

CHAPTER 1

EMOTION

1.1 *Theoretical Perspectives*

Theories of emotion have changed and developed since the early examination of the construct by James (1890). The changes stemmed from queries such as “Do we become frightened because we run?” “Do we run because the autonomic nervous system activates the flight-or-fight response?” “Or does the feeling of terror come from...the muscles of the face?” “Does the fact that certain emotion expressions are recognized in all cultures, show that there are *universal* emotions?” (Isaacs, 1998, pp. ix-x). These questions have led to varying theoretical explanations and operational definitions (James, 1890; Cannon, 1927; Izard, 1977, 1993; Frijda, 1988; Jenkins, Oatley, & Stein, 1998). Arguing for a single universal theory of emotion may not be feasible, yet emotion could be viewed as a syndrome, a co-occurring pattern of responses, such as, physiological responses, cognitive processes, emotional displays, and feeling states (Ashkanasy, Hartel, & Zerbe, 2000).

1.1.1 *Physiological responses*

Physiological responses caused by emotional modulation of the autonomic and endocrine systems impact on heart-rate, sweat glands, blood pressure and blood flow, suppressing reactivity to pain, whilst at the same time increasing respiration, in readiness for the *fight or flight* response to threat or danger (LeDoux, 1995). The central nucleus of the amygdala, one of the areas of the limbic system, is important for its unique role in this emotional and behavioural process.

The central nucleus is connected to the brain stem which controls heart rate and other autonomic responses (Kapp, Wilson, Pascoe, Supple, & Whalen, 1990;

LeDoux, 1995). Different outputs of the central nucleus mediate individual responses, such as freezing, blood pressure and conditioned responses (Le Doux, Iwata, Cicchetti, & Reis, 1988). Emotional learning may be mediated by a direct pathway, via the thalamus, a process that bypasses the neocortex (Le Doux, 1998). Although this direct pathway is shorter, allowing for a faster transmission, the information received from the thalamus is unfiltered and biased, providing only a 'crude representation of the stimulus' (Le Doux, 1998, p.106). It does have the important advantage of time, by evoking a quick warning that danger may be lurking.

1.1.2 *Evaluation of stimulus*

The thalamic pathway cannot tell the amygdala exactly what the stimulus may be; it is the job of the cortex to interrupt and to prevent an inappropriate response (Le Doux, 1998). The amygdala has been described as the brain's memory bank or storeroom, collating sights and sounds, hopes and fears, pain and joy, frustrations and triumphs and assessing them as a threat or opportunity, by the match of what is happening in the present situation to the stored template of past experiences (Le Doux, 1996; Goleman, 1999).

Hence, sensory data is cognitively evaluated allowing for factual and logical comprehension to take place; then a simultaneous "independent emotion evaluation of the same sensory data 'brings a yield' of feeling experience, giving meaning and vitality to the comprehended information that exists in and around an individual" (Isaacs, 1998, p. 18).

1.1.3 *Emotional meaning*

According to Jenkins, et al. (1998) the principal function of an emotion is to direct attention to any event that is relevant to a concern that is important to an

individual. For example, in the law of situational meaning (Frijda, 1988, p. 349), “in goes loss and out comes grief...in goes frustration or an offence, out comes anger”.

As Frijda (1988) emphasized, it is an individual’s concerns that arise from the actual situation that are pertinent in forming the meaning, not the event itself per se.

1.2 *Emotion and Cognition*

The dual system of cognition and affect appears to involve an independent cataloguing and indexing of experience, and can tune out lesser mood states, allowing for an analytical tracking of content and meaning of earlier experiences (Isaac, 1998; Forgas, 2000). For example, when a new mood state occurs that is similar in kind and intensity as one that has occurred previously, the same individual with the same personality reacts anew, yet in the same way, to similar sensory data (Isaac, 1998).

It may be that emotions differ from moods in that emotions focus on a personally meaningful circumstance, have less duration than moods, and occupy the foreground of consciousness (Oatley & Jenkins, 1996). Fredrickson (2002, p. 122) argues, that these distinctions are “guarded more at theoretical than at empirical levels as in research practice, virtually identical techniques are used for inducing moods and emotions”.

Cognition has at times been considered as being more important than emotions, which were disparaged or thought of as an illness or a defect that required treating (Isaac, 1998). However, the notion that emotions are relational processes has shifted interest to studying emotion and the function of emotional expression, regulation, language, behavioural coping mechanisms and health issues (e.g., Campos, Campos, & Barrett, 1989; Pennebaker & Beall, 1986). With emotion being viewed as an integral part of how an individual interacts within a social world

(Forgas, 2000) came the need to understand the abilities to recognize, understand, and regulate emotions (Salovey & Mayer, 1990) all of which require the capacity for introspection, or an awareness of an inner life in both the self and in others (Isaacs, 1998).

CHAPTER 2

EMOTIONS IN THE WORKPLACE

2.1 *Overview*

Emotions in the workplace have now been recognized as being an inseparable part of organizational life (Ashkanasy, et al., 2000; Zerbe, Hartel, & Ashkanasy, 2000). For most of Western history, emotions have been viewed as a disruption to clear thinking and decision making. For example, writing in the first century BC, Publilius Syrus noted “Rule thy feelings, lest thy feelings rule you”, (cited in Lopes, Cote & Salovey, 2006, p. 55). However, viewing emotions as a disruption to clear thinking and decision making may create a work environment in which employees disconnect both physically and psychologically from the organization (Frost, 2004; Lubit, 2004).

2.2 *Enactment of Emotion*

Research on the impact everyday emotions have in the workplace was ignored until organizations began to focus more extensively on how interpersonal interactions and emotions impact on co-workers and supervisors (Ashforth & Humphrey, 1993) and workplace outcomes (Diefendorff & Richard, 2003; Ashforth & Humphrey, 1995) such as job satisfaction (Levin & Stokes, 1989; Cooper & Cartwright, 1994), positive and negative emotions (Weiss & Cropanzano, 1996), and uncivil workplace behaviour (Basch & Fisher, 2000). It has been argued that a more positive work environment may be created when emotions are expressed openly rather than being denied (Ashforth & Humphrey, 1995). Research also shows that a more trusting work environment is crucial to maintaining a workplace that supports an open communication and expression of emotion (Leung, 2005; Shirey, 2006).

2.2.1 *Emotion display*

Pretending or denying emotions (Brotheridge & Lee, 2003) may impair a person's sense of authenticity (Ashforth & Humphrey, 1993). However, recent research findings show that to maintain an air of professionalism, employees have had to control both their positive and negative emotions (Kramer & Hess, 2000). These 'control moves' are referred to as an intentional effort by an individual (when under scrutiny) to produce certain expressions he or she deems would improve his or her situation (Goffman, 1969). An example consists of individuals using non-verbal cues to feign an expression that they believe others will find credible (Schlenker & Weigold, 1990). This is something that is not easy to do (Ashkanasy, et al., 2000) and can result in emotional strain.

