

A Study On Emotional Intelligence Factors And Contribution Across The Countries In The World.

G. Sharmila¹, Dr. S. Srividhya²

1. Part Time Research Scholar, Department of Management Studies, Anna University Regional Centre Coimbatore.
2. Assistant Professor, Department of Management Studies, Anna University Regional Centre Coimbatore 641 047.

Email: ssautche@gmail.com

Abstract: Emotional Intelligence will play a vital path of Social Community. The conceptual paper concentrates on difference in Emotional Intelligence in the term of Culture, Behavior etc. We examine the degree to which conceptual ability, emotional intelligence, and relationship management impact each other, as well as whether or not country cultural differences have an impact on these relationships, while controlling for gender differences. The study has read various Article and Thesis and derived the Idea to which they play the role.

[G. Sharmila, S. Srividhya. **A Study On Emotional Intelligence Factors And Contribution Across The Countries In The World.** *Life Sci J* 2013;10(9s):46-53] (ISSN:1097-8135). <http://www.lifesciencesite.com>. 6

Keywords: Emotional Intelligence; Factor; Contribution; Country; World

INTRODUCTION:

Alfred Binet (1857–1911), inventor of the first intelligence test. Claims of races having different intelligence were used to justify colonialism, slavery, social Darwinism, and racial eugenics. In the late 19th and early 20th centuries, group differences in intelligence were assumed to be due to race and, apart from intelligence tests, research relied on measurements such as brain size or reaction times to demonstrate such differences. The first IQ test was created between 1905 and 1908 and revised in 1916 (the Stanford–Binet Intelligence Scales). Alfred Binet, the developer of these tests, warned that these should not be used to measure innate intelligence or to label individuals. However, at the time there was great concern in the United States about the abilities and skills of recent immigrants. Different immigrant nationalities were sometimes thought to belong to different races, such as Slavs. The tests were used to evaluate draftees for World War I, and researchers found that people of southern and eastern Europe scored lower than native-born Americans. At the time, such data were used to construct an ethnically based social hierarchy, one in which immigrants were rejected as unfit for service and mentally defective. It was not until later that researchers realized that lower language skills by new English speakers affected their scores on the tests.

In the 1920s, many scientists reacted to eugenicist claims linking abilities and moral character to racial or genetic ancestry. Despite that, states like Virginia enacted laws based in eugenics, such as its 1924 Racial Integrity Act, which established the one-drop rule as law. Generally, understanding grew about the contribution of environment to test-taking and results (such as having

English as a second language). By the mid-1930s most US psychologists had adopted the view that environmental and cultural factors played a dominant role. In addition, psychologists were reluctant to risk being associated with the German Nazi claims of a "master race".

In 1969, Arthur Jensen revived the hereditarian point of view in the article, "How Much Can We Boost IQ and Scholastic Achievement?" It followed changes in public programs introduced to try to correct decades of discrimination against poor African Americans. Jensen's article questioned remedial education for African-American children; he suggested their poor educational performance reflected an underlying genetic cause rather than lack of stimulation at home. Jensen's work publicized by the Nobel laureate physicist William Shockley, sparked controversy amongst the academic community and student protests.

In their 1988 book *The IQ Controversy, the Media, and Public Policy*, Mark Snyderman and Stanley Rothman claimed to document inaccurate media coverage of scientific findings regarding IQ. The book builds on the results of a survey conducted in 1984. The survey was sent to 1020 scholars within fields that deal with the issue of IQ and had 661 respondents. 45 percent of the respondents thought that black-white differences in IQ were the product of both genetic and environmental variation, while 15 percent believed that the differences were entirely due to environmental factors; the rest either declined to answer the question, or thought that there was insufficient evidence to give an answer.^[16]

Another debate followed the appearance of *The Bell Curve* (1994), a book by Richard Herrnstein and Charles Murray, who argued in favor of the

hereditarian viewpoint. It provoked the publication of several interdisciplinary books representing the environmental point of view, as well as some in popular science. They include *The Bell Curve Debate* (1995), *Inequality by Design: Cracking the Bell Curve Myth* (1996) and a second edition of *The Mismeasure of Man* (1996) by Steven J. Gould. One book written from the hereditarian point of view at this time was the *g Factor: The Science of Mental Ability* (1998) by Jensen. In 1994 a group of 52 scientists, including leading hereditarians, signed the statement "Mainstream Science on Intelligence". The Bell Curve also led to a 1995 report from the American Psychological Association, "Intelligence: Knowns and Unknowns", acknowledging a difference between mean IQ scores of whites and blacks as well as the absence of any adequate explanation of it, either environmental or genetic.

