman, 2006). One of the assumptions of psychosocial theory is that fundamental contribution of culture to individual development. Diener and Diener (1995) found a higher correlation between self-esteem and life satisfaction in an individualist, than in collectivist cultures.

Whereas psychosocial theory views biological maturation as a stimulus for stage changes, what happens within the stage is cultural adaptation to changing economic, environmental and intercultural conditions. Psychosocial stages are a product of the changing person and mechanisms of culturally influenced socialization (Newman & Newman, 2006). Probably the least complicated way to describe the impact of culture on psychosocial functioning is observing in context of collectivism and individualism. Individualism is the worldview that guides social behavior towards attaining personal goals and ambitions, and these may not necessarily coincide with the best interest of the group. Values prescribe competition, personal achievement, and conflict between what is best for the group and what is best for the individual. In the individualistic society, this conflict is resolved by choosing to pursue personal gratification first. In a collectivistic society, social behavior is geared towards collective well-being (Triandes, 1995).

The principle of cultural determinism (Benedict, 1934) provides an appreciation for the implications of socio-cultural influence on psychosocial functioning. According to this principle, a person's specific culture moulds its psychological experiences through presenting challenges, expecting certain behavioral accomplishments and providing resources. Culture is a more important factor than biology in determining whether different stages of development will be experienced as stressful or not. Cultures differ in their expectations regarding life choices, the timing of life choices, range of choices and resources are available for those who confront with significant decisions, resulting in distinct characteristics and skill levels at specific periods in life.

#### **Emotional Intelligence and Psychological Adjustment**

Psychosocial functioning refers to the way one behaves (functions) in a social context. Healthy psychosocial functioning implies positive social behavior that benefits both the individual and the group (Gilbreath, 2004). Referring to Mayer and Salovey's (1997) framework of emotional intelligence, the question now arises as to whether adults in the workplace can be trained to acquire ability of emotional intelligence. Researchers found relationship between psychosocial functioning and emotional intelligence and behavior accompanied with problematic psychosocial functioning e.g., frustration (anger), helplessness (depression) and stress overshadow or even obliterate emotionally intelligent behavior. Anger or rage as negative psychosocial functioning; the hostile adult failed to demonstrate regulation of emotion because of their need to vent anger. The depressed adult found it difficult, if not impossible to keep oneself emotionally smooth and relax (Bailey & Leland, 2006). A person experiencing an extremely stressful situation could revert to exhibit relaxed behavior after exposure to emotional intelligence

training. On the other hand, emotional intelligence helps in self-management and equipped the person with psychological tools to manage negative emotions so that one could regain the energy needed to be creative and productive (Vermeulen, 1999).

Researchers suggested that although the capabilities to demonstrate emotionally intelligent behavior are developed during childhood, yet flexible nature of these capabilities allows people to change it with their growth. This indicates that adult training in emotional intelligence is viable, but the question remains whether trainees would like to develop and change level of EI if no like is shown between the utilization of emotional intelligence and negative psychosocial functioning (Dulewicz & Higgs, 2000).

#### Psychological adjustment and cultural differences

Major life events like marriage, divorce, births and deaths create negative effect on well-being. Research has also emphasized the increasing effects of day-to-day events, either positive or negative, on well-being and interpersonal relationships (DeLongis, Folkman, & Lazarus, 1988; Kanner, Coyne, Schaefer, & Lazarus, 1981). Daily hassles and uplifts can have major effects on people's physical and psychological adjustment that is similar to or even stronger than the effects of major life events. This view is even more relevant in the inter-cultural context, where daily life is stuffed with daily hassles because of new cultural context one is unable to adapt and adjust the inherent haziness of new cultural systems, intercultural communication, and the unavoidable conflict that arises because of differences.

On one hand, positive consequences of physical and psychological adjustment include accomplishment of language competence, self-esteem, awareness, and health (Babiker, Cox, & Miller, 1980; Kamal & Maruyama, 1990), self-confidence, positive mood, interpersonal relationships, and stress reduction. Clearly when intercultural experiences go sound, many individuals attempt to evolve in qualitative and positive ways so that they could get psychologically and physically well adjusted (Matsumoto, LeRoux, Ratzlaff, Tatani, Uchida, Kim, Araki, 2001).

On the other hand, negative consequences are of psychological and emotional concerns (Shin & Abell, 1999), early return to one's home country (Montagliani & Giacalone, 1998), emotional distress (Furukawa & Shibayama, 1994), dysfunctional communication (Gao & Gudykunst, 1991; Okazaki-Luff, 1991), culture shock (Pederson, 1995), depression, anxiety, diminished school and work performance, and difficulties in

interpersonal relationships (Matsumoto, LeRoux, Ratzlaff, Tatani, Uchida, Kim, Araki, 2001). In severe cases, negative outcomes of maladjustment include antisocial behavior (gangs, substance abuse, and crime) and even suicide. Providentially, all sojourners do not experience this wide range of psychological and physical health troubles, but mostly they experience some of these problems at some point during their stay in alien cultures.

According to Ward (2001), the factors that predict intercultural adjustment include life changes, cognitive appraisals of stress, coping styles, personality, social support, cultural identity, type of acculturating groups, perceived discrimination, acculturation strategies, and socio-cultural adaptation. Because intercultural contact and change are momentous life events that are naturally stressful, coping skills are obligatory to deal with life in a new and different environment.

Another factor that may influence adjustment is value variation. Sojourners may experience stress when face cultural values different or even opposite to their native culture (Parker, Kleiner, Naedauan, 1969; Price, 1983).

#### **Psychological Adjustment and Gender Differences**

Gender has significant impact on one's personality as well as behavioral characteristics. Thus, it is very important that in any study involving personality characteristics, one looks into the possibility that systematic differences exist in terms of gender. Springer and Deutsch (1998) commenting on the sex differences in certain human abilities like verbal and spatial skills, point out that males tend to be more lateralized for verbal and spatial functions, while females demonstrate greater bilateral representation for both types of functions. This is supposed to explain the superiority of females in language functions (Halpern, 1992) and males in visual-spatial functions (Schaie, 1994).

In all the social and work environment constrictions, female workers are earning for themselves and for the families. They have recognized their own position in the society. Unmarried female workers can now choose to get married and married workers are getting help from their husbands in doing domestic works this is a significant social change and it reflects the acknowledgment of female earning and contribution in the labor force. At the same time, they are also playing traditional domestic roles with their new identities. Therefore, they are baring heavy duties with two contradictory roles, namely the role of career women on the one hand and that of household workers on the other hand. This double role may lead to stress and as a result may affect some aspects of life of the workingwomen, such as psychological adjustment at home, work and social situation (Zohir & Paul-Majumder, 1996).

#### **Review of Relevant Literature**

The role of emotional intelligence can be seen in different fields of life, hospitals are one of them, especially nursing staff. Nursing staff have great importance in hospital settings as they have to deal with variety of situations. Lot of factors play an effective role in their practice, including their competency, experience, and emotional intelligence. Over the years, emotional intelligence has become the matter of interest for psychologists. Emotionally intelligent nurses can deal with patients in a better way. This can, not only help them in their professional life but can also play an active role in domestic settings (McQueen, 2004). Many researchers have proved the significant relationship between emotional intelligence, psychological adjustment, work stress, stress due to domestic work, and work performance. Moreover, studies have shown significant differences in term of gender and culture in both emotional intelligence and psychological adjustment.

Many studies have found that that there is a moderate yet significant relationship between emotional-social intelligence (ESI) and physical health (Bar-On, 2004; Krivoy, Ben-Arush, Bar-On, 2000; Bar-On, 2006). Researchers examined the relationship between ESI and psychological health, the EQ-i scores of 418 psychiatric patients were compared with matched control groups in Argentina, Israel, South Africa and the United States (Bar-On, 1997b). In addition to significant differences in overall ESI, the EQ-i scores revealed significant differences on most of the scales between the clinical samples and control groups (Bar-On, 2006).

Self-actualization is the process of striving to actualize one's potential capacity, abilities and talents. It requires the ability and drive to set and achieve goals, and it is characterized by being involved in and feeling committed to various interests and pursuits (Bar-On, 2006). In a reexamination of an older dataset (Bar-On, 1988), multiple regression analysis was run to study the impact of ESI competencies, skills and facilitators on self-actualization. The results indicated the significant impact on self-actualization (Bar-On, 2006). In a study Emotional intelligence was found to be a factor in successful life adjustment, among them the successful achievement of a well-balanced life with little interference between work, family and leisure. Data were obtained, including measurement of emotional intelligence, life/work balance and other indices of adjustment and social/psychological skills, and salary from a sample of 153 respondents. EI measured by questionnaire items (trait EI) and a task of identifying emotions in social problem episodes

as described in vignettes (performance EI). Balance was measured in terms of family/leisure interfering with work and vice versa. Both interference dimensions correlated strongly with emotional intelligence in the hypothesized direction. Emotional intelligence was positively related to salary both for men and women, and at different levels of educational achievement. Other indices of social skill were also related to EI. On the other hand, those high in EI tended to be less concerned with economic success (Sj-berg, 2008).

