

## An Exploration of Emotional Intelligence and Job Performance among Nurses in Rural Texas

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### Abstract

*Nursing professionals are held to a variety of roles and responsibilities specific to their field. The success of nursing professionals in their specified roles is essential for quality of care and the success of the healthcare workforce. The **purpose** of this study was to determine whether a relationship exists between emotional intelligence and job performance among nursing professionals. Utilizing the Emotional Skills Assessment Process (ESAP), an emotional intelligence profile was gathered from 54 nurses, who were employed at two hospitals in rural East Texas. The ESAP is designed to describe the ability, capacity, or skill an individual has to identify, assess, and manage the emotions of self and others. **The findings** indicated that the higher the empathy score, the higher the job performance attitude score. Empathy had positive and indirect effects on job performance knowledge, job performance initiative, job performance quality, and overall job performance. The higher the empathy score, the higher the job performance knowledge, job performance initiative, job performance quality, and overall job performance scores. Deference scores on the ESAP had an indirect relationship with job performance knowledge, and ESAP stress management scores had an indirect relationship with job performance safety.*

**Key Words:** Emotional Skills Assessment Process (ESAP), Job Performance, Empathy, Deference

1. Healthcare Reform is changing the roles of the health occupation employee (Brown, 1997). In the mid 1990s, healthcare in the United States began a move from acute care toward disease prevention and health promotion. These reform efforts have added the role of educator to allied health professionals' traditional role of patient care (Brown, 1997).

However, few schools in the United States provide an interdisciplinary experience that prepares healthcare occupation employees for the holistic care of patients. Most educational experiences focus on a single disease or patient group, rather than on the complexity of a patient's condition and demands of his or her life in its entirety (American Association of Colleges of Nursing [AACN], 1996). The literature recommends that clinical experiences reflect the movement of the community and didactic portions of healthcare programs account for complex human dynamics of real life (Ryan, D'Aoust, Groth, McGee, & Small, 1997).

The business of healthcare is also becoming a consumer-driven market, which increases the importance of health occupation employees' customer relations, communications, and social abilities (Nobel, Redman, Williams, & Langley, 1996). American Association of Colleges of Nursing [AACN], 1996). Healthcare employees are held to roles, and performance criteria that are not typical of business professionals (Walpole et al., 2005). Specifically, researchers have identified four desirable traits for healthcare workers' (1) expert skill level; (2) social ability to communicate and maintain relationships; (3) emotional ability to handle grief, dying, and situations of stress; and (4) a personality type that allows for flexibility of processes and procedures (Albanese, Farrell, & Dottl, 2005; Désy&Prohaska, 2008; Kreiter et al., 2004). These traits are essential when determining who to hire in health occupation-specific facilities, and who to admit into health occupation-specific careers. Individuals with lower emotional intelligence ratings may struggle with complex situations (Albanese et al., 2005; Désy&Prohaska, 2008; Kreiter et al., 2004). For example, healthcare occupation employees must acknowledge and consider complex family situations, such as blended or atypical families, during treatment and care planning; therefore, these professionals must possess the emotional intelligence, social maturity, and real life experience to understand and treat the patient accordingly (Brown, 1997). If a patient receives treatment planning that does not fit into the complexity of his or her life, treatment effectiveness and the probability that the patient and family will comply with the treatment decreases tremendously (Brown, 1997).

The demand for nursing professionals and nursing programs has become extremely competitive and enrollment has significantly increased (AACN, 1996). However, the majority of nursing programs in the United States use GPA as the sole means for admission selection. Grade point average simplifies the admission process by providing a clear way of ranking potential students and easily eliminating applicants, thus simplifying the candidate identification process. Therefore, it is possible that students who are a good fit for the nursing field are excluded through the current selection process. Additionally, this simplified admission process is not necessarily identifying an applicant's abilities or projected success in the workforce.