The review article "Thirty Years of Research on Race Differences in Cognitive Ability" by Rushton and Jensen was published in 2005. The article was followed by a series of responses, some in support, some critical. Richard Nisbett, another psychologist who had also commented at the time, later included an amplified version of his critique as part of the book *Intelligence and How to Get It: Why Schools and Cultures Count* (2009). Rushton and Jensen in 2010 made a point-by-point reply to this thereafter.

Some of the authors proposing hereditarian explanations for group differences have received funding from the Pioneer Fund which was headed by Rushton until his death in 2012. The Southern Poverty Law Center lists the Pioneer Fund as a hate group, citing the fund's history, its funding of race and intelligence research, and its connections with racist individuals. On the other hand, Ulrich Neisser writes that "Pioneer has sometimes sponsored useful research—research that otherwise might not have been done at all." Other sources and researches have criticized the Pioneer Fund for promoting scientific racism, eugenics and white supremacy.

UNITED STATES:

Rushton & Jensen (2005) write that, in the United States, self-identified blacks and whites have been the subjects of the greatest number of studies. They state that the black-white IQ difference is about 15 to 18 points or 1 to 1.1 standard deviations (SDs), which implies that between 11 and 16 percent of the black population have an IQ above 100 (the general population median). The black-white IQ difference is largest on those components of IQ tests that best represent the general intelligence factor *g*. The 1996 APA report "Intelligence: Knowns and Unknowns" and the 1994 editorial statement "Mainstream Science on Intelligence" gave more or less similar estimates. Roth et al. (2001), in a review of the

results of a total of 6,246,729 participants on other tests of cognitive ability or aptitude, found a difference in mean IQ scores between blacks and whites of 1.1 SD. Consistent results were found for college and university application tests such as the Scholastic Aptitude Test (N = 2.4 million) and Graduate Record Examination (N = 2.3 million), as well as for tests of job applicants in corporate sections (N = 0.5 million) and in the military (N = 0.4 million).

A 2006 study by Dickens and Flynn estimated that the difference between mean scores of blacks and whites closed by about 5 or 6 IQ points between 1972 and 2002,¹ which would be a reduction of about one-third. However this was challenged by Rushton & Jensen who claim the difference remains stable. In a 2006 study, Murray agreed with Dickens and Flynn that there has been a narrowing of the difference; "Dickens' and Flynn's estimate of 3–6 IQ points from a base of about 16–18 points is a useful, though provisional, starting point". But he argued that this has stalled and that there has been no further narrowing for people born after the late 1970s. Murray found similar results in a 2007 study.

The IQ distributions of other racial and ethnic groups in the United States are less well-studied. *The Bell Curve* (1994) stated that the average IQ of African Americans was 85, Latinos 89, whites 103, East Asians 106, and Jews 113. Asians score relatively higher on visuospatial than on verbal subtests. The few Amerindian populations who have been systematically tested, including Arctic Natives, tend to score worse on average than white populations but better on average than black populations.

According to several studies, Ashkenazi Jews score 0.75 to 1.0 standard deviations above the general European average. This corresponds to an IQ of 112–115. Other studies have found somewhat lower values. During the 20th century, this population made up about 3 percent of the total US population, but won 27 percent of the US science Nobel Prizes and 25 percent of the Turing Awards. Jews have high verbal and mathematical scores, while their visuospatial abilities are typically somewhat lower, by about one half standard deviation, than the European average.