In another study, similar relationship was found. Study was conducted to find out the relationship between psychosocial functioning and emotional intelligence in a sample of 69 employees in different organizational settings in South Africa. Each respondent completed the Personal Multi-Screening Inventory (PMSI) and the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). The research findings indicated that there is a significant relationship between subscales of the PMSI and subscales of the MSCEIT, in that the ability to manage emotions is associated with low levels of helplessness, stress and frustration, and high levels of expectation, satisfaction and achievement, whereas the ability to perceive emotions is associated with low levels of satisfaction and achievement. A relatively high level of the ability to perceive emotions is also associated with helplessness. Moreover, employee volunteer interventions in workplace can be enhanced through emotional intelligence mediation of negative psychosocial functioning (Rossouw, 2008).

Another study investigated the above relationship gender wise. In this study, nature and extent of the relationships was estimated, which exist between two cognitive variables, intelligence and creativity, and two non-cognitive variables, emotional intelligence and psychological adjustment among a sample of 90 young adults. The results revealed that the two groups differed significantly on the variables and also in their inter-correlations. Maladjustment was identified as the most important predictor of all the other variables, in the case of the male sample. Emotional intelligence played a significant role in determining overall creativity and maladjustment in the females. The relationship between intelligence and creativity was found to be stronger in females than males (Bindu & Thomas, 2006).

Another study throws light upon the gender differences in emotional intelligence. Two hundred and sixty predominantly white participants completed a measure of trait emotional intelligence (EI) and estimated their scores on 15 EI facets on a normal distribution with the mean of 100 and standard deviation 15. Females scored higher than males on the
social skills measured through trait EI. However, when the 15 facets of self-estimated EI were combined into a single reliable scale and the participant's measured trait EI scores were held constant, it was demonstrated that males believed they had higher EI than females. Most of the correlations between measured and self-estimated scores were significant and positive, thereby indicating that people have some insight into their EI. Correlations between measured and self-estimated scores than females, and a regression analysis indicated that gender was a significant predictor of self-estimated EI (Petrides & Furnham, 2000b).

The psychological health and adjustment to life has also been investigated in different cultures. In a study, first-and second Generation of Chinese immigrants were measured. It was predicted that problems with the English language, inadequate social support, value differences, and unfulfilled expectations would induce more symptoms of psychological distress and depression in first-generation than in second-generation Chinese immigrants. Overall psychological health, and hence adjustment, was good. There was evidence for language problems and unfulfilled expectations, but not social support and value differences, being linked to mental health in these second generations. Evidence linking mental health to other personal variables was found in both generations (Furnham & Li, 1993).

Another study explored relations between psychological adjustment, marital status and paternal acceptance in childhood. The sample was composed of 488 undergraduate and graduate students. Based on data from four self-report questionnaires, results showed that perceived partner acceptance, as well as remembrances of both maternal and paternal acceptance in childhood, was significantly associated with adults' (both men's and women's) psychological adjustment. In addition, the remembrances of paternal (but not maternal) acceptance in participants' childhood partially mediated the relation between perceived partner acceptance and women's (but not men's) psychological adjustment (Rohner, Melendez, & Rickaby, 2008).

A study was conducted to assess the effect of employment on health of women with fibromyalgia syndrome (FM). Sample comprized of 287 women (137 employed, 150 unemplyed) recruited from 118 randomly selected rheumatology practices. Data were obtained theough telephonic interviews about demographic characteristics, health status, symptoms, family work, and social support. Formal statistical analysis, including estimation and testing, focused on the relationship between employment and 4 health status measures:

Modified Health Assessment Questionnaire (MHAQ), visual analog scale (VAS) for pain on the interview day, number of painful areas, and VAS for fatigue on the interview day. The relationship between employment and these measures was evaluated using analysis of variance, chi-square, linear regression, and ordinal logistic regression. The majority of participants reported high levels of symptoms and poor health status. In the bivariate analyses, employed women reported significantly less pain, fatigue, and better functional status than those who were not employed. In the multivariate analyses, employment remained a significant factor in explaining number of painful areas, functional status (MHAQ), and fatigue, with employed women reporting better health status than those not employed. Employment was not associated with pain on the day of the interview when other factors were considered in the analysis. The psychological demands of family work were consistently related to all dependent measures of health status, as those with greater psychological demands reported worse health status. As in community studies, employed women report better health status than unemploed women. The demands of family work exert a serious and significant effect on every dimension of health status and should be the focus of greater clinical attention (Reisine, Fifield, Walsh, & Feinn, 2003).

Practitioners who work with information technology (IT) are reported to face rising level of worked related stress. The origins of the stress come from increasing demands, system users, advances in technology, and growing use of information and communication technologies to improve the efficiency and effectiveness of intra and inter-organizational business activities. While a considerable amount of research has been undertaken on workrelated stress in the information systems literature, a void has appeared and centers on the need to explore how IT personals cope with stress. The research presented in this paper investigates whether coping and affect (both negative and positive) influence adjustment (anxiety, depression and stress) among IT personals. A sample of 100 IT personals from Australia completed a questionnaire, which contained measures for adjustment, affect state, and coping strategies. The findings demonstrated that specific individual characteristics influence the psychological adjustment of the IT personals sampled. Information technology personals who engaged in a more problem-focused style of coping, such as active coping were found to be better adjusted than those who engaged in a more emotionfocused styles of coping, such as cognitive avoidance coping, social coping, accepting responsibility, and self-controlling coping. The research concludes that the psychological adjustment of IT personnel is influenced by the types of coping strategies they use, specific individual demographics, and their affect state (Peter, Zahir, Marinos, n.d.).

Different studies have demonstrated that there is a significant relationship between ESI and occupational performance (Bar-On, 1997b/2004/2006; Bar-On et al., 2005; Ruderman & Bar-On, 2003). Mortality over a 4-year period was examined in relation to self-esteem, depression, life satisfaction, and meaning in life in a non-clinical sample of 129 intermediate-care nursing home residents. Survival was associated with the psychological adjustment variables, and the effect persisted after statistically controlling age, sex, and physical health. Self-evaluations (self-esteem and depression) were stronger predictors of mortality than were general life evaluations (life satisfaction and meaning in life). Comparisons with previous studies suggest conditions under which psychological variables are likely to be associated with mortality (O'Connor, & Vallerand, 1998).

Relationship of the Big Five personality dimensions and trait emotional intelligence (EI) with the selection of emotional labor strategies has been investigated. Emotional labor refers to the control and management of emotions within the work role in order to comply with organizational norms and demands and is achieved though surface acting, deep acting or the expression of naturally felt emotions. Participants were 298 undergraduates and academic staff referring to their part-time or full-time work in customer service (40.9%), sales (21.5%), social work nursing (26.3%) or other people work jobs (11.4%). Participants completed questionnaires containing the TEIQue SF, Goldberg's short IPIP NEO, a perceived job demands scale and an emotional labor scale. Exploratory factor analysis yielded the strategies surface acting and the natural expression of emotions on a continuum and two deep acting factors labeled developing feelings and the reappraisal of feelings. Hierarchical multiple regression analysis revealed that conscientiousness and extraversion were significant predictors of surface acting. Neuroticism, Agreeableness and extraversion were significant and positive predictors of developing feelings. Agreeableness and neuroticism were significant predictors of deep acting and reappraisal of feelings. Extraversion was a significant predictor of deep acting and reappraisal of feelings. Trait EI was not an independent predictor, but as hypothesized, it correlated negatively with surface acting and positively with deep acting and reappraisal of feelings. No support was found for a positive relationship to deep acting and developing feelings. Job type was also a significant predictor of surface acting and deep acting, developing feelings. The Big Five findings were theoretically consistent and have validated previous research (O'Donvano, n.d.).

Environment can also effect a person's psychological adjustment. This can be very true in case of nurses, who are continuously exposed to tense environment. Following study examined the impact of the actual environment on changes in psychological adjustment over time. According to Self-Determination Theory (SDT), environments that are objectively supportive of autonomy should facilitate psychological adjustment through their impact on people's subjective perceptions of autonomy and self-determined motivation. The present study tested this hypothesis using a prospective design with nursing homes residents. Results from structural equation modeling showed that actual autonomy-supportive nursing home environments were positively associated with resident's perceptions of autonomy that in turn predicted self-determined motivation in major life domains. Self-determined motivation, in turn, predicted increase in psychological adjustment over one-year period. Theoretical implications of the present findings discussed are in line with SDT (Philippe & Vallerand, 2007).

Furthermore, nurses working in emergency wards can be at high risk of burnout and poor psychological adjustment, as a study demonstrates. By means of the Maslach Burnout Inventory, job burnout was examined among randomly selected nurses working on psychiatric (55 nurses) and medical units (51 nurses) at 2 university hospitals in Isfahan during 2003. Psychiatric nurses experienced a greater degree of emotional exhaustion than the medical nurses. Significant positive correlation was noted among age, years of experience, frequency of outcalls and emotional exhaustion for the psychiatric nurses. Frequency of outcalls was also significantly associated with a sense of non-accomplishment. Longer duration of service was accompanied by higher degree of emotional depersonalization for the medical nurses (Yousefy & Ghassemi, 2006).