Prior to the implementation of GPA and entrance testing standards as selection criteria, many programs selected individuals based on experience in the field and number of completed internships and apprenticeships. In fact, some of the most productive healthcare occupation employees spent time in apprenticeships prior to attending school. Some examples include Florence Nightingale, Alvin Barach, Antonie Van Leeuwenhoek, IgnazSemmelweis, Joseph Lister, Charles Darwin, and Louis Pasteur (Morley, 2010). Therefore, it might be advantageous for healthcare educational programs to consider the combination of prior experience, emotional intelligence, social maturity, competency, personality traits, and GPA. In doing so, admissions staff will be better informed to rank and select candidates who will be more productive, successful, and fruitful in the nursing profession. These actions may be important in the current and ever-changing economic and social platform of the United States.

The purpose of the study was to determine whether a relationship exists between emotional intelligence and job performance among nursing professionals in rural East Texas using the Emotional Skills Assessment Process instrument. Other aspects such as social maturity, competency, and personality traits and GPA were examined in the study, but in this article the authors are focusing on emotional intelligence.

The study sought to answer the following research questions:

1. Does a relationship exist between emotional intelligence, and any of the ten variables measured on the job performance scale?
2. What are the descriptive characteristics of the relationship that exists between emotional intelligence and any of the ten variables measured on the job performance scale?

## **2. Methodology**

### **2.1 Instruments**

To measure emotional intelligence of the participants in this study the Emotional Skills Assessment Process (ESAP) was utilized. The purpose of the Emotional Skills Assessment Process (ESAP) was to describe the ability, capacity, or skill an individual has to identify, assess, and manage the emotions of self and others (Carroll, 2004). This test was produced by Nelson, Low, and Vela (1983) and has been revised multiple times since. Additionally, many studies have shown the reliability and validity of the instrument (Stottlemyer, 2002; Vela, 2003). Stottlemyer (2002) administered the Exploring and Developing Emotional Intelligence Skills (EDEIS) tool to provide supporting evidence of the ESAP as a valid and reliable tool. Additionally, Vela's (2003) dissertation project, which included a sample of 760, found substantial evidence of a significant correlation between EI and academic achievement. Hardy, Justice, and Espinoza (2006) tested the validity of the ESAP via an exploratory factor analysis. According to their findings, 7 of the 10 factors indicated evidence of a relationship between the ESAP in the areas of assertion, deference, decision-making, drive strength, time management, commitment ethic, and stress. Further, two factors demonstrated a close relationship with the ESAP when combined with one of the other seven factors. Each of the 10 factors yielded variance of between a 6.26% and 1.89% and 9 factors were found to be valid constructs. Aggression yielded a negative correlation, which was consistent with the findings reported in the ESAP Interpretation and Intervention Guide (Nelson et al., 2004). Nelson et al. (2004) reported that the testing instrument had been validated via a study of 2,000 students from high school to college age. Here, validation ranged from a low of - 0.51 for aggression to a high of 0.84 for commitment ethic.

Reliability was tested using split-half and stability coefficients reported on 1,398 individuals (Nelson et al., 2004); the split-half was reported as 0.72. Nelson et al. (2004) obtained stability coefficients via a test-retest format with 60 participants and a 2-month interval between tests. Stability coefficients were reported for all 13 areas of the ESAP and ranged from a low of 0.45 (comfort) to a high of 0.77 (deference). Age, gender, and ethnicity were considered important factors for determining norms for the testing instrument (Nelson et al., 2004). The ESAP yielded 10 main scores that are obtained from 213 questions. The ESAP profile consists of the following emotional skill areas: assertion, aggression, deference, comfort, empathy, decision-making, leadership, drive strength, time management, and commitment ethic. Additionally, the ESAP can identify three potential problem areas, change orientation, self-esteem, and stress. Job performance was evaluated using the Joint Commission's Recommended Job Performance Evaluation Scale for Healthcare Institutions. The use of the same job scale at both institutions assisted in measuring job performance indicators.

### **2.2 Participant Selection and Data Gathering**

The sample population consisted of 63 randomly selected nursing professionals who were employed by one of two 100-bed hospitals in East Texas. Nine participants were disqualified because of incomplete testing or missing information; responses from 54 participants were included in the analysis. The sample population included only nursing professionals and eligibility was determined based on an initial demographic assessment that was conducted at the beginning of the visit. This process ensured that the sample population was well suited for the study and possessed the pertinent characteristics needed to generalize information about the population being sampled. Nursing employees were recruited via marketing materials such as flyers and emails. These materials were distributed throughout the institutions being sampled two weeks prior to the scheduled testing visit and email reminders were sent out on the first and last day of testing.