The racial groups studied in the United States and Europe are not necessarily representative samples for populations in other parts of the world. Cultural differences may also factor in IQ test performance and outcomes. Therefore, results in the United States and Europe do not necessarily correlate to results in other population

CULTURE

We propose that countries where humane orientation is higher will be countries in which there is greater emotional intelligence. We believe cultures that reward individuals for being friendly, caring and kind to others will create an environment that encourages the development of emotional intelligence. Individuals who are friendly, caring and kind to others are more apt to be more aware of their own emotions and those of others, better regulate their own emotions and to use their emotions to achieve goals (all signs of greater emotional intelligence). We know of no previous research linking humane orientation and emotional intelligence, however House et al. (2002) found that the United States had a statistically higher (i.e. test banding, see Hanges, Dickson & Sipe, 2004) level of humane orientation (4.17 – Band C) than either France or Germany (both at 3.40 – band D). Consequently, our first hypothesis is:

From the study it is found that the United States had greater emotional intelligence than either France or Germany. The GLOBE project places the United States in a higher category of humane orientation than either France or Germany. Consequently, from the study it is found that the United States had greater relationship management than either France or Germany.

Individuals around the globe vary in many different aspects, including the way they think, act, respond, etc. Cultural differences and national cultures were analyzed by Geert Hofstede. These ideas were first based on a large research project into national culture differences across subsidiaries of a multinational corporation (IBM) in 64 countries encompassing 100,000 people. Subsequent studies by others covered students in 23 countries, elites in 19 countries, commercial airline pilots in 23 countries, up-market consumers in 15 countries, and civil service managers in 14 countries. Together these studies identified and validated four independent dimensions of national culture differences, with a fifth dimension added later. The fifth dimension, Long-Term Orientation, does not include Turkey, since Hofstede only applied this dimension to 23 countries.

CONCEPTUAL ABILITY

Conceptual ability is distinct from general intelligence (IQ) or cognitive ability (Mumford et al., 2000). It allows an individual to generalize from observations and experiences as well as develop abstract thought (White, 1971) and that is how we will define it for the purposes of this study.

With regards to the connection between conceptual ability and emotional intelligence we see greater conceptual ability as tied to greater introspection (Northouse, 2004) and greater insight

into the functions and attitudes of relevant stakeholders (Zaccaro et al., 1991). From the Study it is found that the higher the conceptual ability the higher the emotional intelligence.

With regards to the connection between conceptual ability and relationship management we see greater conceptual ability as tied to a greater awareness of the need to actively involve others in problem solving (Mumford et al., 2000), and from the study it is found that the higher the conceptual ability the higher the relationship management.

EMOTIONAL INTELLIGENCE ACROSS AFRICAN AND AMERICAN FEMALE STUDENTS

For this study we use Wong & Law's (2002) trait instrument for measuring emotional intelligence, which was based upon the Mayer & Salovey (1997) four-dimension model. We use the trait construct because we are interested in the self-perceived personality characteristics (traits) of the respondents and in how the respondents perceive that they will act in certain circumstances. From The study it is derived as the higher the emotional intelligence the higher the orientation towards relationship Management. From the study it is proved that a) there is no statistically significant relationship between African American female college students' emotional intelligence level [Total EQ Score] and their academic performance [Grade Point Average]. B) There is no statistically significant relationship between the components of emotional intelligence [Intrapersonal Ability, Interpersonal Ability, Stress Management, Adaptability, and General Mood] and the academic performance [Grade Point Average] of African American female college students. C). There is no statistically significant difference between African American female college students' emotional intelligence level and their academic level [e.g., Freshman Year, Sophomore Year, Junior Year [and Senior Year or Total Cumulative Credits].

From the Overall study it is found that the researcher suggests that American university students score higher than Turkish students in EI, as measured by the Wong and Law Emotional Intelligence Scale. This difference can be attributed to higher ability to recognize, appraise, and express emotion in oneself (SEA) and to use emotion to facilitate performance (UOE). The greater stress on university entrance exams in Turkey that reflect IQ but not EQ, may also be a factor.

EI towards Transforming the cross cultural Leadership across Five countries:

This was a preliminary attempt to investigate the relationship between emotional intelligence and transformational leadership in a cross-cultural context. The challenge was translating the

measurement instruments in four languages and collecting data from 685 triads in five countries.

Results provided some evidence of convergent and criterion validities and reliabilities of the measure of emotional intelligence and transformational leadership. Results indicated how subordinates' perceptions of leader EQ are associated with transformational leadership behaviors in the five countries. The results were somewhat consistent across the five countries that provided partial support to Spector et al.'s (2002) conclusions that the findings from field studies in the U.S. are generalizable across cultures.