### **Rationale of the Present Study**

Nursing profession has always been considered very valuable and respectable among all the professions that include rescue services. Researchers have conducted different studies to demonstrate the role of emotional intelligence at work place, but no research was conducted to explore the relationship of emotional intelligence with psychological adjustment of nurses in Pakistan. According to McQueen (2004), the potential value of emotional intelligence in this emotional work is an issue that still needs to be explored. This relationship has not yet investigated in Pakistan. Due to the job of nurses, they have to face emergency situations very frequently. So, they have to handle relevant family members of the patient, who require lot of emotional support, but due to continuous exposition of nurses to emotional out burst, it becomes difficult to manage their own emotions. Therefore, family distress can also lead to the lower level of emotional intelligence and psychological adjustment (Kooker et al., 2006). Moreover, long working hours and long-term exposure to emergency can decrease the level of psychological adjustment (Camerino et al., 2008). Scores on Emotional Quotient Inventory (EQ-i) were considered as the emotional intelligence level of nurses. Similarly scores on Psychological Adjustment Scale were considered as the level of psychological adjustment of nurses. Empirical evidences were collected and it was found that comparatively nurses of private hospitals were more competent, having more facilities and, advantages than those of government hospitals. So they were expected to be more emotionally intelligent and psychologically adjusted. This idea leads us to explore the impact of emotions on their psychological adjustment. Sample age was restricted because of sample availability and experience concerns.

# Objectives

- To find out the relationship between EQ and psychological adjustment for the nurses in hospital settings.
- To explore the role of emotional intelligence and psychological adjustment of nurses who serve in emergency and non-emergency wards.
- To estimate the level of emotional intelligence and psychological adjustment of nurses with reference to professional experience.
- To find out the level of emotional intelligence and psychological adjustment of nurses serving in private and government hospitals.
- To investigate the impact of marital status on emotional intelligence and psychological adjustment of nurses.

# Hypotheses

- There will be positive relationship between emotional intelligence and psychological adjustment.
- Nurses serving in emergency wards will be more emotionally intelligent and psychologically adjusted then nurses serving in non-emergency wards.
- Nurses having high experience will have high emotional intelligence but low psychological adjustment than low experienced nurses.
- Nurses serving in private hospitals will have high emotional intelligence and psychological adjustment then those serving in government hospitals.
- Married nurses working in emergency wards would have low emotional intelligence and psychological adjustment than those working in non-emergency wards.

### **CHAPTER II**

### **METHOD**

This study was conducted in two phases, pilot study and main study. Bar-On (1997) Emotional Quotient Inventory (EQ-i) was used to measure emotional intelligence. There was need of pilot study because EQ-i was originally developed in English and standardized on western sample that is why, it was not readily applicable on sample specified in current study. So, EQ-i was translated into Urdu and an attempt was made to compute reliability of EQ-i (Urdu translation) for designated sample (nurses).

Another reason to conduct pilot study was that psychological adjustment scale used in this research was originally validated and standardized on university students and its was necessary to compute alpha reliability for the specified sample which was found to be satisfactory.

### **Pilot Study**

#### Sample

A sample of (N = 100) female nurses of age ranged 20-30 years (M = 25.6, SD = 3.4) was randomly selected from various private and government hospitals of Sargodha and Lahore (nine private hospitals and four government hospitals from Sargodha, and two private hospitals and three government hospitals from Lahore). Special written permission was sought from medical superintendents of different hospitals (private & government) of Lahore and Sargodha. Participants were informed about the objectives of research and written informed consent was obtained prior to administration of EQ-i (Urdu translation). Any query of participants about research was satisfactorily answered. The sample was drawn from emergency and non-emergency wards of private hospital, Chema Heart Center, Muneer Hospital, Ibrahim Hospital, Al-Rsheed Hospital, and government hospitals; Civil Hospital, Hilal-e-Aehmer Hospital, Fatima Hospital, Mula Bakhish Hospital and those of private hospitals of Lahore including Fatima Memorial Hospital, Sheikh Zaid Hospital, and government hospitals; Meo Hospital, Jinnah Hospital, Services Hospital.

#### **Translation of Emotional Quotient Inventory (EQ-i)**

Emotional Quotient Inventory (EQ-i) was developed and standardized in western countries so it was not easily understandable and comprehendible for the nurses in Pakistani hospitals. So, to prevent the response biases, it was necessary to translate EQ-i into indigenous language. Committee approach was used to achieve this purpose, so that it could become understandable to the sample of the present study. Translation was conducted through step-by-step process.

## Step I: EQ-i Translated by Expert English Teachers

In first step, three teachers of English department, University of Sargodha were requested to translate Bar-On Emotional Quotient Inventory (EQ-i) into Urdu. The purpose of this activity was to avoid grammatical errors and technical shortfalls of language.

#### Step II: EQ-i Translated by Expert Psychologists

Three expert psychologists and researchers of GC University, Lahore were requested to translate EQ-i into Urdu because they were expected to be aware of cultural contexts and terms of psychology used in the test. This practice proved to be very fruitful as this translation was amid to change language but not the true meanings and sense of statements for which EQ-i was designed.

#### Step III: Selection of Translated items through Committee Approach

Finally, three researches reviewed and scrutinized the translations done by English teachers and experts psychologists. Best translated items were selected from the translations with the mutual consent of three researchers. Translations obtained from English teachers and psychologists were scrutinized again and again by committee, which was comprised of three research scholars. They selected the best translated items.

After the selection of suitable items, Urdu format of EQ-i was designed and subjected to statistical procedure in order to determine reliability and internal consistency among subscales.

### **Step IV: Determining the reliability**

After translating the Emotional Quotient Inventory (EQ-i) it was applied on nurses to determine the reliability of the scale. Alpha reliabilities were satisfactory for EQ-i and subscales. The correlations of EQ-i with its subscales and, among the subscales were also very high.

### Determining the Reliability of Psychological Adjustment Scale

Another scale was used in the present study named as Psychological Adjustment Scale to assess the level of psychological adjustment of the nurses serving in emergency and non-emergency wards of private and government hospitals. The original scale was validated on university students and its alpha reliability of psychological adjustment scale was ( $\alpha =$ .83). In the present study, the psychological adjustment scale was used on difference sample (Nurses), therefore, it was necessary to find out the reliability of this scale on the present sample. Alpha reliability was calculated ( $\alpha =$  .83) on 100 nurses serving in private and government sector. Reliability estimates of subscales were also satisfactory ranging from high .75 (Positive self-image) to low .17 (Good interpersonal relationships). The internal consistency among the subscales and total psychological adjustment scale was also computed.

## Main Study

#### Sample

A sample (N = 200) of female nurses with age ranged from 20-30 years (M = 25.6, SD = 3.4) was taken through purposive sampling technique from various private and government hospitals of Sargodha and Lahore. Sample was further categorized into nurses of emergency (n = 100) and non-emergency wards (n = 100) of private and government hospitals and in terms of experience. Nurses with professional experience of less than five years were taken as low experienced nurses and those with experience greater than five years were considered as highly experienced nurses. Data were obtained from private (Sarwar Hospital, Sadiq Hospital, Ibrahim Hospital, Al-Rsheed Hospital, Chema Heart Henter, Muneer Hospital, Mubarik Medical Complex, Ibn-e-Sena Hospital) and government (Civil Hospital, Hilal-e-Aehmer Hospital, Fatima Hospital, Mula Bakhish Hospital) hospitals of

Sargodha and Lahore (Private: Fatima Memorial Hospital, Sheikh Zaid Hospital, Government: MEO Hospital, Jinnah Hospital, Services Hospital).

#### Measures

- 4. Bar-On Emotional Quotient Inventory (EQ-i,), Urdu Translation
- 5. Psychological Adjustment Scale
- 6. Demographic form

### I) Bar-On Emotional Quotient Inventory (EQ-I), Urdu Translation

Bar-On Emotional Quotient Inventory (EQ-i) was specifically developed to measure emotional intelligence of adults, which was based on Bar-On's Emotional and Social Model (ESI) of Emotional Intelligence. It was found to be very reliable and valid measure of emotional intelligence. Bar-On EQ-i comprised of 125 statements and 5 subscales named Intrapersonal scale (38), Interpersonal scale (22), Stress management scale (17), Adaptability scale (23), General mood (16) and Positive impression scale (08). Response format of EQ-i was "not true", "rarely true", "some times true", "often true", and "true of me" and score range was 1-5. 1 was given to "not true" and 5 to "true of me". In the negative items, scoring was reversed. Positive impression scale (08 items) was used as validity measure of Bar-On EQ-i.

Internal reliability coefficients are high for all of the subscales, ranging from .69 (Social Responsibility) to .86 (Self-Regard), with an overall average internal consistency of all EQ-i subscales was .76 and these results show very good reliability. Test-retest reliability after one month was .85 and after four months .75 (Bar-On, 2004).