For example, when individuals were instructed to not react to either happy or angry facial stimuli, they still spontaneously and involuntarily produced a facial muscle response pattern that corresponded to particular facial stimuli (Dimberg, Thunberg, & Grunedal, 2002). Preliminary studies have shown that employees are more influenced by perception of non-verbal facial expression in supervisor interactions than by the positive or negative feedback being verbally communicated; furthermore, employees have a higher negative reaction when positive feedback is delivered with negative affect (Ashkanasy, 2000).

Although emotional display was initially examined in an employee-customer-relation context (Hochschild, 1983), the results of later studies showed that similar patterns exist between employees, co-workers and supervisors (Kramer & Hess, 2002). Emotional display has been found to be related to personality variables,

interpersonal job demands, as well as a supervisor's belief about the correct emotion display (Diefendorff & Richard, 2003).

2.2.2 *Emotional dissonance*

Endeavouring to display a false emotion can have negative consequences (Hochschild, 1983), such as emotional dissonance, brought about by the emotional labour involved in conjuring up an appropriate emotion to meet the occasion at hand (Brotheridge & Lee, 2003; Morris & Feldman, 1996; 1997; Rafaeli & Sutton, 1987). To better examine this theory Brotheridge and Lee (2003) developed the Emotional Labour Scale (ELS), a self-report questionnaire that measures six facets of emotional display in the workplace and found that emotional strain results from the effort required for an individual to hide true feelings or to display unfeeling emotions.

Having the confidence to correctly perceive, understand and regulate emotions in the self as well as in others, and to confidently use emotions to facilitate thought, creates an opportunity to reassess the need to continually express 'a false' emotion, when a different emotion is really being felt (Brotheridge & Lee, 2003). This may be the outcome of earlier vicarious reinforcement (e.g. Bandura, 1986) that in the workplace may create an emotional dissonance resulting in emotional labour (e.g. Morris & Feldman, 1997).

2.2.3 *Emotional labour*

Whilst demands to display certain emotions may create emotional dissonance which can increase physiological arousal (Grandey, 2000) and emotional strain (Brotheridge & Lee, 2003), emotional dissonance is an independent construct distinct from the frequency of emotional labour (Abraham, 1998). Employees deal with emotional demanding situations in differing ways (Ashforth & Humphrey, 1993) and

a situation may only become dysfunctional to the extent that the displayed emotion violates the felt emotion (Morris & Feldman, 1997).

For example, some employees may be better actors than others (Goffman, 1969) or use various behavioural and cognitive defense mechanisms to ease the pressure of emotional labour (Ashforth & Humphrey, 1993). Whilst some employees consciously manipulate emotion for political purposes (Liu, Perrewe, Hochwater, & Kacmar, 2004) others apply internal resources to enjoy the rewards of a workplace encounter (Brotheridge & Grandey, 2002). Using internal resources such as emotional awareness (Salovey & Mayer, 1990) may increase workplace functioning.

2.2.4 The advantages of emotional awareness

Emotional awareness has the advantage of increasing a person's ability to experience and express empathy (Goleman, 1995). Empathy is associated with emotional intelligence (Salovey & Mayer, 1990; Schutte et al., 1998) and is a cornerstone to understanding and helping others develop in the workplace, particularly in the supervisor-employee relationship (Abraham, 2004). A recent study conducted in a large community hospital showed that empathetic gestures including emotional support (e.g., being a good listener) helped staff members carry on with their jobs, created powerful emotions of well-being and psychological safety, increased job satisfaction, reduced stress levels and influenced turnover intention (Dutton, 2003).

2.3 Cognitive and Affective Processes

In an attempt to understand more fully organizational cognitive and affective processes, Weiss and Cropanzano (1996) developed the Affective Events Theory (AET). This theory suggests that the work environment consists of discrete events

which prompt momentary positive or negative moods and emotions; accumulation of which can determine an employee's positive and negative affective states, which in turn mediate the effect of an event on attitudes and behaviour. An event may create an affective state that in turn determines an attitudinal state, ultimately ending in a behavioural consequence (Ashkanasy, 2002). However the antecedents and consequences for positive and negative affective reactions vary (Fisher, 2002).

For example, Fisher (2002) found that certain job characteristics (task identity, skill variety, task significance, autonomy, feedback from the job) and positive dispositional affectivity predicted positive affective reactions, which in turn predicted affective commitment and helping behaviour. On the other hand, role conflict and negative affectivity predicted negative affective reactions. Fisher (2002) argues that these findings supported Herzberg, Mausner, and Snyderman's two-factor model (Herzberg, Mausner, & Snyderman 1959 cited in Fisher, 2002) which proposed that different aspects of jobs are associated with good and bad feelings. Furthermore, the differing antecedents and consequences are consistent with positive and negative affect being two separate constructs, supported by Fisher's (2002) study and research on affect in general (e.g. Watson, et al., 1988; Diener & Emmons, 1984; Watson & Tellegen, 1985).

2.3.1 *Emotions and workplace situations*

Basch and Fisher (2000) examined specific emotional and situational components within the workplace. They experimentally examined which types of events were linked to specific emotions such as anger, pride, worry and disgust and found that behaviours associated with two event categories, The Acts of Colleagues

and Acts of Management, accounted for 59% of events causing negative emotions. The acts consisted of behaviours such as backstabbing, refusing to carry one's share of the load and not co-operating. Such events often caused frustration, disappointment, annoyance anger, unhappiness, sadness, disgust, and hurt (Basch & Fisher, 2000). Basch and Fisher found that negative emotions were quite prevalent in the workplace and argued that the dominance of negative emotions indicated that employees and managers alike may not understand how their actions affect those around them.

The acts associated with positive emotions tended to be those involving friendly, helpful, supportive and competent behaviour. Basch and Fisher (2000) reported that in no case was friendly, helpful, supportive behaviour reported in connection with negative emotions, or uncooperative behaviours from others reported in connection with positive emotions.

2.4 Positive and Negative Affect

Positive and negative emotions and their relationship with various antecedents and consequences have important implications for the workplace (George, 1989). As previously stated positive and negative affect are two dominant and independent mood dimensions (e.g. Watson, et al., 1988; Diener & Emmons, 1984; Watson & Tellegen, 1985) with distinctive features and correlates (Watson, 2002). Differences in positive and negative affect may have neurobiological underpinnings; positive affect primarily reflects the level of resting activity in the left pre-frontal region, whereas negative affect is more predominantly found to be associated with right frontal activity (Tomarken & Keener, 1998 cited in Watson, 2002).