The mean score of the sample as a whole falls under 'average' EI category as per Chadha's norms: 52% fall under 'average' emotional intelligence category, 47% in the 'below average' and just one female student in the 'high' emotional intelligence category. This dearth of EI could be associated with the war torn, miserable social, economic and political reality prevailing in the country. The students are under military care and control. Among males 44% and 56%, respectively come under 'average' and 'below average' emotional intelligence category. Among females 70% have 'average' EI and 27% have 'below average' EI.

The females in this sample evince higher emotional competency (with the mean score, 198.51) compared to the males (with the mean score 180.38), when faced with emotionally challenging situations.

The mean scores on all the five components indicate a lead in the females over the males.

The mean difference between male and female is statistically significant with respect to 'motivation' and 'empathy'. The mean score on 'Motivation' is the highest and the mean score on 'self-regulation' is the lowest.

EMOTIONAL INTELLIGENCE IN CHINA:

This is particularly evident in what this author calls the legalistic approach (Han Fei Zi). Han Fei Zi, who seemed to have heavily influenced the King of Qin, believed that "man (is) naturally evil" and that therefore "strict rules and severe punishments are needed". Ruling with fear certainly taps into the power of emotions (fear is a strong one!), but it doesn't go much deeper into the emotional field.

In the strategic approach (Sun Zi), an emotion in leadership is also not covered. Sun Zi is a famous author in the West now, thanks to the publicity given to his book "Art of War". This very interesting book talks about how to lead using principles normally used to win battles but it doesn't cover the use of emotions in leadership.

Transformational Leadership

Following Burns (1978), Bass (1985; see also Bass & Avolino, 1993) proposed that transformational leadership is associated with distinct dimensions of *intellectual stimulation* (encouraging followers to question their own way of doing things and become innovative), *individualized consideration* (providing personal attention, empathy, and encouragement for self-development of followers), *charisma* or *idealized influence* (trust, respect, and pride stimulated by and emotional identification with the leader), and *inspirational motivation* (encouraging followers to improve their contribution by articulating a compelling vision). Leaders who possess interpersonal intelligence may be associated with transformational leadership for several reasons. Leaders who possess empathy aspect of EQ are likely to recognize followers' need, take active interest in them, and respond to changes in their emotional states. Empathy is likely to be associated with individualized consideration. Social skills aspect of EQ, which is associated with enabling followers to engage in desirable behaviors, is likely to be associated with intellectual stimulation. Employees are likely to respect and emotionally identify with a leader who is considerate and is willing to help employees to be effective and improve their job performance. Therefore, the social competence dimension of EQ is likely to be associated with leaders' charisma or idealized influence.

Developed by Bass (1985), the Multifactor Leadership Questionnaire (MLQ) is a widely used instrument to assess the three aspects of transformational leadership—charisma, intellectual stimulation, and individualized consideration. However, there has been lack of evidence of construct validity of the instrument (Tejeda, 2001). Carlessa's (1998) study indicated that there is little evidence to support that the MLQ measures three distinct transformational leader behaviors. In the present study, we conceptualize transformational leadership as a unidimensional construct consisting of the three types of interrelated behaviors. (As will be seen later, in the present study a factor analysis of the MLQ items resulted in a single factor.)

On the basis of our theoretical discussion, we formulate the following hypotheses for the study:

Hypothesis 1: Empathy is positively associated with transformational leadership.

Hypothesis 2: Social skills are positively associated with transformational leadership.

We also wanted to explore how these relationships differ between individualistic (U.S., Greece, and Portugal) and collectivistic (China and Bangladesh) cultures?