For the convenience of sample, EQ-i was translated into Urdu in present study and results of pilot study reported satisfactory alpha reliability ( $\alpha = .90$ ) and internal consistency among subscales of EQ-i (Urdu translation) and this scale could be confidently used for current study (See Appendix C).

## **II)** Psychological Adjustment Scale

Psychological Adjustment Scale was originally designed to measure the psychological adjustment of the university students in National Institute of Psychology (NIP) Islamabad. It

was found to be a reliable and valid measure of psychological adjustment. This scale was originally constructed in Urdu language. It is consisted of 27 statements, with 5 subscales named as Accurate perception of reality (04 items), Ability to cope with stress and anxiety (06 items), Positive self image (07 items), Ability to express full range of emotions (06 items), and Good interpersonal relationships (04 items). Response format of Psychological

Adjustment Scale was " $i^{k}d_{k}$ ",  $i^{k}d_{k}$ ", " $i^{k}d_{k}$ ", " $i^{k}d_{k}$ ", and " $i^{k}d_{k}$ " and score ranged from 1-5. One was given to " $i^{k}d_{k}$ " and 5 to " $i^{k}d_{k}$ ". In the negative statements, the scoring was reversed. Researches reported cutoff score for Psychological Adjustment Scale that was 81, which means that participants falling below 81 were less psychologically adjusted while those who scored above 81 fall in high psychological adjustment ranged as defined by researchers (Sabbir, 1999). Internal consistency was also calculated for the designated sample in order to check its suitability for current study, which found to be satisfactory ( $\alpha = .83$ ).

### **III) Demographic Form**

Biographical form included variables that were relevant to the purpose of the study i.e., marital status, hospitals (private/ government), wards (emergency/ non-emergency) and professional experience.

Informed consent form was developed through which the necessary information about the purpose of research, its procedure, application and even duration was clearly communicated in written form. This form was in Urdu and its wording was simple, unambiguous and clearly understandable (See Appendix B).

### Procedure

After ensuring the suitability of the instruments for current study, sampling plan was chalked out to ensure the representativeness of the sample. Sample was categorized in terms of emergency (n=100) and non-emergency (n=100) wards, and further divided into private (n=100) and government hospitals (n=100). After that, data was collected according to the sampling plan. This categorization was based on the total sample of (N = 200).

Before administering the Emotional Quotient Inventory (EQ-i, Urdu Translation), Psychological Adjustment Scale (PAS) and Demographic Sheet of Variables, special permission was sought from medical superintendents of government hospitals and private hospitals through permission letter signed by chairman, psychology department, University of Sargodha. Purpose and advantages were clearly communicated with heads of specified hospitals and nurses serving in emergency and non-emergency wards. After obtaining the permission, nurses were personally approached in emergency and non-emergency wards of private and government hospitals in Sargodha and Lahore. Two scales, EQ-i (125 items) and Psychological Adjustment Scale (27 items) along with Demographic Form were administered after obtaining written informed consent. Informed consent included purpose of research, procedure and their rights as participants, and confidentiality of the data was assured to the sample.

Clear instructions were given to all the participants about the instruments and their questions were satisfactorily answered. Scales and demographic form were administered in group of 5-10 nurses of each ward. Data were collected under the suitable environmental conditions. All the extraneous variables were possibly controlled.

Nurses completed two scales and demographic form in approximately 45-50 minute. Data collection was completed in one and half month. The obtained data were subjected to statistical analyses.

### **CHAPTER III**

#### RESULTS

The current study was comprised of two phases: Pilot study and Main study. In the pilot study, psychometric properties of EQ-i (Urdu translation) and Psychological Adjustment Scale were determined and both instruments used in this study were found to be reliable and valid and Alpha coefficients endorsed the suitability of instrument for the current study. Moreover, all the subscales of EQ-i were found to be correlated with each other and with total EQ-i. Similarly, all the subscales of Psychological Adjustment Scale were satisfactorily correlated with each other and total Psychological Adjustment Scale (PAS). In the main study, the data obtained from designated sample were subjected to statistical analysis in order to test proposed hypotheses. Various statistical analyses e.g., correlation, t test, ANOVA, regression analysis, MANOVA were used for this purpose.

### **Results: Pilot Study**

As Emotional Quotient Inventory was translated into Urdu, it was necessary to determine its reliability after translation, to estimate the suitability of EQ-i for the current study. The coefficient alpha of total EQ-i (Urdu translation) was found to be high ( $\alpha = .90$ , p < .0001.) and correlation analysis was run to find out inter-consistency among the subscales and, between the subscales and total EQ-i. Similarly, Alpha coefficients for total Psychological Adjustment Scale (PAS) ( $\alpha = .83$ , p < .0001.) and its subscales were also found to be satisfactory. Inter-consistency among the subscales and, between the subscales and total Psychological Adjustment Scale was also high as revealed through correlation analysis.

Scales	No of items	α
Intrapersonal scale	38	.84
Interpersonal scale	22	.77
Stress management	17	.63
Adaptability	23	.83
General mood	16	.72
Total Emotional Intelligence	117	.90
Positive Impression Scale	08	.70

Reliability coefficients for total Emotional Quotient Inventory (EQ-i) and its Subscales (N = 100)

Table 3.1 indicated that reliability estimate of total EQ-i was highly satisfactory ( $\alpha$  = .90). The alpha values of subscales and total EQ-i ranged from .63 to .90. The alpha coefficients for the subscales were also high i.e., Intrapersonal scale ( $\alpha$  = .84), interpersonal scale ( $\alpha$  = .77), Stress management ( $\alpha$  = .63), Adaptability ( $\alpha$  = .83), General mood ( $\alpha$  = .72), Positive impression scale ( $\alpha$  = .70). Stress management has the lowest alpha value (.63) as compare to all the subscales and total Emotional Intelligence scale.

·					
Scales	1	2	3	4	5
1Intrapersonal scale					
2 Interpersonal scale	.80*				
3 Stress management	.66*	.57*			
4 Adaptability	.79*	.72*	.72*		
5 General mood	.80*	.77*	.54*	.66*	
6 Total Emotional Intelligence	.94*	.87*	.79*	.89*	.84*

Correlation Matrix of Emotional Quotient Inventory (EQ-i) and its Subscales (N = 100)

\* *p* < .0001.

Table 3.2 revealed that all the subscales of EQ-i were correlated with each other and with over all EQ-i scale, subscales ranged from .57 to .94. All the subscales were highly correlated with overall EQ-i scale i.e. Intrapersonal (.94, p < .0001), Interpersonal scale (.87, p < .0001), Stress management (.79, p < .0001), Adaptability (.89 p < .0001), and General mood (.84, p < .0001). The Intrapersonal Scale has highest correlation with total EQ-i (.94 p < .0001), while Stress management has lowest correlation with total EQ-i (.79 p < .0001). Furthermore, among subscales stress management has lowest correlation with general Mood (.54 p < .0001), while Intrapersonal Scale found to be highly correlated with Interpersonal Scale (.80, p < .0001) and Good Mood Scale (.80, p < .0001).

Scales	No of items	α
Accurate perception of reality	04	.40
Ability to cope with stress and anxiety	06	.52
Positive self image	07	.75
Ability to express full range of emotions	06	.64
Good interpersonal relationships	04	.20
Total Psychology Adjustment Scale	27	.83

Reliability Coefficient of total Psychological Adjustment Scale (PAS) and its Subscales (N = 100)

Table 3.3 showed that the reliability estimate of total Psychological Adjustment Scale (PAS) was highly satisfactory ( $\alpha = .83$ ). The alpha values of subscales and total PAS ranged from .63 to .90. The alpha coefficients for the subscales were also high e.g., Accurate perception of reality ( $\alpha = .40$ ), Ability to cope with stress and anxiety ( $\alpha = .52$ ), Positive self image ( $\alpha = .75$ ), Ability to express full range of emotions ( $\alpha = .64$ ), Good interpersonal relationships ( $\alpha = .20$ ). Good interpersonal relationship scale carried lowest reliability ( $\alpha = .20$ ) among all subscales and total Psychological Adjustment Scale.

Scales	1	2	3	4	5
1 Accurate perception of reality.					
2 Ability to cope with stress and anxiety.	.54*				
3 Positive self image.	.53*	.52*			
4 Ability to express full range of emotions.	.36*	.46*	.27*		
5 Good interpersonal relationships.	.44*	.48*	.56*	.35*	
6 Total Psychological Adjustment Scale	.73*	.80*	.78*	.69*	.71*

Correlation Matrix of Psychological Adjustment Scale (PAS) and its Subscales (N = 100)

\* *p* < .0001.