Further differences between positive and negative affect include that people who experience positive affect tend to be more creative, resilient, and socially integrated individuals (Fredrickson, 2002). How positive emotions can produce enhanced psychological resilience and emotional well-being was recently investigated by assessing how positive and negative emotions tap into a broadening way of thinking. For example, one study examined the relationship between affect and thinking of different ways to deal a problem, as well as trying to step back from the situation in order to gain more objectivity (Fredrickson & Joiner, 2002). The aim of this research was to predict changes in positive emotions and broad-minded coping over time. Findings that showed an increase in positive mood after broadening thinking was an effect unique to positive emotion alone; fewer negative emotions were not related to broadening thinking.

2.4.1 *Specificity of positive affect*

Positive affect reflects the extent to which a person experiences states such as joy, interest, confidence and alertness (Watson, 2002; Watson & Clark, 1984; Watson et al., 1988). Positive affect is a “component of the approach-oriented behavioural facilitation system”, which evolved to ensure that organisms obtained necessary resources such as food water and shelter (Watson, 2002, p. 107). As Fredrickson (2002) argued, positive emotions seldom occur in threatening situations and therefore the psychological process that narrows the momentary thought-action that promotes decisive action may not be required. Interestingly the higher individuals’ positive affect, the more likely they are to search for a new job to replace a dissatisfying job (Duffy, Ganster, & Shaw, 1998).

Positive affect facilitates pro-social behaviour that is helpful to co-workers (George & Brief, 1992; Isen & Baron, 1991) and has a facilitative effect on motivation, performance and persistence at work (Erez & Isen, 2002), particularly if the connection is made between effort and ultimate performance (Bandura, 1997). Positive affect also promotes cognitive flexibility and facilitates problem solving, decision making, and creativity (Isen, Daubman, & Nowicki, 1987) and is associated with higher levels of emotional intelligence (Schutte, Malouff, Simunek, McKenley & Hollander, 2002).

2.4.2 *Specificity of negative affect*

Negative affect represents negative emotional states such as fear, anger, and tension and have also evolved to serve a particular evolutionary task (Watson, 2002; Watson & Clark, 1984; Watson et al., 1988). Negative affect is a “component of the withdrawal-oriented behavioural inhibition system, which essentially keeps the organism out of trouble by inhibiting behaviour that might lead to pain, punishment, or some other undesirable consequence” (Watson, 2002, p. 107). These specific action tendencies are what make an emotion evolutionarily adaptable; for example, the body has an urge to escape when feeling fear and mobilizes the appropriate autonomic functions in readiness of movement (Fredrickson, 2002). Negative affect is more likely to occur when employees act in ways that do not match their personality traits (Moskowitz & Cote, 1995) or do not express the emotions they are really feeling. This is supported by the findings that negative affect intensifies the effects of emotional dissonance (Abraham, 1999).

The consequences of negative affect have important implications for the workplace (George, 1989) as employees’ satisfaction or dissatisfaction with the job

may well be influenced by their general affective state. For example, employees who score high on negative affect perceive their jobs as containing lower levels of desirable work enrichment (Levin & Stokes, 1989) and they may focus on the unfavourable features of their jobs more closely (Levin & Stokes, 1989) or have a tendency to “look through the glass darkly” when making emotional judgements relating to tasks (Necowitz & Roznowski, 1994; Abraham, 2000a). These individuals may have been strongly influenced by earlier attitudes and beliefs (e.g. Isaac, 1998), therefore when agitated, nervous or pessimistic, they may have a propensity to match job related experiences with pre-existing unpleasant emotional feelings (Kraiger, Billings, & Isen, 1989). The affect infusion model (AIM; Forgas, 1995) proposes that affect is directly related to a person’s cognitive and behavioural processing.

2.4.3 *Cynicism*

In establishing a theoretical framework for understanding the process by which cynicism develops in organizations, Abraham (2000a) argued that individuals predisposed to view life through negative lens are more likely to view themselves as victims of inequity even in situations that do not merit such judgements. Cynical beliefs and negative emotions may be both overtly and covertly expressed through harsh criticism of the organization. Additionally, individuals high in negative affect, are less responsive to fair procedures (Irving, Coleman, & Bobocel, 2005). With such beliefs, it is unlikely that cynics will engage in pro-social behaviour to further the well-being of the organization (Abraham, 2000a).

2.4.4 *Antisocial behaviour*

Individuals who experience negative affect may be more inclined toward antisocial behaviours, such as aggression (Berkowitz, 1989). Furthermore, strong

emotions in the workplace such as jealousy and envy among employees have been blamed for outcomes such as increasing uncivil behaviours (Vecchio, 1995), which will be discussed in more detail in a later chapter. It cannot be assumed, however, that those with high negative affect are necessarily less adjusted to the workplace than those with low negative affect. In some instances those who score low in negative affect fail to acknowledge negative emotions or dissociate from unpleasant experiences (Levin & Stokes, 1989; Watson & Clark, 1984).

Individuals who self-regulate their emotions through a defensive repressive style often claim to experience low negative affect (e.g. Watson & Clark, 1984). Low negative affect scorers are likely to have high scores on the Marlowe-Crowne social desirability scale (Weinberger, Schwartz, & Davidson, 1979). Defensive behaviour may also manifest through the externalization of blame (Vaillant, 1977).

2.4.5 *Blaming others*

Externalizing blame does not usually result from a process of rational thinking and is often a core reaction related to anger (Thompson, 1985). When anxious or angry, individuals tend to consider fewer behaviour options (Ciarrochi & Godsell, 2006). Employees believing that their own negative angry emotions have been caused by other people, such as supervisors or colleagues (Tennen & Affleck, 1990) is an example of this process. Blaming others can be used as an excuse that helps the employee experience greater control over an aversive workplace (Snyder & Higgins, 1988).

General negative emotionality in the workplace, associated with blaming others, can be distinguished among employees through how they spontaneously respond to both positive and negative work events (Huri & Lindeman, 2004).

Blaming others is associated with impairments in emotional well-being and physical health (Tennen & Affleck, 1990) whereas owning one's own behaviour (personal responsibility) has been found to be associated with positive adaptational outcomes (Timko & Janoff-Bulman, 1985).

2.4.6 *Stress*

Perceptions of an insecure organisational future; perceptions of inadequate working conditions, and perceptions of inadequate treatment by the organization have been found to be associated with negative emotions and work stress (Kiefer, 2005). Stress increases when a person perceives a situation to be threatening (LeDoux, 1995; Fredrickson, 2002). Employees may try to escape the threatening situation, such as workplace crises by changing employment (Depue & Monroe, 1986; Hutri & Lindeman, 2000).

Negative emotionality was examined in relation to an occupational crisis, defined "as a state in which employees feel intense work-related anxiety, are unable to solve their problems, and want to escape the threatening situation by changing jobs or occupation" (Hutri & Lindeman, 2002, p. 20). When empirically tested, results showed that negative affect (which can stem from different situations and different interpretation of each situation) and occupational crisis occurred as a function of work overload, interpersonal problems, frustration at work, organizational changes, threat of job loss and/or family worries (Hutri & Lindeman, 2002).