Davis, Stankov, and Roberts' (1998, p. 1013) study indicates the potential dark side of popularizing

a construct before it is carefully conceptualized and operationalized and rigorous empirical studies are completed. Self-report measures of EQ (e.g., Bar-On, 1997; Boyatzis & Goleman, 2001; Bernet, 1996; Cooper & Sawaf, 1997; Law, Wong, & Song, 2004; Mayer et al., 2000; Schutte et al., 1998) and criterion variables may have resulted in common method variance. This occurs when data are collected from the same respondents, with the same measures, and at the same time. The EQ instruments developed by Law, Wong, and Song and by Mayer, Caruso, and Salovey are psychometrically sound which are likely to be resistant to common method variance (cf. Spector, 1987). Another issue is that in organizational studies, supervisors are often asked to assess their own managerial skills, but studies by Kruger and Dunning (1999) and Shipper and Dillard (2000) reported that unsuccessful supervisors overestimate their skills compared to successful supervisors. Also three studies reported that under-estimators of their managerial skills are likely to be more effective than over-estimators (Atwater & Yammarino, 1992; Church, 1997; Van Velsor, Taylor, & Leslie, 1993). As a result, if the supervisors are asked to self-assess their EQ, some of them will probably provide misleading information.

The objective of the present study was to investigate the relationships of two dimensions of social competencies of EQ—empathy and social skills—to transformational leadership in a cross-cultural context. An attempt was made to overcome some of the limitations of the existing self-report measures of EQ by using a new measure which involved asking observers (e.g., MBA students and their colleagues) to assess their supervisor's EQ and transformational leadership.

Cultural Differences among the Five Countries – United States, Greece, Portugal, Australia, Japan

Since our study investigated the relationship between EQ and transformational leadership in five

countries, it is appropriate to discuss cultural differences among these countries. Hofstede's study (1980) shows that the five countries differ greatly on the cultural dimension of *individualism–collectivism*. In individualistic cultures, individuals primarily look after their own and immediate family's interests (husband, wife, and children), but in collectivist cultures, individuals belong to one or more close groups created by birth and later events, from which they cannot separate themselves. "Overall, individualistic cultures (such as Australia and the United States) value individual goals over group goals, individual concerns over group concerns, and individual rights and needs over collective responsibilities and obligations. Collectivistic cultures (such as China, Japan, and Korea), in contrast, value group goals over individual goals, group concerns over individual concerns, and collective needs over individual needs" (Ting-Toomey et al., 1991, p. 277). On the *individualism–collectivism* dimension, the United States is extremely individualistic among the 50 countries studied by Hofstede and Bond (1988). Greece and Portugal are moderately individualistic countries and the remaining two countries are collectivistic nations. Given this cultural difference among these countries, a central issue is whether managers in these countries significantly differ on the relationships between emotional intelligence and transformational leadership.

Hofstede's other cultural dimensions are power distance (i.e., the extent to which the less powerful members of an organization believe and accept that power is unevenly distributed), uncertainty avoidance (i.e., the extent to which people avoid unclear or unpredictable situations), and masculinity (i.e., the extent to which there is sex role differentiation). The differences on these dimensions among the five countries were not very high.

Table- 2: Summary of Regression Analysis with the two EQI Subscales and Transformational Leadership in Each of the Five Countries

Predictor variable	Transformational leadership					
	All β_1	U.S β_1	Greece β_1	Portugal β_1	S. Korea β_1	Bangladesh β_1
Empathy	.50***	.58***	.37**	.82***	.41***	.47***
Social skills	.32**	.16*	.34*	0.09	.41***	.37***
R^2	.62***	.52***	.46***	.81***	.63***	.60***
N (trials)	685	128	86	74	263	134

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

ERITREA:

It was found that the sample had 'average' score on Emotional Intelligence –in the aggregate as well as components-wise. There was gender

difference in emotional intelligence on the motivation and empathy components.

PAKISTAN:

The major findings of the study and evaluation have been done by using Statistical Package for Social Sciences (SPSS). The findings show that the female segment of the bank employees is more emotionally intelligent than their male counterparts and the age of the male and female employees have inverse relationship with the Emotional Intelligence and as the level of education increases the Emotional Intelligence level increases as well. The more satisfied the employees are the more they will be in a better position to perform well in an organization. The study was supported by the findings of the previous researches conducted by different researchers.