Inter-correlations showed in table 3.4 that all the subscales of Psychological Adjustment Scale (PAS) were correlated with total PAS scale and its subscales. Correlation values of subscales and total Psychological Adjustment Scale ranged from .27 to .80. All the subscales were highly correlated with overall PAS scale i.e., Accurate perception of reality ( $\alpha = .73$ ), Ability to cope with stress and anxiety ( $\alpha = .80$ ), Positive self image ( $\alpha = .78$ ), Ability to express full range of emotions ( $\alpha = .69$ ), Good interpersonal relationships ( $\alpha = .71$ ). The highest correlation was found between positive self-image and good interpersonal relationships (.56, p < .0001) among the subscales while lowest correlation was found between the subscales i.e., positive self-image and ability to express full range of emotions. Moreover, the subscale, ability to cope with stress and anxiety was highly correlated with total Psychological Adjustment Scale (.80, p < .0001).

### **Results: Main Study**

In the main study, the obtained data were subjected to statistical analysis to test the hypotheses of current study. The variables of interest included emergency and nonemergency wards, private and government hospitals, experience and marital status. Various descriptive and inferential statistics were used i.e., mean, standard deviation, t test, correlation, regression analysis, ANOVA, MANOVA. Different result patterns were also shown through graphical figures. Results are described below:

# Table 3.5

Variables	Private H	ospitals	Governments Hospitals			Governments Hospitals		
	Emergency wards $f(\%)$	Non- emergency wards $f(\%)$	Total f	Emergency wards $f(\%)$	Non- emergency wards $f(\%)$	Total f		
Age 20-30 years ( <i>M</i> = 25.6, <i>SD</i> = 3.4)								
Wards	50 (25)	50 (25)	100	50 (25)	50 (25)	100		
Martial Status of Nurses								
Married ( $n=92$ ) Unmarried ( $n=108$ )	23 (11.5) 27 (13.5)	17 (8.5) 33 (16.5)	40 60	23 (11.5) 27(13.5)	29 (14.5) 21(10.5)	52 48		
Professional Experience								
Low Experience(n=105) High Experience(n=95)	27 (13.5) 23 (11.5)	36 (18) 14(7)	63 37	21(10.5) 29(14.5)	21(10.5) 29(14.5)	42 58		

Demographic Characteristics of the Sample (N = 200)

Table 3.5 shows the demographic characteristics of sample i.e., age, wards, martial status and professional experience. Sample was comprised of age 20-30 years with the (M = 25.6, SD = 3.4). Sample taken from the emergency and non-emergency wards of private hospitals and government hospitals was of equal proportion and thus, truly representative.

Inter-correlations among all Variables (N = 200)

Scales	1	2	3	4	5
1 Emotional Intelligence					
2 Psychological Adjustment	.78****				
3 Hospitals	17**	18**			
4 Wards	.02	.01	.00		
5 Marital Status	.00	.03	12	.00	
6 Professional Experience	19*	20***	.26****	.02	72****

\* p < .05, \*\* p < .01, \*\*\* p < .001, \*\*\*\* p < .0001.

Correlation Matrix revealed that Emotional Intelligence was significantly correlated with Psychological Adjustment (.78, p <.0001), hospitals (-.17, p <.01) and professional experience (-.19, p <.05) while psychological adjustment only found to be negatively correlated with emotional intelligence (-.18, p <.01) and professional experience (-.20, p <.001). Similarly, hospital was negatively and significantly correlated with emotional intelligence (-.17, p <.01) and psychological adjustment (-.18, p <.01) but positively correlated with professional experience (.26, p <.0001). Another significant correlation between marital status and professional experience (-.72, p <.0001) was found. Rest of the correlations e.g., EQ with wards and marital status, psychological adjustment with wards and marital status, hospitals and wards, wards and professional experience remained non-significant.

Regression analysis was run to find out the significant predictors of emotional intelligence and results shown in Table 3.7.

Predictor variables	В	SE	β	t	р
Psychological Adjustment	3.28	.18	.781	17.6	.0001
Hospitals (Private/Government)	-20.4	8.02	178	-2.55	.01
Wards (Emergency/Non-emergency)	2.82	8.15	.025	.346	.73
Professional Experience	-3.12	1.11	196	-2.81	.005
Marital Status	.412	8.18	.004	.05	.96

Mean differences of Predictor variables of Emotional Intelligence (N = 200)

The results show that psychological adjustment, hospitals, and experience were significant predictors of emotional intelligence. The significant predictor of emotional intelligence was psychological adjustment as, F(1, 199) = 310.1, p < .0001 has a  $\beta = .781$  and R = .78 which explain the 78% of total variance and Hospitals, F(1, 199) = 6.5, p < .01 has a  $\beta = -.178$  and R = .178 which covers 18% of the total variance. Moreover, experience was also resulted in significant predictor of emotional intelligence as, F(1, 199) = 7.90, p < .005 has a  $\beta = -.196$  and R = .196 which is the 20% of the total sample. In short, the most significant predictor of emotional intelligence was psychological adjustment followed by professional experience and hospitals (private / government) while Wards and marital status did not significantly predict emotional intelligence.

Data were further analyzed to find out the role of emotional intelligence and psychological adjustment in emergency and non-emergency wards and results shown in Table 3.8.

	Wards						
	Emergen	icy wards	Non	у			
				wards			
	М	SD	М	SD	t		
<b>Emotional Intelligence Scales</b>							
Intrapersonal scale	140.3	20.2	142.5	19.1	77		
Interpersonal scale	82.1	11.4	83.0	11.0	53		
Stress management	62.6	11.2	61.5	12.3	.64		
Adaptability	86.9	13.4	87.8	13.8	48		
General mood	61.1	7.9	61.0	9.5	.048		
Total Emotional Intelligence	433.2	57.9	436.1	57.4	34		
Psychological Adjustment Scale							
Accurate perception of reality	14.6	2.8	15.0	2.3	97		
Ability to cope with stress and	21.7	3.9	21.6	3.8	.05		
anxiety							
Positive self image	27.3	4.6	27.9	4.6	78		
Ability to express full range of emotions	21.0	4.5	20.0	4.6	1.5		
Good interpersonal relationships	14.6	2.5	15.0	2.3	-1.2		
Total Psychology Adjustment Scale	99.4	14.2	99.7	13.1	13		

Mean, Standard Deviation and t test of Nurses Serving in Emergency Wards and Nonemergency Wards on Emotional Intelligence and Psychological Adjustment Scales (N = 200)

Mean, standard aviation and *t*-test were computed in order to measure the differences on emotional intelligence scale and psychological adjustment scale between the nurses serving in emergency and non-emergency wards and the findings indicated very small difference between nurses serving in emergency wards (M = 433.2, SD = 57.9) and nurses serving in non-emergency wards (M = 436.1, SD = 57.4) on emotional intelligence scale and its subscales which was not enough to be called significant. Similarly, mean scores of nurses serving in emergency wards (M = 99.4, SD = 14.2) and in non-emergency wards (M = 99.7, SD = 13.1) on psychological adjustment was also very small and non-significant. *t*-tests also provide similar picture.

Hospital was another variable of interest, which was taken into consideration. Data were further broken down in terms of hospitals and the purpose was to investigate the impact of hospitals on EI and psychological adjustment. Results are shown in Table 3.9.

	Hospital						
	Private hospitals (			nment			
	М	SD	М	SD	t		
Emotional Intelligence Scales							
Intrapersonal scale	144.5	22.1	138.3	16.4	2.2*		
Interpersonal scale	84.9	11.4	80.2	10.5	3.0*		
Stress management	62.2	14.2	61.9	8.7	.12		
Adaptability	90.6	15.6	84.1	10.3	3.4*		
General mood	62.6	8.0	59.6	9.2	2.4*		
Total Emotional Intelligence	444.9	66.1	424.4	45.4	2.5*		
Psychological Adjustment Scale							
Accurate perception of reality	15.6	2.5	14.1	2.4	4.2*		
Ability to cope with stress and anxiety	22.0	4.2	21.3	3.4	1.2		
Positive self image	28.7	3.9	26.5	5.1	3.2*		
Ability to express full range of emotions	20.6	5.1	20.4	3.9	.19		
Good interpersonal relationships	15.0	2.2	14.5	2.6	1.4		
Total Psychology Adjustment Scale	102.0	14.1	97.0	12.8	2.6*		

Mean Scores of Nurses Serving in Private Hospitals and Government Hospitals on Emotional Intelligence and Psychological Adjustment Scale (N = 200)

\* *p* < .05.

Table 3.9 showed the means score, standard deviation and *t*-test values of nurses serving in private and government hospitals. Findings indicated that nurses working in private hospital (M = 444.9, SD = 66.1,) were more emotionally intelligent as compared to the nurses serving in government hospitals (M = 424.4, SD = 45.4) as *t*-test further substantiate the difference, t (198) = 2.5, p < .05. Results further revealed that nurses serving in private hospitals scored high on subscales of emotional intelligence scale including intrapersonal scale (M = 144.5, SD = 22.1) interpersonal scale (M = 84.9, SD = 11.4), Adaptability (M = 90.6, SD = 15.6) and general mood (M = 62.6, SD = 8) compared to nurses serving in government hospitals as t values endorsed the differences like nurses working in private hospitals were found to be more intra –personally, t (198) = 2.2, p < .05 and interpersonally skilled t (198) = 3.0, p < .05, adaptable t (198) = 3.4, p < .05 and generally remain in good mood t (198) = 2.4, p < .05 as compared to their counterparts serving in government hospitals.