Human physiology allows for rapid changes to take place when an individual is under severe threat (LeDoux, 1995) such as the need to flee from wild animals (Sapolsky, 1999 cited in Ciarrochi & Godsell, 2006). Even though such severe physical threats do not generally occur in today's workplace, workers' bodies show

similar reactions when dealing with social and psychological threats (Ciarrochi & Godsell, 2006). Changes in the level of social and psychological threat in the workplace might account for employees' increased doctor visits and physical symptoms (Chen & Spector, 1991).

CHAPTER 3

EMOTIONAL INTELLIGENCE

3.1 *Overview*

Salovey and Mayer (1990) were among the first to use the term ‘emotional intelligence’ to refer to the ability of individuals to understand and deal with their own and others’ emotions. Emotional intelligence was originally defined 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” (Salovey & Mayer, 1990, p.189). This early definition was drawn in part from Gardner’s (1985) concept of the two-part personal intelligences, intra and interpersonal intelligence. Gardner described intrapersonal intelligence as involving ‘access to ones own feeling life...the capacity instantly to effect discriminations among these feelings and eventually, to label them” and described interpersonal intelligence as involving “the ability to notice and make distinctions among other individuals” (p. 240). Gardner argued that these personal intelligences “should be part of the human intellectual repertoire” (p. 244); with inclusion of knowledge about the self and others, a concept that closely resembled the Salovey and Mayer definition of emotional intelligence.

Emotional intelligence includes using discrimination to understand emotional cues and then drawing on this information to guide both thinking (cognition) and action (behaviour), as well as correctly perceiving, using, understanding and managing emotions in the self and others (e.g. Salovey & Mayer, 1990; Schutte et al., 1998). These processes are defined in detail by a four branch model which builds on the original model of emotional intelligence (Mayer, Salovey & Caruso, 2002).

3.2 *Four Branch Model of Emotional Intelligence*

The four branch model of emotional intelligence as consisting of the abilities to perceive emotion in the self and others, using emotion to facilitate thought, understanding emotion in the self and others, and regulating emotion in the self and others.

3.3 *Perceiving Emotion in the Self and Others*

This aspect of emotional intelligence relates to individuals being aware of both their mood and their thoughts concerning the mood (Mayer & Stevens, 1994).

Perceiving emotions also refers to the ability to recognize how those around them are feeling (Mayer et al., 2002). To be able to accurately identify or perceive one's own emotions as well as the emotions of another, provides an opportunity to make the right responses at the right time (Mayer et al., 2002). For example, an accurate appraisal of emotions begins with noticing emotional expression. If a person is not comfortable with another person's negative emotional expression, and hence turns away when sensing another person's discomfort, the encounter may not result in an accurate perception of his or her own emotional state (Mayer et al., 2002). Research suggests a relationship between the ability to perceive emotions in the self and to be able to accurately perceive emotions in others (Zuckerman, Hall, DeFrank, & Rosenthal, 1976 cited in Mayer et al., 2002).

3.3.1 *Non-verbal cues*

Correct perception of emotions in the self and others is dependent upon non-verbal as well as verbal cues (Salovey & Mayer, 1990). Nonverbal emotional responses include changes in breathing patterns (Aguilera, Lemeigan & Bloch, 1989 cited in Bloch et al., 1991) and changes in facial expressions, posture, vocalizations,

head and eye movements, and muscle contractions (Izard, 1993). Some non-verbal cues such as changes in facial expressions appear to be driven by subcortical processes and outside conscious control (Ekman, 1992) as does the tensing of muscles when angry, blushing when embarrassed or perspiring when fearful (Ashkanasy, et al., 2000).

3.3.2 *Difficulties in perceiving emotion*

Research focusing on alexithymia sheds light on functions relating to perception of emotion. Alexithymia is a disorder that involves difficulties in evaluating and verbally expressing emotion (Davies, Stankov, & Roberts, 1998). These difficulties include difficulty in identifying feelings, difficulty in describing feelings, and externally oriented thinking (Bagby, Taylor & Parker, 1994; Davies, et al., 1998). It is not clear whether alexithymia is associated with a primary dysfunction of perception or an incomplete processing of perceived emotional information (Lane, Ahern, Schwartz, & Kaszniak, 1997). Taylor and Bagby (2000, p. 44) argue that the concept of alexithymia overlaps inversely with Gardner's (1985) concept of intrapersonal intelligence, particularly "the ability to identify, label, and discriminate among feelings and to represent them symbolically"; a definition similar to perception of emotion in the Salovey and Mayer model of emotional intelligence.

Empirical research based on this model found that emotional intelligence correlated strongly and negatively with alexithymia (Schutte, et al., 1998). Alexithymia also correlated negatively with scores with the Bar-On Emotional Quotient Inventory (EQ-i; Bar-On, 1997). This measure of emotional intelligence also incorporates the intrapersonal and interpersonal intelligences (Gardner, 1985) as well as adaptability, stress management and general mood (Bar-On, 1997). Taylor

and Bagby, 2000) argued that that as well as lacking emotional self-awareness, individuals with alexithymia have problems establishing warm and intimate relationships, have a proclivity to experience dysphoric states and are not able to think about emotions in order to deal with stressful events.

3.4 *Using Emotion to Facilitate Thought*

Facilitating thought has to do with “how much a person’s thoughts and other cognitive activities are informed by his or her experience of emotion”; for example, how emotions affect cognition to assist effective problem-solving, reasoning, decision making and creative endeavors (Mayer, et al., 2002, p. 19). As explained by Mayer et al. (2002) emotions can change the way people think (for example promoting positive thoughts when a person is happy and negative thoughts when a person is sad). Cognition can also be disrupted by emotions, as when a person is experiencing excessive anxiety or fear. It is during these times that the cognitive system needs to re-prioritize and attend to what is important (Mayer et al., 2002).

3.5 *Understanding Emotions in the Self and Others*

“Understanding what leads to various emotions is a critical component of emotional intelligence; for example, annoyance and irritation can led to rage if the cause of the irritation continues and intensifies” (Mayer et al., 2002, p. 19). Understanding one’s own emotions is a prerequisite to self-control and anger management (Bodine & Crawford, 1999). In dealing with other people and enhancing self-understanding of emotion, it is necessary to understand how emotions combine and change over time (Mayer et al., 2002). Understanding the emotions of others is vital for empathetic interaction (Salovey & Mayer, 1990; Goleman, 1995).