SOUTH AFRICA:

From the Study it is found that the emotions and feelings that employees experience as indicated by the interviews could be categorized into five themes: 1) anger, aggression, aggravation and frustration; 2) disappointment; 3) stressed, overwhelmed and emotionally drained; 4) anxious and scared; and 5) suspicion, scepticism, and cynicism. Allcorn (1994) and Bensimon (1997) have identified the workplace as one of the most frustrating environments individuals have to deal with. It is not surprising then that anger be one of the most frequently experienced emotions at work (Fitness, 2000). When the outcome of something has a bearing on one's reputation, social standing, authority, credibility or power base, it is easy to into the trap of aggressive behaviour. When people engage in this type of behaviour frequently, the atmosphere can become antagonistic, cynical and highly aggressive, and none of these characteristics improves behaviour. Anger in the workplace has been linked to a number of negative experiences such as hostility (Folger & Baron, 1996), destructive behaviours for instance theft (Chen & Spector, 1992), and other negative behaviours such as revenge (Bies & Tripp, 1998).

During the interviews it became evident that the participants were disappointed with many aspects of the organization, from team failure to the way in which management treated employees. It was clear that these feelings of disappointment gave rise to many other emotions such as anger and Frustration and other feelings such as unappreciated and demotivated. In 2007 an "Employee Health and Wellness Survey" that was conducted by Afriforte on one of the business units, that funned part of the current study, it was found that nine of the eighteen (50%) participants that were assessed showed a risk of being over-committed (which, when not controlled or managed, could lead to burnout). Four of the eighteen (22,20%) participants were at a high risk of burnout. When workloads are too heavy and demands

too big, employees might start suffering and their ideals might be in direct conflict with reality. According to Alton (2002), burnout is not a symptom of work stress; it is the end result of unmanaged work stress. It is a debilitating psychosocial condition brought about by unrelieved work stress, which results depleted energy reserves, lowered resistance to illness, increased dissatisfaction and pessimism, increased absenteeism and inefficiency at work (Alton, 2002). During the past few months the mining industry has been under much pressure in terms of production and gold loss (due to power failures and load shedding), and decreasing safety standards leading to increased numbers of accidents. This has a serious impact on the future of some of the marginal mines in South Africa and layoffs become a great consideration. It can therefore be assumed that employees of this industry feel anxious about their job security.

In a study done by Mirvis and Kanter (1991) they concluded that 48% of American workers were cynical They found that 65% agreed that people would tell if they felt they would gain from it, 41 % doubted the truth of what management told them, and 49% said that management would take advantage of them when given the opportunity. The results the current study are in accordance with the literature. A lack of trust and feelings of cynicism have a negative impact on productiveness and willingness to embrace organizational change.

What events and situations do employees experience when reporting their emotion experiences?

It was found that most of the events were experienced as having a negative emotional impact and these were categorised into three levels, namely organisational, group, and individual level.

The concepts of fairness and trust have been studied extensively by a number of management researchers (Kramer & Tyler, 1996; Politis, 2003). It has been established by means of empirical evidence that trust is needed in resolving interpersonal problems within an organisation (Atkinson, 1995; Davenport & Prusak, 1998). During the observation periods it became clear that some of employees had a problem with management in terms of having to meet unfair demands, never receiving credit, and not being trusted with their tasks. observations, it became obvious that when something went wrong it was immediately pointed out and the people accountable were immediately reprimanded, but when things went well and someone had done something more than was expected, it was usually overlooked. This was detrimental to the motivation of the people involved and it was easy to see that it had a ripple effect. It only been in the past recent that previously

disadvantaged individuals and- females general had been recruited for higher level positions in the mining industry. In the past most of them were recruited for lower level surface (such as clerical positions), and under ground (such as mining teams) positions. But much has been done by the industry at large to develop these employees in order to be successful in managerial positions, by assigning them to mentors and placing them on formal development programmes. Workplace bullying is a destructive organizational occurrence, and involves recurring patterns of inappropriate and aggressive behaviour directed at a specific person or group (Salin, 2003). It seems as if bullying leads to feelings of frustration and anxiety and obviously has a detrimental effect on the employees involved. Supervisory relationships forms a sub-dimension of organisational support and entails the availability of the supervisor to the employee, as well as the perceived relationship between the supervisor and the employee. Ineffective communication is another sub-division of organisational support and involves clarity regarding the decision-making process in the organisation, the reporting structure, and the availability of critical information pertaining to important issues in the organisation. From the interviews it could be concluded that the communication at the organisation was not very constructive or clear and that this led to frustration and feelings of mistrust. It was obvious from the responses that not receiving recognition frustrated and aggravated employees, and they had a definite need to feel valued and appreciated. When people feel appreciated for doing