Moreover findings suggested that nurses serving in private hospitals (M = 102.0, SD = 14.1,) were more psychologically adjusted as compared to the nurses serving in government hospitals (M = 97.0, SD = 12.8,) as *t*-test further validate the difference t (198) = 2.6, p < .05. Results further revealed that nurses serving in private hospitals scored high on subscales of psychological adjustment scale including accurate perception of reality (M = 15.6, SD = 2.5,) and positive self-image (M = 28.7, SD = 3.9,) compared to the nurses serving in government hospitals as t values further support the differences on accurate perception of reality t (198) = 4.2, p < .05 and positive self-image t (198) = 3.2, p < .05.

## Figure 3.1





### **Emotional Intelligence Scale**

# Figure 3.2

Mean Differences of Nurses of Private Hospital and Nurses of Government Hospitals on<br/>PsychologicalScale



## Psychological Adjustment Scale

The graphical picture of mean differences depicts that nurses serving in private and government hospitals on emotional intelligence scale. Nurses of private hospitals (M = 445)

are more emotionally intelligent as compare to the nurses of government hospitals (M = 425) as shown in Figure 3.1.

Similarly, Figure 3.2 show that mean differences of nurses serving in private and government hospitals on psychological adjustment scale. Graphical figure reveal that nurses serving private hospitals (M = 102) are more psychological adjusted as compared to their counterparts of government hospitals (M = 97).

# **Table 3.10**

Sources	SS	Df	MS	F
		Emotional Intelligence		
Between Groups	20971.5	1	20971.5	6.5*
Within Groups	638117.2	198	3222.8	
Total	659088.7	199		
		Psychological Adjustment		
Between Groups	1230.0	1	1230.0	6.7*
Within Groups	35990.9	198	181.7	
Total	37221.0	199		

ANOVA showing the Effect of Hospitals (Private and Government) on Emotional Intelligence and Psychological Adjustment (N = 200)

\* *p* <. 05.

ANOVA was conducted to find out the affect of hospitals on emotional intelligence and psychological adjustment of nurses. Findings revealed moderate significant affect of hospitals (private and government) on emotional intelligence, F(1, 199) = 6.5, p < .05) and psychological adjustment, F(1, 199) = 6.5, p < .05).

	Emergency Wards					
	Private h	Private hospitals		nment itals		
	М	SD	М	SD	t	
Emotional Intelligence Scales						
Intrapersonal scale	142.7	23.5	138.0	16.2	1.1	
Interpersonal scale	83.4	12.6	80.9	10.1	1.0	
Stress management	61.9	12.4	63.3	9.8	5	
Adaptability	89.8	15.8	84.0	9.9	2.2	
General mood	61.7	8.0	60.5	8.0	.7	
Total Emotional Intelligence	439.7	68.5	426.8	44.7	1.1	
Psychological Adjustment Scale						
Accurate perception of reality	15.3	2.6	13.9	2.8	2.4*	
Ability to cope with stress and anxiety	22.1	4.3	21.2	3.5	1.0	
Positive self image	28.3	4.3	26.4	4.9	2.0*	
Ability to express full range of emotions	20.8	5.4	21.2	3.4	41	
Good interpersonal relationships	14.6	2.2	14.6	2.8	.00	
Total Psychology Adjustment Scale	101.3	15.0	97.5	13.2	1.3	

Mean Differences of Emergency Wards of Private Hospitals and Government Hospitals on Emotional Intelligence and Psychological Adjustment Scales (N = 200)

\* p < .05.

Mean differences, Standard deviation and t- test were computed in order to find out the difference between the nurses serving in emergency ward of private hospitals and government hospitals on emotional intelligence and psychological adjustment. Findings indicated that there was non-significant difference between the nurses serving in emergency wards of private hospitals (M = 439.7, SD = 68.5) and government hospitals (M = 426.8, SD = 44.7) on emotional intelligence scale. The mean differences on subscales of EQ-i also remained non-significant.

Moreover, nurses of emergency wards of private hospitals were more psychologically adjusted (M = 101.3, SD = 15.0) than their counterparts of government hospitals (M = 97.5, SD = 13.2) but this difference was not statistically significant. Nurses serving in emergency wards of private hospitals were found to have accurate perception of reality (M = 15.3, SD = 2.6) and positive self-image (M = 28.3, SD = 4.3) as their counterpart of government hospitals. t values further endorsed the difference on accurate perception of reality t (1, 98) = 2.4, p < .05 and positive self image t (1, 98) = 2.0, p < .05.

# Figure 3.3



Mean Differences of Nurses of Emergency Wards of private and government hospitals onEmotionalIntelligenceScale

## **Emotional Intelligence Scale**

### Figure 3.4

Mean Differences of Nurses of Emergency Wards and Non-emergency Wards on Psychological Adjustment Scale



### **Psychological Adjustment Scale**

Figure 3.3 indicates the mild to moderate difference between the emergency wards of private and government hospitals on emotional intelligence scale and subscales, which

remained non-significant. Graphical picture seems to be compatible with the tabulated value shown in Table 3.11.

Figure 3.4 represent the mild but non-significant difference among nurses of emergency ward of private hospitals and government hospitals on psychological adjustment scale. Furthermore, significant but moderate difference on two subscales of psychological adjustment named as accurate perception of reality and positive self-image is visible through Figure 3.4.

	Non-emergency Wards				
	Private ho	spitals	Government hospitals		
	М	SD	М	SD	t
Emotional Intelligence Scales					
Intrapersonal scale	146.3	20.7	138.4	16.8	2.0*
Interpersonal scale	86.5	10.1	79.4	10.9	3.3*
Stress management	62.4	15.8	60.3	6.8	.86
Adaptability	91.3	15.6	84.1	10.9	2.6*
General mood	63.4	8.1	58.5	10.3	2.6*
Total Emotional Intelligence	450.1	64.0	420.9	46.2	2.5*
Psychological Adjustment Scale					
Accurate perception of reality	15.8	2.3	14.2	2.0	3.7*
Ability to cope with stress and anxiety	21.9	4.1	21.3	3.5	.73
Positive self image	29.0	3.5	26.5	5.3	2.7*
Ability to express full range of emotions	20.3	4.9	19.7	4.3	.64
Good interpersonal relationships	15.5	2.1	14.4	2.4	2.3*
Total Psychology Adjustment Scale	102.7	13.2	96.4	12.5	2.4*

Descriptives and t tests showing difference between Nurses serving in Non-emergency Wards of Private Hospitals and Government Hospitals on total EQ and PAS (N = 200)

\* *p* <. 05.

Table 3.12 revealed that nurses serving in non-emergency wards of private hospitals (M = 450.1, SD = 64.0) were more emotionally intelligent than those of government hospitals (M = 420.9, SD = 42.2). This difference is further explained through *t* test that proved to be supportive, t(1, 98) = 2.5, p < .05. The difference between nurses serving in non-emergency wards of private hospitals and government hospitals remained moderately significant on EQ-i subscales including Intrapersonal scale, t(1, 98) = 2.0, p < .05. Interpersonal scale, t(1, 98) = 3.3, p < .05, Adaptability, t(1, 98) = 2.6, p < .05, General mood, t(1, 98) = 2.6, p < .05 and total EQ, t(1, 98) = 2.5, p < .05 except Stress management on which no significant difference was found.

On the other hand, nurses serving in non-emergency wards of private hospitals (M = 102.7, SD = 13.2) were more psychologically adjusted as compared to the government hospitals (M = 96.4, SD = 12.5) and t values further confirmed this difference t (1, 98) = 2.4, p < .05. Moderate difference was found on the subscales of psychological adjustment including accurate perception of reality t (1, 98) = 3.7, p < .05, positive self image t (1, 98) = 2.7, p < .05, good interpersonal relationships t (1, 98) = 2.3, p < .05, while the difference on two subscales of psychological adjustment scale named as Ability to cope with stress and anxiety and Ability to express full range of emotions remained non-significant.

### Figure 3.5

Mean Differences of Nurses of Non-emergency Wards of Private Hospitals and Nonemergency Wards of Government Hospitals on Emotional Intelligence Scale and its subscales



**Emotional Intelligence Scale** 

### Figure 3.6

Mean Differences of Nurses of Non-emergency Wards of Private Hospitals and Nonemergency Wards of Government Hospitals on Psychological Adjustment Scale



### **Psychological Adjustment Scale**

Figure 3.5 demonstrate the moderate but significant difference between the nurses of non-emergency wards of private and government hospitals on emotional intelligence and its subscales contrary to figure 3.3, which depicted non-significant differences in emergency wards.

Moreover, figure 3.6 revealed the significant difference between the nurses of nonemergency wards of private and government hospitals on psychological adjustment and its subscales including Accurate perception of reality, Positive self image and Good interpersonal relations while Figure 3.6 showed non-significant difference on two scales e.g., Ability to cope with stress and anxiety and Ability to express full range of emotions.

