

Fundamental to work performance, that is achieving a quality product and service, is the well being of employees. This being said, all aspects of the employees' work environment must be assessed not only to ensure safety but also to maximize the human potential without causing harm. Physical and psychological aspects of the environment create the milieu that either enhances the employee's capabilities, or diminishes their abilities by not supporting the essential characteristics of HFE.

As such, "understanding people's capabilities and developing job demands and conditions that are matched to those capabilities is the main focus of the ergonomist" (Kroemer, & Kroemer, & Kroemer, 2001, page 148). Part of this understanding of capabilities can be achieved by assessing and identifying individuals' *Emotional Intelligence*. Working with these individuals enables them to adapt to changes in their work environment, reducing unhealthy psychological and physiological responses to stimuli. Developing emotional intelligence does not only improve the work environment; improved adaptation occurs in all facets of life since these skills are implicit in all interactions.

Intelligence Quotient is not the same as *Emotional Quotient*. EQ can be learned whereas IQ cannot and is fixed. The origins of IQ are debated and consist of genetic, biologic and environmental factors. At one time, it was thought that high IQ was associated with success, which can be the case but does not appear to be the predominant factor. "There are widespread exceptions to the rule that IQ predicts success- Many (or more) exceptions than cases that fit the rule. At best, IQ contributes about 20 percent to the factors that determine life success, which leaves 80 percent to other forces" (Goleman, 1995, p. 34).

A group of Ivy League graduates were followed post graduation to study their success rates once independent from the university. Despite their high IQ and Ivy League education, varying degrees of success were identified within this group, further lending to the theory that other issues are more important than IQ when it comes to success. Success is being defined to primarily deal with interrelationships and the ability to sustain them. EQ, specifically interpersonal intelligence, is thought to be the essential feature of success. According to Howard Gardner, Psychologist and educator: "Interpersonal intelligence is the ability to understand other people: what motivates them, how they work, how to work cooperatively with them. Successful salespeople, politicians, teachers, clinicians, and religious leaders are likely to be individuals with high degrees of interpersonal intelligence... Intrapersonal intelligence ...is a correlative ability, turned inward. It is a capacity to form an accurate, veridical model of oneself and to be able to use that model to operated effectively in life."(Goleman, 1995. p.39)

Emotions have a physical as well as a psychological component. There are researchers who consider emotions to be biochemical reactions while other researchers define emotions as a conscious mechanism. "Most people who study emotions are somewhere in between and they view emotions as a coordinated response systems, so that an emotion occurs when there are certain biological, certain experiential, and certain cognitive states which all occur simultaneously. In other words, emotions operate on many levels. They have a physical aspects as well as a psychological aspect". (*What are emotions,* p. 6)

In the book Emotional Intelligence, Daniel Goleman describes the brain's flight or fight response when exposed to a perceived stressor. "Under stress, a nerve running from the brain to the adrenal glands atop the kidneys triggers a secretion of the hormones epinephrine and norepinephrine, which surge through the body priming it for an emergency. These hormones activate receptors on the vagus nerve; while the vagus nerve carries messages from the brain to regulate the heart, it also carries signals back into the brain, triggered by epinephrine and norepinephrine. (Goleman, 1995, p. 20)".

The ability to control these various biochemical reactions has a proven direct positive impact on an individual's health status and can help to reduce the risks of developing heart disease, diabetes, and hypertension. In addition, individuals have used various substances (alcohol, stimulants, depressants, etc.) in efforts to control the effects of these biochemical responses to stress, which often have further detrimental impacts on their welfare and safety.

Stress management classes, taught within organizations, have been found to benefit employees by allowing them to control stress and develop traits associated with a healthy emotional intelligence quotient. The skills taught in stress management programs include "muscle relaxation, biofeedback, meditation, cognitive restructuring, yoga, Tai Chi, and guided imagery" ("*Stress management training*" p.2)

Studies have indicated that the benefits of improving an employee's E.I. through education and training have led to improved subjective and objective responses to stress. One study indicated "positive impacts on electromyography, adrenaline levels and blood pressure" ("*Stress management training*, p.3). Further data from organizations which have participated in stress management programs have indicated a reduction in health care claims and malpractice claims.