3.5.1 *Empathy*

Empathy is often conceived of as a sympathetic reaction to distress or as a reflection of social and emotional understanding (Feshbach, 1989). It may be contingent upon the cognitive abilities to “a) discriminate between the affective cues of others, b) assume the perspective and role of another person, c) be emotionally responsive and, d) have the affective ability to experience emotions” (Feshbach, 1989, pp. 352-353). Individuals with alexithymia have reduced empathy, perhaps because they lack understanding of the feelings of others as well as an understanding about their own emotions (Mayer, Salovey, Gomberg-Kaufman, & Blainey, 1991).

3.5.2 *Non-verbal communication*

In order to understand one’s own emotions as well as the emotions of others it is important to understand the emotional meaning of nonverbal communication. A high proportion of emotional meaning (93%) maybe conveyed without words; 55% via facial expressions, body posture and gestures, and 38% through tone of voice (Mehrabian, 1968). Non-verbal cues also include rolling the eyes, raising the eyebrows, folding the arms, and/or slouching (Duke, Nowicki, & Martin, 1996). A proportion of emotional meaning is also conveyed through non-word sounds such as the rate of speech, sounds such as grunts, and sighs etc (Duke, et al., 1996).

Although a non-verbal cue has to be initially perceived, it is important to understand its meaning in order to understand one’s own and others’ emotional responses (Salovey & Mayer, 1990). As Fitness (2001) pointed out, some people may be completely unaware of another person’s feelings and have no idea if their partner is feeling angry, sad or jealous, whereas others can be oversensitive and over-interpret even the slightest non-verbal cue such as a frown or the raising of an eyebrow.

3.6 *Regulation of Emotion in the Self and Others*

An important issue for emotional intelligence theory is what is gauged as an intelligent approach to emotion regulation (Mayer & Salovey, 1995). Even though Mayer and Salovey argued that there may be more than one correct approach, they suggested three propositions that describe intelligent ways to construct and regulate emotions; “that people should optimize their pleasures over the long term; emphasize emotions that are both pro-individual and pro-social; and carefully review a context before deciding what emotion is optimal to feel” (p. 198).

Emotion regulation has been described as “the processes by which individuals influence which emotions they have, when they have them and how they experience and express these emotions” (Gross, 1998, p. 275). Regulation of emotion includes the ability to alter the affective reactions of others (Salovey & Mayer, 1990). A subscale of the Trait Meta-Mood Scale (Salovey, Mayer, Goldman, Turvey, & Palfai, 1995) was designed to measure the regulation, monitoring and evaluation of emotion and was found to have a significant relationship with emotional functioning (Duran, Extremera, & Rey, 2004). A significant relationship was also found between the ability to regulate emotions and the quality of social interactions (Lopes, Brackett, Nezlek, Sellin, & Salovey, 2004).

Emotion can be regulated at five points in the emotion generation process, (Gross, 1998); 1) selection of the situation, 2) modification of the situation, 3) deployment of attention, 4) change of cognitions, and 5) modulation of responses. Individuals differ in their ability to regulate emotions, and some strategies are more successful than for a given individual than other strategies (Mayer & Salovey, 1997; Salovey & Mayer, 1990).

3.6.1 *Suppressing emotion*

Individuals who habitually suppressed emotion were less likely to disclose, not only negative but also positive emotions, and also reported substantially more avoidance strategies; which in turn were related to inauthentic interactions (Gross & John, 2003). Even though individuals were aware of being inauthentic, they tended to behave in an inauthentic manner in an attempt to be liked (Gross & John, 2003). Suppression dampens emotions and reduces the information about the world that accompanies the emotional response (Freud, 1966, p. 32 cited in Mayer & Salovey, 1995). Additionally, managing or regulating emotions by this method comes at the cost of not being able to problem solve due to the lack of emotional awareness (Miller & Swanson, 1960). Any psychological process that blocks the flow of emotional information may reduce levels emotional intelligence (Mayer & Salovey, 1995; Mayer, Caruso, & Salovey, 1999).

3.6.2 *Reappraising emotion*

Research indicates that reappraising an emotion by changing the thoughts regarding a situation is associated with better interpersonal functioning and is associated with disclosing emotions, both positive and negative with others (Gross & John, 2003). Additionally, those who reappraise emotion experience more positive affect, fewer symptoms of depression and are more satisfied with life, more optimistic, have better self esteem and well-being and have higher levels of environmental mastery and self-acceptance (Gross & John, 2003).

Reappraising to the point of ruminating however will tend to maintain negative affect (Martin, Tesser, & McIntosh, 1993) increase anger (Rusting & Nolen-Hoiksema, 1998) and interfere with interpersonal problem solving (Lyubomirsky &

Nolen-Hoekesema, 1995). Reflection, another means of self examination, has been found to correlate with rumination (Fresco, Frankel, Mennin, Turk, & Heimberg, 2000). Higher emotional intelligence has predicted fewer cognitive intrusions and less ruminative thinking (Salovey et al., 1995). The personality characteristic of openness to experience incorporates openness to different types of thoughts (McCrae & Costa, 1990) and this construct also correlates positively with emotional intelligence (Schutte et al., 1998).

3.6.3 *Belief system*

Mayer and Salovey (1995, p. 197) argued that “as individuals develop increasingly complex representations of a situation, their emotional reactions may merge with more complex thoughts...for example, a person who believes anger is bad in a particular situation and who repeatedly behaves angrily in spite of such beliefs, may be considered emotionally unintelligent...this may be because the belief is incorrect or because the belief is correct but the reaction is not controlled due to missed opportunities for self-regulation”.

3.7 *Ability versus Mixed Model Conceptualisations of Emotional Intelligence*

In the original model of emotional intelligence proposed by Salovey and Mayer (1990) emotional intelligence was considered to intersect between two fundamental aspects of personality, the cognitive and emotional systems (Mayer & Salovey, 1995) “where standards of intelligence could be applied to cognitive performance and standards of adaptation to emotional reactions” (p. 197).

The four branch model of emotional intelligence (Mayer, Salovey & Caruso Emotional Intelligence Test; MSCEIT; 2002) focused on the *ability* to effectively perceive, use, understand and regulate emotions. Thus, as well as refining the

emotional functions included in the concept of emotional intelligence, the later model emphasises emotional intelligence ability, which can be viewed as a potential or maximal functioning, as opposed to emotional intelligence as a personality characteristic, which can be viewed as typical functioning.

3.7.1 *Emotion and cognition*

Mayer, Salovey, and Caruso (2000) differentiated between models of emotional intelligence that focus on the nexus between emotion and cognition, which they termed ability models, and those that also include more general social skills and coping skills, which they termed mixed models. Mayer et al's., (2002) four branch model is an ability model while the model developed by Bar-On (1997) is a mixed model. Mixed models include characteristics such as self-regard, stress management, self-actualization and motivation in their definition of emotional intelligence (Bar-On, 1997).