All tests were administered during a single testing period at each facility included in the study. The healthcare facility administrative body at each facility granted permission to conduct this study at their facility prior to the beginning of the study. Memorandums of Understanding (MOU) were signed by each facility sampled; these MOUs explained confidentiality procedures and the steps that would occur within the study. Dates were chosen by the institution being sampled to allow for maximum opportunity for participation. The tests were administered in the main conference room of each facility. One of the researchers first met with each participant and obtained his or her signature on the informed consent document. After informed consent was obtained, the research collected demographic information via a self-report questionnaire provided by the researcher. Participants used employee identification numbers to pair demographic data and test scores. Test scores and demographic questionnaire data was recorded at the time of the testing, which ensured the confidentiality of the participant and ensured that the data was recorded with the appropriate nursing employee.

After testing, a job performance evaluation was forwarded to the department manager for which the participant worked. The evaluation did not include the name of the participant; rather it was identified by the employee's identification number, that ensured confidentiality between the department manager and the researcher. The department manager had two weeks from the day of receipt to complete the job performance evaluation. The researcher collected all job performance evaluations two weeks from the last scheduled day of testing at each institution for scoring and data entry.

### 2.3 Treatment of Data

The treatment of the data included descriptive statistics and correlation analysis. The correlation coefficient ( $r$ ) was obtained to determine whether there was a positive or negative correlation between the variables being explored in this study. A regression analysis was used in this study to examine whether the independent variables predicted the dependent variables. A regression analysis measures the degree of the relationship between the predictor variable and the criterion variable. In this study, the researchers hypothesized that emotional intelligence would predict job performance. Therefore, emotional intelligence traits were the predictor variables and job performance was the criterion variable. A  $p$ -value of 0.5 was used as the criterion to determine whether the degree of prediction was significant.

### 3. Results

The Statistical Package for the Social Sciences (SPSS 20) was used to compute descriptive statistics for all 42 assessment scores that were collected. The descriptive statistics for the eight traits of interpretation of interest are shown in Table 1. As seen in Table 1, the sample in this study included 54 participants. The mean and the standard deviation for each item are shown below.

**Table 1: Descriptive Statistics**

Trait	M	SD	N
ESAP Assertion	1.98	0.658	54
ESAP Aggression	1.41	0.659	54
ESAP Deference	1.70	0.633	54
ESAP Comfort	2.65	0.555	54
ESAP Empathy	2.48	0.666	54
ESAP Decision Making	2.22	0.718	54
ESAP Leadership	2.39	0.712	54
ESAP Drive Strength	2.54	0.693	54
ESAP Time Management	2.52	0.666	54
ESAP Commitment Ethic	2.61	0.564	54
ESAP Change Orientation	1.56	0.634	54
ESAP Self-Esteem	2.28	0.787	54
ESAP Stress Management	2.30	0.792	54
Facility	1.19	0.392	54
Gender	1.85	0.359	54
Age	2.91	1.202	54
Marital Status	2.13	0.516	54
Ethnicity	1.33	0.801	54
Department	3.15	2.218	54
Years in Healthcare	3.22	10574	54
Higher Education	2.94	1.140	54
Job Performance Knowledge	4.24	0.699	54
Job Performance Depend	4.30	0.788	54
Job Performance Attendance	4.06	0.878	54
Job Performance Quality	4.07	0.723	54
Job Performance Attitude	3.98	0.858	54
Job Performance Safety	4.20	0.762	54
Job Performance Community	3.96	0.726	54
Job Performance Initiative	4.11	0.839	54
Job Performance Efficiency	4.09	0.759	54
Job Performance Appear	4.07	0.843	54
Job Performance Overall	41.02	6.169	54

A correlation analysis was conducted to examine the direct correlations between job performance overall score, quality of work, efficiency of work, knowledge, communication, initiative, attitude, dependability, attendance, appearance, and safety and ESAP assertion, aggression, deference, comfort, empathy, decision making, leadership, drive strength, time management, commitment ethic, change orientation, self-esteem, and stress management. The critical values for  $r$  for a one-tailed test for the current sample were 0.167 at  $p < 0.05$  and 0.240 at  $p < 0.01$  (Gall et al., 2007). The following  $r$ -values, or correlation coefficients provided in Table 2 is the results of the correlation analysis.