By improving an employee's ability to deal with stress, through raising their emotional intelligence quotient, the organization benefits as well as the individual. The organization needs to understand and identify the need for helping employees; the process begins with the leadership. The leadership style and approach in dealing with their employees has a direct impact on the quantity and intensity of the stress experienced by the employees within that culture. The culture, in turn, is directly influenced by the leadership, who determine whether EQ training is relevant and important or whether the investment in time and resources are better made elsewhere. How significantly the leadership values its employees has a direct impact on the milieu and on efforts to invest in the health and welfare of those employees. Furthermore, a non-punitive approach, with an emphasis on confidentiality and establishing trust with the employees, is essential for participants to accept the feedback they receive and to respond positively to this feedback. Individuals need time to process the information they are given and to be able to respond to this feedback; a safe environment in which they do not feel threatened is crucial to this process.

Emotional intelligence plays a significant role in an organization's "decision making, leadership, strategic and technical break through, open honest communication, trusting relations and teamwork, custom loyalty and creativity and innovation." (Cooper. & Sawaf. p.2) These factors directly relate to TQM principles and ultimately relate to the employees just how much they are valued and appreciated by the organization. How employees view themselves within the context of an organization is fundamental to

their motivation and to their ability to strive for customer satisfaction. In addition, how the employees' supervisor views EI and participation in training will greatly impact their willingness and ability to participate openly in the various sessions. The more open and honest the supervisors are, the more likely the employees will feel safe and encouraged to participate without feeling threatened.

Initially, once an organization has decided to provide EI training, an initial assessment should be performed. "One of the first tasks of this initiative was to assess the level of stress in the organization, which was accomplished via a climate survey that allowed comparison with national benchmark data." (*Stress management training* p.1) This assessment would explore the understanding and willingness of individuals regarding EI prior to participating in the training and, in addition, their perception of the validity of EI, which is then incorporated into the training program. A trainer also needs to assess the readiness of the participants to make these changes.

There are multiple stages that individuals evolve through when confronted with the need to change. Once they have evolved to the stage at which they perceive themselves to be ready for this change and determine it to be beneficial, they are then more likely to accept positive feedback and be able to make the needed changes.

As indicated earlier, there many tools employed to assist with the training of stress management and the enhancement of emotional intelligence. Multiple analytical tools are available to assess emotional competence. With these tools it is possible to do an assessment, providing data which can later be analyzed and categorized. Two specific tools, the "Emotional Competence Inventory 360 and the Work Profile Questionnaire-EI Version, are designed to be utilized in the work environment." (*Emotional Competence Framework*, p. 1) Emotional competence framework outlines key competencies such as self awareness, self regulation, self motivation and social competency indices. Sub-categories have been identified under each main category, which are measured. This framework establishes and documents the ideal characteristics exhibited by those with emotional intelligence. "The best assessment approach for rating social and emotional learning is usually based on multiple ratings conducted from multiple perspectives, such as 360 degree assessments that include the boss, peer and subordinate ratings" (Adler, Cherniss, Cowen, Emmerling, & Goleman ,p. 5).

Once individual assessments and scores have been obtained, training and education can be individualized to enhance assets while improving those areas where deficits exist. Training should include role plays, simulations, and group discussions since these techniques appear to reprogram the amygdale and neocortex. As is the case in a TQM endeavor, this is an ongoing, never ending process. Formal training usually is concluded within a 10-12 week time frame. Individual and group training continues, but is structured within the context of continuing the growth and development of the employees. Generally, it is recommended to out source training to professionals trained in EI. Once the formal training has ended, the organization can transition to resources within the organization. As individuals establish and strengthen their emotional intelligence, their ability to adapt to their changing environment improves.