Professional experience was another variable taken into consideration. Various statistical techniques i.e., mean, standard deviation, *t*-test, and ANOVA were applied to investigate the significance of above mentions variable. Results are described in Table 3.13 and 3.14.

Mean, SD, t test of Low Experience and High Experience Nurses Serving in Private Hospitals and Government Hospitals on Emotional Intelligence and Psychological Adjustments (N =200)

	Experience				
	Low experience		High experience		
	М	SD	М	SD	t
Emotional Intelligence Scales					
Intrapersonal scale	144.2	19.8	138.3	19.2	2.1*
Interpersonal scale	84.8	10.7	80.1	11.3	3.0*
Stress management	61.9	13.1	62.2	10.0	20
Adaptability	88.5	14.0	86.1	13.1	1.2
General mood	62.9	8.3	59.0	8.8	3.2*
Total Emotional Intelligence	442.6	59.5	425.9	54.2	2.0*
Psychological Adjustment Scale					
Accurate perception of reality	15.4	2.4	14.2	2.6	3.4*
Ability to cope with stress and anxiety	22.1	4.0	21.2	3.6	1.6
Positive self image	28.9	4.0	26.1	4.8	4.4*
Ability to express full range of emotions	20.8	5.0	20.2	4.1	1.0
Good interpersonal relationships	15.2	2.3	14.3	2.5	2.6*
Total Psychology Adjustment Scale	102.6	13.7	96.1	12.8	3.4*

\* *p* <. 05.

Mean scores and standard deviation were computed to investigate the difference between the nurses having low professional experience and those having high professional experience. Mean scores indicate that nurses having low professional experience (M = 442.6, SD = 59.5) were high on emotional intelligence than nurses having high professional experience (M = 102.6, SD = 13.7). Additionally, t-test explained this relationship, t (1, 198) = 2.0, p < .05. Scores on subscales of emotional intelligence were also significantly different as intrapersonal, t (1, 198) = 2.1, p < .05, interpersonal, t (1, 198) = 3.0, p < .05 and general mood, t (1, 198) = 3.2, p < .05 indicates the significant difference among nurses with low professional experience and high professional experience while the difference on two subscales remained non-significant e.g., stress management and adaptability.

Findings further revealed that nurses having low professional experience (M = 102.6, SD = 13.7) were moderately but significantly high on overall psychological adjustment than nurses having high professional experience (M = 96.1, SD = 12.8) and t value substantiate the difference t (1, 198) = 3.4, p < .05. Subscales including Accurate perception of reality, t (1, 198) = 3.4, p < .05, Positive self image, t (1, 198) = 4.4, p < .05, Good interpersonal relationships, t (1, 198) = 2.6, p < .05 were significant as shown in Table 3.13 but the difference on Ability to express full range of emotions, Ability to cope with stress and anxiety remained non-significant.
# Figure 3.7





**Emotional Intelligence Scale** 

# Figure 3.8

Mean Scores of Nurses having Low Experience and Nurses having High Experience on Psychological Adjustment Scale



**Psychological Adjustment Scale** 

Figure 3.7 demonstrates the significant difference between the nurses having low professional experience and high professional experience on total emotional intelligence and its subscales. Figure has provided clear indication of moderate difference but stress management and adaptability could not be seen significantly different.

Similar picture of differences in psychological adjustment is shown through Figure 3.8. Nurses with low professional experience and high professional experience showed moderately significant difference on subscales of psychological adjustment including, accurate perception of reality, positive self image, and good interpersonal relationships whereas no significant difference could be observed on ability to cope with stress and anxiety, and ability to express full range of emotions.

# **Table 3.14**

Sources	SS	df	MS	F
		Emotional Intelligence		
Between Groups	13930.9	1	13930.9	4.2*
Within Groups	645157.8	198	3258.3	
Total	659088.8	199		
		Psychological Adjustment		
Between Groups	2106.7	1	2106.7	11.8**
Within Groups	35114.2	198	177.3	
Total	37221.0	199		
Between Groups Within Groups Total	2106.7 35114.2 37221.0	Psychological Adjustment 1 198 199	2106.7 177.3	11.8**

*Effect on Emotional Intelligence and Psychological Adjustment Scale (N = 200)* 

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

ANOVA was conducted to find out the affect of professional experience (low & high) on emotional intelligence and psychological adjustment. Findings revealed that affect of professional experience was moderately significant on EQ, F(1, 199) = 4.2, p < .05 but highly significant on psychological adjustment F(1, 199) = 11.8, p < .001.

# **Table 3.15**

Variables	М	SD	t					
	Emotional Intelligence Scale							
Married nurses								
Emergency wards	438.2	56.1	.64					
Non-emergency wards	430.6	56.5						
	Psychological Adjustment Scale							
Married nurses								
Emergency wards	100.1	2.1	.73					
Non-emergency wards	97.9	1.9						

Effect of Marriage on Emotional Intelligence and Psychological Adjustment Scale (N = 82)

Mean, standard deviation and t-test was conducted in order to find out the difference between married nurses of emergency wards and non-emergency wards. Mean scores indicated mild but non-significant difference between married nurses of emergency wards (M= 438.2, SD = 56.1) and non-emergency wards (M = 430.6, SD = 56.5) on emotional intelligence. Moreover, mean scores also described non-significant difference between married nurses of emergency wards (M = 100.1, SD = 2.1) and non-emergency wards (M = 97.9, SD = 1.9) on Psychological Adjustment Scale.

# **Table 3.16**

Effect of all Independer	t Variables	on .	Emotional	Intelligence	and	Psychological	adjustment
(N = 200)							

Source	Dependant Variable	SS	df	MS	F	р
Wards (Emergency/Non-emergency)	EQ	381.97	1	381.97	.12	.72 .89
	PA	2.92	1	2.92	.01	
Hospitals (Private/Government)	EQ	7152.07	1	7152.07	2.31	.13 .14
	PA	349.16	1	349.16	2.10	
Professional Experience	EQ	18145.6	1	18145.6	5.87*	.01
	PA	9 2224.5	1	9 2224.5	13.42*	.0001
Marital Status	EQ	10413.1	1	10413.1	3.37*	.06 .02
	PA	5 836.11	1	5 836.11	5.04*	
Wards x Hospitals	EQ	772.76	1	772.76	.25	.61 .48
	PA	82.11	1	82.11	.49	
Wards x Professional experience	EQ	77.00	1	77.00	.02	.87 .30
	PA	177.54	1	177.54	1.07	
Hospitals x Professional experience	EQ	3899.66	1	3899.66	1.26	.26 .89
	PA	3.19	1	3.19	.019	
Ward x Hospital x Experience	EQ	4733.04	1	4733.04	1.53	.21 .24
	PA	228.66	1	228.66	1.38	
Wards x Marital status	EQ	802.42	1	802.42	.26	.61 .20
	PA	267.57	1	267.57	1.61	
Hospital x Marital status	EQ	21238.7	1	21238.7	6.87*	.001
	PA	8 508.68	1	8 508.68	3.06*	.01
Ward x Hospital x Marital status	EQ	2.04	1	2.04	.001	.98 .97
-	PA	.18	1	.18	.001	
Experience x Marital status	EQ	3305.53	1	3305.53	1.07	.30 .15
	PA	332.46	1	332.46	2.00	
Ward x Experience x Marital status	EQ	378.63	1	378.63	.123	.72 .71
	PA	21.61	1	21.61	.130	
					Conti	

Source	Dependent Variables	SS	df	MS	F	р
Hospital x Professional	EQ	.625 1	1	.625	.00	.98
experience x Marital status	PA	.142	1	1.142	.007	.93
Ward x hospital x professional	EQ	4922.94	1	4922.94	1.59	.20
experience x marital status.	PA	408.66	1	408.66	2.46	.11
Error	EQ	568449.85	184	3089.40		
	PA	30499.05	184	165.75		
Total	EQ	38450168.0	200			
	PA	2020058.0	200			
Corrected total	EQ	659088.78	199			
	PA	37221.02	199			

Note. Please read EQ as emotional intelligence and PA as psychological adjustment.

Multivariate analysis was conducted to evaluate the affect of all independent and interaction effects of variables on emotional intelligence and psychological adjustment. Findings indicated that professional experience had significant affect on emotional intelligence, F(1, 199) = 5.87, p < .01 and psychological adjustment, F(1, 199) = 13.42, p < .0001, and marital status was also found to have significant effect on emotional intelligence, F(1, 199) = 3.37, p < .06 and psychological adjustment, F(1, 199) = 5.04, p < .02. An interaction affect of hospitals and marital status was also significant on emotional intelligence, F(1, 199) = 6.87, p < .001 and psychological adjustment, F(1, 199) = 3.06, p < .01. Rest of independent and interaction effects remained non-significant.