Something well, they will be inclined to repeat this behaviour and other employees may even copy this behavior in order to receive recognition as well. The mining environment is a place where accidents happen on a daily basis some can be avoided, others are beyond the organization's control. Due to the fact that this is a high risk environment to work in, much pressure is put on employees in terms of safety requirements. It became clear from the responses that safety placed an emotional as well as a mental burden on the employees. Throughout literature emotional dissonance has been associated with stress and negative outcomes in terms of employee health and well-being. Emotional dissonance occurs when emotions expressed and true emotions experienced are in conflict with each other. Research has shown that when employees have to portray emotions which are in conflict with their true feelings, it can lead to feelings of emotional dissonance (Zapf, 2002), which can in the end be viewed as a sense of strain to the employee (Moore et al" 2004). It was evident that many of the participants felt that they were in a difficult situation - they were friends with their co-

workers; but at work they had to fulfill the role of supervisor or manager. This caused role conflict and placed the individual in a difficult emotional situation.

Research question 3: How do employee This study adds value to the domain of Industrial psychology in that it provides a description of general emotions which employees in a mining environment experience, as well as the specific events that provoke these emotions. It also provides a description of the regulation methods these employees implement, which will be useful to determine and improve their well-being, seeing that faking and suppressing of emotions such as anger and irritation have been linked to detrimental personal health (Grandey et al., 2002; Gross, 2002).

EI on Attention among the African, Whites and Mexicians:

With respect to Attention, there were significant differences among ethnic group means, $F(3,511) = 92.54$, $p < .001$. A post hoc analysis (Least Squares Difference, LSD) revealed that Mexicans ($M=2.56$) reported lower scores on the subscale Attention than African Americans, Latino Americans, and Whites ($M=3.73$, $M = 3.70$, and $M=3.98$ respectively; $ps < .01$). In addition, Whites obtained higher scores in Attention than African Americans and Latino Americans ($ps < .01$). There was a significant main effect of gender, $F(1,511) = 23.29$, $p < .001$ (see Figure 1). Overall, women ($M=3.72$) obtained higher scores in Attention than men ($M=3.30$). There were no statistically significant interactions between ethnic group and gender.

For Clarity, there were significant differences among ethnic group means ($F(3,511) = 13.40$, $p < .001$). A post hoc analysis (LSD) revealed that Mexicans ($M=3.11$) obtained lower scores on the subscale Clarity than African Americans, Latino Americans, and Whites ($M=3.51$, $M=3.63$, $M=3.53$, respectively; $ps < .01$). Significant main effects were found for gender ($F(1,511)=4.8$, $p < .05$;) Overall, women obtained lower scores ($M=3.42$) than males ($M=3.52$). There were no statistically significant interactions between ethnic group and gender. On the subscale Repair, there were no significant differences among ethnic group means ($F(3,511) = .68$, $p > .10$). There were no significant main effect for gender ($F(1,511)= .91$, $p > .10$; see Figure 3). There were no statistically significant interactions between ethnic group and gender.

References:

1. Ashforth, B. and Humphrey, R. (1993), "Emotional labor in service roles: the influence of identity", *Academy of Management Review*, Vol. 18 No. 1, pp. 86-115.