**Table 2: Correlation Analysis**

*R Summary Table for Job Performance*

Trait	$r$	$r^2$
ESAP Assertion/Overall Job Performance	0.332**	0.110
ESAP Aggression/Overall Job Performance	0.313**	0.097
ESAP Deference/Overall Job Performance	0.293**	0.085
ESAP Comfort/Overall Job Performance	0.164*	0.026
ESAP Decision Making/Overall Job Performance	0.206*	0.042
ESAP Leadership/ Overall Job Performance	0.262**	0.068
ESAP Drive Strength/ Overall Job Performance	0.394**	0.155
ESAP Time Management/ Overall Job Performance	0.270**	0.072
ESAP Commitment Ethic/ Overall Job Performance	0.494**	0.244
ESAP Stress Management/ Overall Job Performance	0.292**	0.085
Facility/ Overall Job Performance	0.311**	0.096
Ethnicity/ Overall Job Performance	0.170*	0.028
Department/ Overall Job Performance	0.373**	0.139
ESAP Deference/ Safety	0.312**	0.097
ESAP Empathy/ Safety	0.235*	0.055
ESAP Decision Making/ Safety	0.263**	0.069
ESAP Leadership/ Safety	0.248**	0.061
ESAP Drive Strength/ Safety	0.390**	0.152
ESAP Time Management/ Safety	0.235*	0.055
ESAP Commitment Ethic/ Safety	0.465**	0.216
ESAP Self-Esteem / Safety	0.179*	0.032
Facility/ Safety	0.186*	0.034
Ethnicity/ Safety	0.229*	0.052

\*Critical value for  $r$  one-tailed: At 0.05 level: 0.167\*; At 0.01 level: 0.240\*\*

#### 4. Conclusion

Results did not reveal any significant relationships between assertion, aggression, comfort, decision-making, leadership, drive strength, time management, change orientation, and any of the job performance variables. However, a strong relationship was found between empathy and multiple job performance variables. Those who scored higher on the ESAP for empathy yielded higher overall job performance and scored higher in job performance initiative, job performance communication, and job performance knowledge. Additionally, individuals who reported higher self-esteem and deference, scored lower on the job performance knowledge variable. The correlations between ESAP comfort and decision making score and the overall job performance score were significant at the  $p < 0.05$  level and correlations of the ESAP assertion, aggression, deference, leadership, drive strength, time management, and commitment ethic scores and the overall job performance score were significant at the  $p < 0.01$  level. Further, individuals who scored higher on commitment ethics also scored higher on job performance knowledge and those who scored higher on stress management also scored higher on job performance safety.

#### 5. Implications

Current initiatives by nursing boards and healthcare regulating agencies aim to reward based on job performance and healthcare outcomes. Additionally, healthcare organizations search for ways to provide better health and care at lower costs (CMS, 2010). Hiring and training employees is costly; therefore, it is imperative that organizations employ nurses who can produce satisfactory job performance (NAHEC, 2009).

This study added to the existing knowledge on predicting job performance by examining the correlations and possible predictors of personality, emotional intelligence, and social maturity. This study also highlighted the importance of empathy on perceived overall job performance and the effects of variables, such as feeling and socialization on job performance quality. These findings may inform healthcare administrators and healthcare academic training institutions on the important aspects of personality, social maturity, and emotional intelligence on job performance and their specific direct and indirect effects. Additionally, the study used a unique population, a group of nursing professionals who worked in a variety of nursing fields. The study offers useful insight into how nursing professionals are perceived by their employers in job performance and traits that predict overall job performance as well as job performance in critical areas. This information can help navigate potential employees into nursing disciplines with managers who will benefit from their job performance strengths and weaknesses. For example, a Critical Care Nurse who is expected to have short relationships and contact with patients may benefit from having low Emotional Intelligence (ESAP) empathy scores and while a chronic care nurse who is expected to have longer relationships and contact with patients may benefit from higher ESAP empathy scores. This study suggested that empathy can predict the successful job performance of a nursing professional and can provide guidance for both the nursing student and employer on the best fit for placing a nursing professional in a specialty area.

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