3.7.2 *Ability and trait models*

Petrides and Furnham (2003) took a somewhat different view of alternative conceptualisations of emotional intelligence. They differentiated between ability models, which focus on maximal capability or potential, and trait models, which focus on typical or dispositional functioning. Based on a content analysis of the literature on emotional intelligence Petrides and Furnham (2001, p. 428) identified a sampling domain encompassing different operationalizations of the trait construct, and named them as follows: “adaptability, assertiveness, emotion appraisal (self and others), emotion expression, emotion management (others), emotion regulation, impulsiveness (low), relationship skills, self-esteem, self-motivation, social competence, stress management, trait empathy, trait happiness, and trait optimism”.

3.8 *Assessment of Emotional Intelligence as Ability and Mixed Model Trait*

Two major approaches to assessing emotional intelligence are assessment of maximal performance and assessment of typical performance. Assessment of maximal performance is used to measure emotional intelligence ability and follows the format of cognitive intelligence tests such as the WAIS. Assessment of typical performance follows the format of many personality trait measures. The most commonly used measurement approach, both in personality assessment in general and in assessment of emotional intelligence as a trait, is self-report. Performance tests have responses that are evaluated against objective, predetermined scoring criteria whereas self-report measures require that respondents report their own level of emotional intelligence (Ciarrochi, Chan, Caputi, & Roberts, 2001).

3.8.1 *Emotional intelligence assessed as ability*

The Multifactor Emotional Intelligence Scale (MEIS: Mayer, Salovey & Caruso, 1997) is an ability or performance measure of emotional intelligence. The MEIS consists of a set of 12 ability tasks; it was constructed to assess the four-branch model, the intention being to demonstrate that emotional intelligence relates to processing information; as well as to emphasise the cognitive component “to access and generate emotions to assist thought” (Mayer & Salovey, 1997, p.5).

The MSCEIT, a refinement of the MEIS is also an ability or performance measure of emotional intelligence. It was designed to yield an overall score as well as subscale scores for ‘perception of emotion’, measured in faces, landscapes and abstract designs; ‘emotional facilitation’, assessing whether individuals use emotion to facilitate cognitive abilities; ‘understanding emotion’, involving matching a set of emotions, such as joy and acceptance, to a single emotion representative of the

combination; and 'managing emotion' concerning the best way to regulate emotions in oneself and others (Mayer et al., 2002).

Mayer, et al. (1999) argued that a standard intelligence consist of mental abilities which meet certain correlational conditions, and that these abilities develop with age. Using the MEIS (Mayer, et al., 1999), they found that emotional intelligence met the above criteria. Emotional intelligence was operationalised as a set of ability tests; performance on these ability tests correlated moderately, [adults ($n = 503$, $r = .36$, $p < .01$) adolescents (12-16) ($n = 229$, $r = .45$, $p < .01$)] with a measure of verbal intelligence, indicating that emotional intelligence is related to other intelligences without being the same. To test whether emotional intelligence increases with age, the performance of an adolescent sample was compared to the performance of an adult sample. As hypothesized, the adult sample performed better than did the adolescents, showing that emotional intelligence increased from early adolescence to young adulthood (Mayer et al., 1999).

The MEIS was criticized with regard to the convergence between scoring methods (Roberts, Zeidner, & Matthews, 2001), an issue that was re-examined with the construction of the MSCEIT (Mayer et al., 2002). The predictive and incremental validity of the MSCEIT was supported (Lopes et al., 2004), as was the reliability of the total scale, area and branch levels; although the reliability for most of the subscales within branches was relatively low (Palmer, Gignac, Manocha, & Stough, 2005).

3.8.2 *Emotional intelligence assessed as a mixed model trait*

Although Salovey and Mayer (1990) were among the first to use the term 'emotional intelligence' to refer to the ability of an individual to deal with his or her

emotions, Bar-On (2000) began the development of the EQ-I (Bar-On, 1997) in 1983. The purpose of the measure is to examine different factors considered to be “key components of effective emotional and social functioning that led to psychological well-being” (Bar-On, 2000, p. 364).

The Emotional Competence Inventory (ECI) is another mixed model trait measure. It assesses competencies that enable individuals to demonstrate intelligent use of emotions in both managing the self and in working effectively with others (Boyatzis, Goleman, & Rhee, 2000).

The Wong and Law Emotional Intelligence Scale (WLEIS; Wong and Law, 2002) was based on Mayer and Salovey’s (1997) work. This scale provides an overall EI measure (WLEI) and 4 subscales, titled self emotional appraisal (SEA), others-emotion appraisal (OEA), regulation of emotion (ROE) and uses of emotion (UOE). The Assessing Emotions measure of emotional intelligence (Schutte, et al., 1998) was based on the original Salovey and Mayer (1990) model. This measure assesses typical, or trait, emotional intelligence. High scores on this measure were found to be associated with specific aspects of awareness and expression of emotion, less impulsivity, more openness to new experience, greater clarity of feelings and lower alexithymia.

3.9 Utility of Different Measurement Approaches

According to Petrides and Furnham (2003) the operationalization of emotional intelligence through ability or performance measurement (e.g. Mayer et al., 1999) will not produce the same findings as emotional intelligence operationalized through the self-report (e.g. Schutte, et al., 1998, Bar-On, 1997) method of measurement. For example, some emotional experiences are inherently subjective and therefore not open

to an objective scoring criteria which comprises of items that are either correct or not correct (Petrides & Furnham, 2003), but such experiences may be assessed through self-report. As Ciarrochi et al. (2001) noted performance and self-report measures are both important because what people believe to be true can be just as important as what is actually true.

Performance measures usually take longer to administer because a substantial number of observations need to be made before the level of emotional intelligence can be ascertained, whereas self-report measures require individuals to have insight into their own level of emotional intelligence. Self-report measures seem to allow individuals to answer personally relevant experiences (e.g. Taylor & Bagby, 2000) and to put their emotional skills into the context of their life.

The MSCEIT performance measure (Mayer et al., 2002) has proven successful in its predictive ability. However, Ciarrochi and Godsell (2006) argue that it is “possible to be emotionally intelligent with regard to the processing of unfamiliar emotional information (performance measures) but not be emotionally intelligent when it comes to processing emotional information in the context of our everyday lives” (p. 47). On the other hand, an advantage of performance measures, in testing actual ability rather than perceived ability, is that they minimise self-enhancing or faking (Lopes, et al., 2006).

Research shows only modest correlations between self-report and performance measures with self-report measures of emotional intelligence more likely to be related to personality traits (Ciarrochi et al., 2001; Van Rooy, Viswesvaran, & Pluta, 2005). A comparison of MSCEIT scores with the EQ-i self report measure of emotional intelligence (Bar-On, 1997) showed the overall test-to-test correlation in a sub-sample

of 137 was $r = .36$, indicating the two tests share about 10 percent of their variance in common (Mayer et al., 2000).