Research suggests that emotional learning and behavioral changes can occur in all individuals, regardless of their age. A major consideration though is to consider different types of learning. "Training and development efforts in industry have not

always distinguished between cognitive learning and emotional learning, but such a distinction is important for effective practice. Emotional incompetence often results from habits deeply learned early in life. These automatic habits are set in place as a normal part of living, as experience shapes the brain. As people acquire their habitual repertoire of thought, feeling, and action, the neural connections that support these are strengthened, becoming dominant pathways for nerve impulses." (Adler, p.3) These habits can be replaced with new habits. Motivation is also a more significant factor with emotional learning than it is with cognitive learning. Linking the participant's values to the behavioral adapting appears to influence positively the ability and desire of the individual to modify the negative behavioral trait. Developing goals which are obtainable and lead to increased self-confidence appears to be a key element in development of new habits that are representative of emotional intelligence. The goals attained reinforce the behavior and further lead to continued attempts at learning and improving ones' EI through behavioral changes.

Use of models that demonstrate the desired traits are very important to sustaining growth and continued learning in the adult participant. In addition, aiding employees in development of insight is fundamental to the ability to make behavioral changes and to continue to strive for improvement. "Insight serves as a natural link between situations, thoughts and feelings. It enhances self-awareness, the cornerstone of emotional intelligence. And insight often paves the way for meaningful behavior change"(Adler, p.10).The direct supervisor, in addition to the leadership as a whole play a major role in modeling the constructive behavior and setting the tone for further growth. Not only does leadership have a role in identifying the need for training, provides the resource for training while establishing a safe environment in which this learning can take place, they are looked upon as role models, and as such must demonstrate the traits that are encouraged in the subordinates undergoing such training. In any TQM system, the leadership plays a significant role in nurturing the environment so that improvements can occur and be sustained.

Reduction in swamping and the negative physical and psychological symptoms associated with stressors. increase morale and job satisfaction, and retention of staff, which are all positive outcomes from developing skills in emotional intelligence. In all environments, the ability to improve interactions and to control ones' negative responses to stressors are beneficial and enhance the individual's quality of life. The organization benefits since an employee who is healthier and happier is more likely to work to a higher standard, maximizing their creativity and ultimately be more invested in their job and the company's vision and mission. Why focus on emotions? "Emotions are the glue that holds the cells of the organism together in the material world, and in the spiritual world they're the glue that holds the classrooms and the society together."(Pert., p. 4)

References

Adler, M., & Cherniss, G., & Cowan, K., & Emmerling, R., & Goleman, D., *A technical report issued by the consortium for research on emotional intelligence in organizations* (10/07/98). Retrieved on 03/25/03 from The Consortium.

http://www.eiconsortium.org/research/technical_report.htm

Boyalzis, R., and Goleman, D. (n.d.), *Emotional competence inventory*. Retrieved on 3/25/03 from The Consortium

http://www.eiconsortium.org/measures/eci_360.htm

Cooper, R., & Sawal, A. (n.d.) *Emotional intelligence in leadership organizations*. Retrieved 3/2/03 from EQ.ORG

http://www.feel.org/articles/cooper_sawaf.html

Emotional Competence Framework, (n.d.), Retrieved on 3/10/03 from The Consortium

http://www.eiconsortium.org/research.emotional_competence_framework.htm

Emotional Competency Framework, (n.d.), Retrieved on 3/10/03 from The Consortium

http://www.eiconsortium.org/measures/eci_360.htm

Goleman, D. (1995) *Emotional intelligence* (1st ed). New York: Bantam Books

Kroemer, H. & Kroemer, K., & Kroemer-Ehert, K. *Ergonomics*. (2nd ed). New Jersey: Prentice Hall

Pert, C., (2003). *What are emotions*. Retrieved 3/2/03 from EQ Today

<http://www.eqtoday.com/archive/emotions.html>

Stress Management Training, (n.d.), Retrieved on 3/10/03 from The Consortium

http://www.eiconsortium.org/model_programs/stress_management_training.htm