2. Beutler, L.E., Engle, D., Oro-Beutler, M.E., Daldrup, R. and Meredith, K. (1986), "Inability to express intense affect: a common link between depression and pain", *Journal of Consulting and Clinical Psychology*, Vol. 54, pp. 752-9.
3. Bolton, S.C. (2000), "Emotion here, emotion there, emotional organizations everywhere", *Critical Perspectives on Accounting*, Vol. 11, pp. 155-71.
4. Bolton, S.C. (2001), "Changing faces: nurses as emotional jugglers", *Sociology of Health and Illness*, Vol. 23 No. 1, pp. 85-100.
5. Brotheridge, C.M. and Lee, R.T. (2003), "Development and validation of the emotional labor scale", *Journal of Occupational and Organisational Psychology*, Vol. 76 No. 3, pp. 365-79.
6. Charles, K., Gafni, A. and Whelen, T. (1999), "Decision making in the physician-patient encounter: revisiting the shared treatment decision-making model", *Social Science and Medicine*, Vol. 49 No. 5, pp. 651-61.
7. Cook, S.H. (1999), "The self in self-awareness", *Journal of Advanced Nursing*, Vol. 29 No. 6, pp. 1292-9.
8. de Castro, A.B. (2004), "Emotional vs physical labor: the demand of using emotions as a job duty", *American Journal of Nursing*, Vol. 104 No. 3, p. 120.
9. de Raeve, L. (2002), "The modification of emotional responses: a problem for trust in nurse-patient relationships?", *Nursing Ethics*, Vol. 9 No. 5, pp. 465-71.
dimensions of the bone marrow transplant nursing role?", *Journal of Advanced Nursing*,
10. Festinger, L. (1957), *A Theory of Cognitive Dissonance*, Row Peterson, Evanston, IL.
11. Freud, S. (1961), *The Problem of Anxiety*, Psychoanalytical Quarterly Press, New York, NY.
12. Fridlund, A.J., Newsome, J.B. and Gibson, E.L. (1984), "Putting emotion in behavioral medicine: discrete emotion psychophysiology and its relevance for research and therapy"
13. Goleman, D. (1996), *Emotional Intelligence: Why it Matters More than IQ*, Bloomsbury, London.
14. Harris, L.C. (2002), "The emotional labour of barristers: an exploration of emotional labour by status professionals", *Journal of Management Studies*, Vol. 39 No. 4, pp. 553-84.
15. Henderson, A. (2001), "Emotional labor and nursing: an under-appreciated aspect of caring work", *Nursing Inquiry*, Vol. 8 No. 2, pp. 130-8.
16. Hochschild, A. (1979), "Emotion work, feeling rules and social structure", *American Journal of Sociology*, Vol. 85, pp. 551-75.
17. Hochschild, A. (1983), *The Managed Heart: Commercialization of Human Feeling*, University of California Press, Berkeley, CA.
18. Hunter, B. (2001), "Emotion work in midwifery: a review of current knowledge", *Journal of Advanced Nursing*, Vol. 34 No. 4, pp. 436-44.
19. James, N. (1989), "Emotional labour: skill and work in the social regulation of feelings",
20. James, N. (1992), "Care ¼ organization þ physical labour þ emotional labour", *Sociology of Health and Illness*, Vol. 14 No. 5, p. 488.
21. Kahn, W.A. (1990), "Psychological conditions of personal engagement and disengagement at work", *Academy of Management Journal*, Vol. 33 No. 4, pp. 692-724.
22. Kelly, D., Ross, S. and Gray, B. (2000), "Death, dying and emotional labour: problematic
23. Lief, H. and Fox, R.C. (1963), "Training for detached 'concern' in medical students", in *The Psychological Basis of Medical Practice*, Harper & Row, New York, NY, pp. 12-35.
24. Lupton, D. (1997), "Foucault and the medicalisation critique", in Peterson, A. and Bunton, R. (Eds), *Foucault Health and Medicine*, Routledge, London and New York, NY, pp. 94-110.
25. Mahan, C. and Calica, J. (1997), "Perinatal loss: considerations in social work practice", *Social Work Health Care*, Vol. 24 Nos 3-4, pp. 141-52.
26. Majomi, P., Brown, B. and Crawford, P. (2003), "Sacrificing the personal to the professional: community mental health nurses", *Journal of Advanced Nursing*, Vol. 42 No. 5, pp. 527-38.
27. Mann, S. (2002), *Hiding What We Feel, Faking What We Don't*, Vega Publishing, London.
28. McCreight, B.S. (2004), "Perinatal grief and emotional labour: a study of nurses' experiences in gynae wards", *International Journal of Nursing Studies*, Vol. 42 No. 4, pp. 439-48.
29. McQueen, A. (2000), "Nurse-patient relationships and partnership in hospital care", *Journal of Clinical Nursing*, Vol. 9, pp. 723-31.