Other research (Brackett & Mayer, 2003) found that the MSCEIT showed minimal relations to the EQ-i (Bar-On, 1997) and the 33-item assessing emotions measure of emotional intelligence (Schutte, et al., 1998), whereas the latter two measures were moderately interrelated. Additionally, among the emotional intelligence measures, the MSCEIT did not share much variance with personality and well-being measures, whereas the EQ-i and Assessing Emotions measures shared considerable variance with these measures (Brackett & Mayer, 2003). Goldenberg, Matheson, and Mantler (2006) found that the Schutte et al (1998) assessing emotions scale showed a consistent relationship with self-reported coping styles and depressive affect, whereas the MSCEIT demonstrated stronger relations with age and education.

3.10 *Emotional Intelligence and Other Constructs*

The construct of emotional intelligence intersects with other intrapersonal characteristics to the extent these other characteristics are associated with the interaction of emotion and thought (Mayer, 2001). A model (figure 3.1) devised by (Ciarrochi, et al., 2001) shows how intelligence can be applied to everyday situations and clarifies how and why emotional intelligence may intersect with other constructs. The authors point out that emotional intelligence does not just relate to life events, adaptation or life outcomes, it is also an ability that helps a person to understand and predict these everyday occurrences.

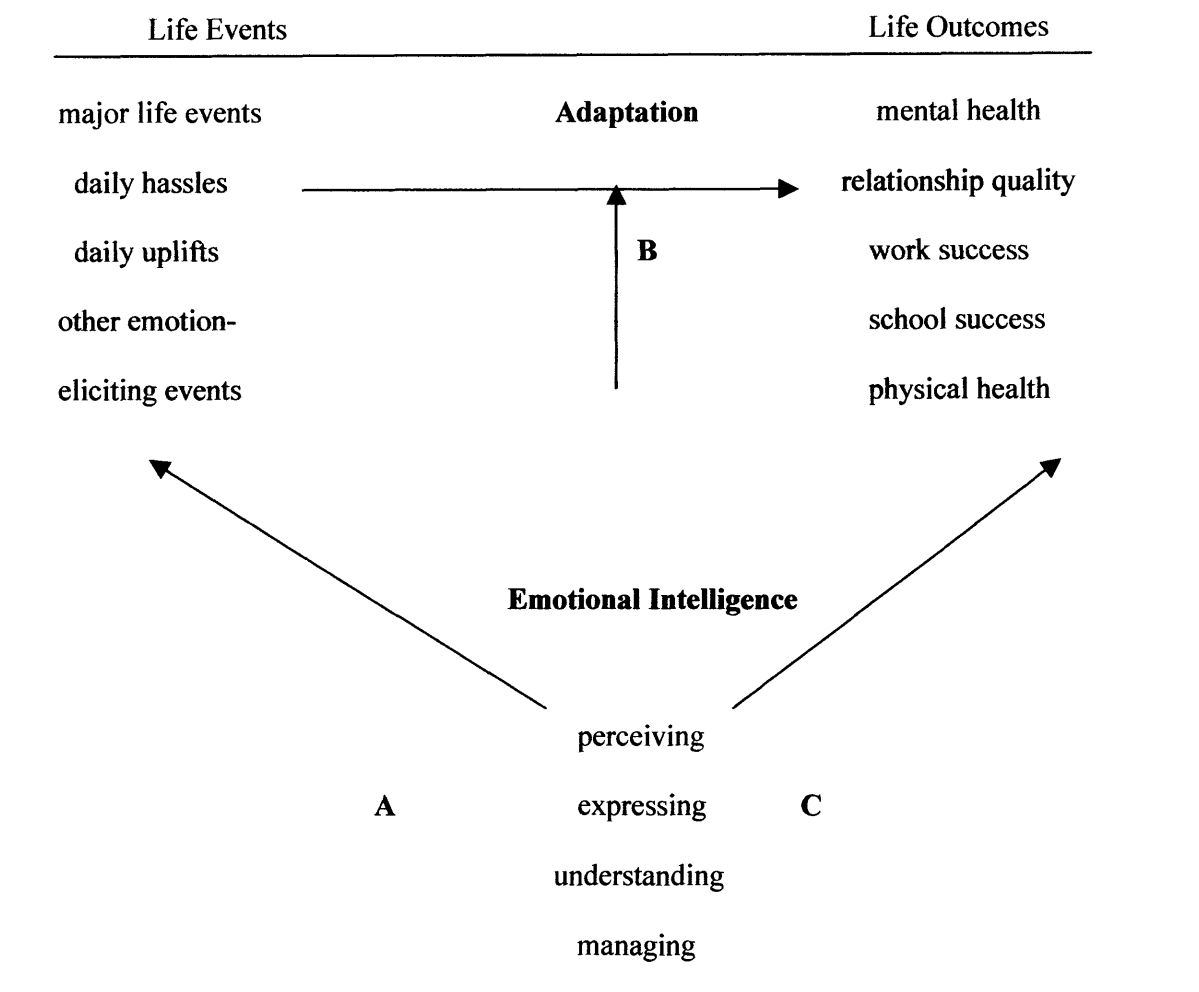


Figure 3.1. The role of emotional intelligence in everyday life (from Ciarochi, Chan, Caputi, & Roberts, 2001).

According to this model those low in emotional intelligence will adapt poorly to stressful life events, responding with more depression, hopelessness, and other negative life outcomes. Conversely, people high in emotional intelligence will adapt better to negative life outcomes, in part, because they will manage situations differently, which will help produce more positive outcomes. Emotional intelligence has been associated with greater clarity and attention to feelings, greater mood repair, greater optimism, less pessimism as well as less impulsivity (Schutte, et al., 1998).

Higher emotional intelligence has also found to be associated with positive

mood, positive mood state and higher self-esteem, (Schutte et al., 2002). The authors suggest that people with high emotional intelligence may be able to maintain higher positive mood states and higher self-esteem states because their ability to regulate or manage emotions counterbalances the effects of negative situations.

As discussed in a previous section, alexithymia is associated with low emotional intelligence and well-being (Austin, Saklofske, & Egan, 2005). Empathy, also previously discussed, is another construct associated with emotional intelligence (Schutte et al., 2001). To feel empathy, an individual has to be able to accurately comprehend (understand) the emotional experience of another person in need (Mehrabian & Epstein, 1970 cited in Mayer, DiPaolo, & Salovey, 1990).

Neuroticism, an important mood-related personality trait, may also be related to emotional perception (Mayer & Salovey, 1988). Yet as Mayer and Salovey (1988) argue, neurotic people tend to be more emotionally labile and although they may be able to recognize emotions in others, this recognition may act as a trigger to distort or intensify their negative emotional perception.