# **Chapter V**

# DISCUSSION

The present study was designed to find out the effect of emergency situations on emotional intelligence and psychological adjustment of nurses serving in private and government hospitals of Lahore and Sargodha cities. Emotional Quotient Inventory (EQ-i) Urdu translation was employed in order to measure the emotional intelligence of Sample. Similarly, an indigenously developed Scale by Sabir (1999) named Psychological Adjustment Scale was administrated to measure the level of psychological adjustment of nurses serving in private and government hospitals. This study was conducted in two phases. In first phase, Emotional Quotient Inventory was translated into native language (Urdu) as it was not applicable on the target sample (Nurses). Moreover, Psychological adjustment Scale was originally validated on different sample. Therefore, a pilot study was conducted in order to translate EQ-i into Urdu, standard procedure was followed.

After translation of EQ-i, reliability estimates were computed to ensure its suitability for current sample. Reliability estimates of total EQ-i and its subscales for present sample were shown to be satisfactory and quite compatible with original version (Bar-On, 1997) and the lowest alpha reliability of stress management can be justified as females have the great tendency to behave empathetically and to engage in intimate relationships. Low but positive correlation between stress management and general mood revealed that both are positive indices and increase in one would cause increase in other as well e.g., high stress management ability would help in making general mood better and visa versa but the relationship is moderate. Psychological Adjustment Scale was used to measure the level of psychological adjustment of the sample. This scale was designed and validated on a different sample. Therefore, it was necessary to check psychometric properties of Psychological Adjustment Scale for present sample. Alpha reliability of Psychological Adjustment Scale was found to be satisfactory for present sample (Table 3.3). It became clear that both scales were ideal to meet the objectives of present study.

After making reliability estimate of scales, main study was conducted. Many variables of interest were included in the present study i.e. hospitals, wards, marital status, and experience. Different statistical techniques were employed in order to analyze data including *t*-test, correlation, ANOVA, and MNOVA. Findings of this study suggested that emotional

intelligence and psychological adjustment, were positively correlated (See Table 3.7). This relationship is also logical, as all the psychological indices seem to be interlinked. Moreover, previous work also supports this assumption as researchers found positive relationship between Emotional Social Intelligence and psychological health by comparing EQ-i scores of psychiatric patients with that of normal group taken from Argentina, Israel, South Africa and the United States (Bar-On, 1997b). Another study provide more direct relationship between emotional intelligence and psychological adjustment, this study indicated that the ability to manage emotions is associated with low levels of Helplessness, Stress and Frustration, and high levels of Expectation, Satisfaction and Achievement (Rossouw, 2008). By keeping the Pakistani culture in view, it can be argued that within the stressful and insecure atmosphere, those who are able to manage and regulate their own emotions, can also successfully manage their domestic chores. Especially, the nurses who are continually exposed to emotionally charged environment needs to have strong emotional control and psychological adjustment in order to serve the patients and their family.

The study further intended to investigate the impact of emergency situations on emotional intelligence and psychological adjustment of nurses. Findings revealed nonsignificant difference between nurses serving in emergency and non-emergency wards. Nurses serving in non-emergency wards scored slightly higher then those serving in emergency wards but existing difference was not sufficient enough to be considered important. The reason may be that during nurses training, they have been taught to be emotionally strong and psychologically mature so that they could care or deal the stressful situations with competency. They primarily get similar training within almost similar atmosphere. So, those who enter in nursing profession or any health service are expected to have almost equal level of emotional intelligence as the findings of study revealed in emergency and non-emergency wards on private and government hospitals. Experience was another important variable taken into consideration and findings partially supported the hypothesis "Nursing having high experience will have high emotional intelligence but low psychological adjustment than low experienced nurses". EQ level was low in high experienced nurses while level of psychological adjustment was low in highly experienced nurses as anticipated. The reason of lower level of EQ in highly experienced nurses may be that they are more frequently exposed to emotionally charged situations that those having low experienced because of a bit longer job duration. Highly experiences are put into emotional outburst and it could be difficult to manage diverse emotionally charged situations and their domestic duties simultaneously. Research work indicated that occupational stress could effect psychological adjustment negatively. A study on psychiatric nurses found that there was significant positive correlation among age, years of experience, frequency of outcalls and emotional exhaustion. Longer duration of service was accompanied by higher degree of emotional depersonalization for the medical nurses. The current study found that professional experience was significant predictor of EQ and this finding is in line with existing literature (Yousefy & Ghassemi, 2006).

Results of the present study further revealed that hospital (private/government) was significant predictor of emotional intelligence. It was hypothesized that nurses serving in private hospitals would have high emotional intelligence and psychological adjustment than those serving in government hospitals. Findings supported this hypothesis and consistent with preliminary empirical evidences collected before formulating this hypothesis (See Rationale of the study). The reason may be that most of severe emergency cases are dealt in government hospitals e.g., severe accidents, victims of sexual abuse, suicide due to legal restrictions. That is why, nurses of government hospitals get more emotionally exhausted and unable to maintain balance between their occupational and familial life as study revealed that there was negative correlation between occupational stress and psychological adjustment (Yousefy & Ghassemi, 2006). F test revealed that variation in the nature of hospitals (private/government) had significant effect on EQ and psychological adjustment and this finding is compatible with other statistical analyses conducted e.g., MANOVA (See Table 310 & 3.16).

Interestingly the data analysis of non-emergency wards has indicated altogether different picture as compare to the emergency wards. Nurses of non-emergency wards serving in private hospitals have significantly scored higher on EQ-i and Psychological Adjustment Scale as compared to the nurses serving in non-emergency wards of government hospitals (Table 3.12). Moreover all the subscales of both EQ-i and Psychological Adjustment Scale indicated this relationship. Nurses serving in non-emergency wards of private and government hospitals were exposed to almost similar kind of emotional situations as nurses serving in private and government hospitals but the role of EQ and psychological adjustment is more prominent in non-emergency situations than emergency situations.

The role of marital status in general was significantly related to women's psychological adjustment (Rohner, Melendez, & Rickaby, 2008) but role of marital status of

nurses in specific context (emergency and non-emergency wards) remained non-significant. Married nurses serving in emergency or non-emergency significantly differ neither on EQ nor to psychological adjustment. The reason may be that married nurses are liable to perform similar kind domestic duties apart from their job in emergency or non- emergency wards. So they require to have equal level of EQ and psychological adjustment to maintain equilibrium between home and job.

Finally MANOVA was conducted as confirmatory statistical analysis to integrate the findings of this study which confirm proceeded analyses. Though no difference was found between married nurses of emergency and non-emergency wards but MANOVA revealed that marital status (married/unmarried) had significant on EQ and psychological adjustment. Interaction effect of hospitals (private/government) and marital status were also significant as it seems obvious that married nurses carry dual responsibilities of family, in laws, children, job while on the other hand, unmarried nurses do not bear marital responsibilities. This unequal distribution of responsibility along with contrasting atmosphere of private and government hospitals may lead to variation in EQ and psychological adjustment.

#### **Conclusions**

The basic aim of the study was to investigate the existing relationship between emotional intelligence and psychological adjustment of nurses in emergency and nonemergency wards of private and government hospitals. Along with main objective, other variables of interest included wards, hospitals, professional experience, and marital status. These variables were considered as contributory factors in determining the EQ and psychological adjustment of nurses. It was concluded that there was positive correlation between EQ and psychological adjustment because both are considered as psychological constructs. In addition, professional experience and hospitals emerged as significant predictors of emotional intelligence and found important in determining psychological adjustment level of nurses. Wards were neither significantly correlated with any of the variable of interest included in this research nor significantly predicted EQ. It was anticipated that marital status would be proved as another contributory factor. Though it was revealed thorough MANOVA that marital status had significant effect on emotional intelligence and psychological adjustment but it remained non-significant when difference was computed among married nurses in emergency and non-emergency situation.

#### Limitations

- The sample was restricted to private and government hospitals of Sargodha and Lahore only.
- Sample taken from the hospitals was small because of time constraints.
- Some extraneous variables e.g., duty shifts (morning/evening), environmental conditions could not be controlled.

#### Future recommendations

- This study must be extended to government and private hospitals of other cities of Pakistan.
- This study must be conducted on larger and culturally diverse sample.
- Cross-cultural study may be conducted to compare emotional intelligence and psychological adjustment of nurses working in different national or international cultural.
- One may attempt to investigate changes in emotional intelligence and psychological adjustment of nurses over longer period of time through longitudinal study.
- A comparison may be made between nurses and other health professionals in terms of emotional intelligence and psychological adjustment.

# 4.4 Practical Implications of the Study

The primary aim of present study was to find out the effect of emergency situations in private and government hospitals on emotional intelligence and psychological adjustment of the nurses. Findings of the current work can be implicated in various fields of health related professions e.g., hospitals, health services to earthquake effectees, rescue services, nursing schools, medical colleges, mental hospitals, recruitment and selection of nurses. Highly professional and well trained nursing staff can deal and help patients than untrained, emotionally deficient and maladjusted ones. This can direct the health professionals to professionally and emotionally train the nurses in order to enhance their professional competency. Therefore, findings of current study can help in selecting nurses who are emotionally and psychologically well adjusted. Moreover, this study describes the role of emotional intelligence in promoting psychological adjustment of the nurses. This study can help in drawing the attention of health professionals towards the role of private and government hospitals in providing health services.

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