People with higher scores on emotional intelligence have better social skills (Engelberg & Sjöberg, 2005) display more co-operative responses towards their partners, and experience more marital satisfaction (Schutte, et al., 2001). This may be due in part to the association of emotional intelligence with attention to feelings, clarity of feelings, mood repair, optimism (Schutte, et al., 1998) positive mood state and self-esteem (Schutte, et al., 2002). Higher emotional intelligence is also predictive of incoming college students' intelligence scores and their end of year grade point average (Schutte, et al., 1998). Higher emotional intelligence among

undergraduate college students has been found to be related to a more challenging and enhanced performance (Lyons & Schneider, 2005).

Higher emotional intelligence has been found to be correlated with greater life satisfaction, better perceived problem-solving, better coping ability and reduced anxiety (Bastian, Burns, & Nettlebeck, 2005). Summerfeldt, Kloosterman, Antony, and Parker (2006) found a relationship between emotional intelligence and less social interaction anxiety. Other studies found that lower emotional intelligence scores predicted alcohol-related and drug-related problems (Riley & Schutte, 2003; Austin, et al., 2005) and adolescents' alcohol and tobacco use (Trinidad, Johnson & Anderson, 2002).

CHAPTER 4

EMOTIONAL INTELLIGENCE IN THE WORKPLACE

4.1 *Overview*

Emotional intelligence has been found to play an important role within the workplace. For example, when employees correctly perceive emotional cues it may encourage them to attend more to the emotions of their colleagues (Lopes et al., 2006). As Lopes et al. argue, understanding the consequences of emotion might help a person abstain from making an important decision when angry. For example, the person may be more aware that a decision made in anger may involve an element of risk and delay making the decision until calmer. Additionally, knowing what causes a colleague's emotions to change helps individuals to devise a better plan regarding how to work with that colleague.

How a person manages his or her own and others' emotions in the workplace can have a major impact on workplace outcomes (Caruso & Wolfe, 2001), such as achieving goals (George, 2000; Salovey, et al., 2002) boosting team effectiveness (Jordan, Ashkanasy, & Hartel, 2003) cooperating with other co-workers, and contributing to a positive workplace environment (Lopes et al., 2006). Other workplace outcomes related to emotional intelligence are job satisfaction, general health, trust, turnover intention, organizational productivity (Sinha & Jain, 2004) organizational commitment (Carmeli, 2003; Aremu, 2005), organizational citizenship behaviours (Carmeli & Colakoglu, 2005) and conflict resolution (Jordan & Troth, 2002).

4.2 *Emotional Intelligence and Work Performance*

Several studies have found that emotional intelligence is associated with performance at work (e.g. Van Rooy & Viswesvaran, 2004; Goleman, 1995). For example, employees' supervisor rated task performance has been found to be related to their level of emotional intelligence (Carmeli & Josman 2006). Task performance was operationalised by supervisor-rated qualities such as completion of tasks, quality of performance, and achievement of work goals (Carmeli & Josman, 2006).

Emotional intelligence also predicted the performance of recruits serving in combat units in the Israeli Defense Forces up to 15 months after they completed an emotional intelligence measure. The combatants were rated on professional performance, cooperation with others, social involvement, performance under pressure and reliability. The model predicted 30% of the variance in performance in combatant soldiers, correctly identifying 78% of the high and low performers (Bar-On, Handley, & Fund, 2006).

Emotional intelligence predicted the difference between soldiers selected into an elite, highly stressful, and dangerous flying unit and recruits going into non-combatant roles in the Israeli Defense Forces (Bar-On et al., 2006). Members of the elite combat units had significantly higher emotional intelligence scores than the low performers. Analysis showed that the specific mixed model emotional intelligence competencies predicting selection into the elite unit included assertiveness, impulse control, stress tolerance, and flexibility (Bar-On, et al., 2006).

4.2.1 *Sales performance*

Emotional intelligence has been used to predict the effectiveness of sales performance. Even though a sales position may be thought of as a transaction of

involving goods and services it is also an emotional and relational transaction (Sala, 2006). In one study, the emotional competence Inventory (ECI) was used to assess whether emotional intelligence competencies were related to behaviours that lead to better performances (Lloyd, 2001 cited in Sala, 2006). Results showed a strong relationship between the self and managerial rating on the ECI and the salesperson's performance.

4.3 *Emotional Intelligence and Leadership*

Several studies have explored the relationship between emotional intelligence and leadership. For example, the relationship between emotional intelligence and leadership qualities was explored in a study focusing on management students working on a 10-week project (Cote, Lopes, & Salovey, 2004 as cited in Lopes, et al., 2006). Individuals scoring high on the MSCEIT (Mayer et al., 2002) were rated by their peers as proposing more constructive goals and ideas for their group project. This relationship was statistically significant after controlling for personality traits and demographic characteristics. These findings suggest that emotionally intelligent leaders may perform better than their counterparts, be more successful in producing and communicating inspiring ideas and may generate more enthusiasm for their ideas (Cote et al., 2004 as cited in Lopes et al., 2006).

Soldiers with leadership potential were found to have significantly higher emotional intelligence scores than those without leadership potential (Bar-On et al., 2006). The emotional competencies assessed by peer report that predicted leadership potential included empathy, reality testing, stress tolerance, self-regard, and flexibility; 15% of the variance in peer assessed leadership potential was accounted

for by total emotional intelligence scores, resulting in a 65% accuracy of correctly identifying 7 out of 10 of those recruited (Bar-On, et al., 2006).

4.4 *Emotional Intelligence and Problem Solving*

Problem solving has been found to be a core quality for organizational effectiveness and productivity (Sinha & Jain, 2004). Those higher in emotional intelligence have been found to solve more problems than those with lower emotional intelligence; in addition, those with higher emotional intelligence solved more problems even after encountering very difficult and frustrating sets of problems (Schutte, Schuettpeiz, & Malouff, 2001).

4.5 *Emotional Intelligence and Group Effectiveness*

Elfenbein (2006) pointed out that it is only in recent times that the importance of emotional intelligence in work groups has been examined. A longitudinal study (Elfenbein, Polzer, & Ambady, 2004 as cited in Elfenbein, 2006) found that teams with greater than average composite emotional intelligence experienced better team functioning. In this study perceiving and understanding the emotions of others were particularly important dimensions of emotional intelligence predicting team functioning. Findings showed that the teams that scored higher on Diagnostic Analysis of Nonverbal Accuracy (DANVA; Nowicki, & Duke, 2001 as cited in Elfenbein, 2006) reported they had accomplished more in their collaborative work; further, these teams retained more of their team members throughout the year long program.

Team members may also gain knowledge about emotions through observing other team members that make them more emotionally aware of their own behaviour and their emotional responses (Jordan & Ashkanasy, 2006). Jordan and Ashkanasy

found that high emotional self-awareness predicted team effectiveness. Although the Jordan and Ashkanasy findings related to emotional self-awareness rather than emotional intelligence per se, the findings can provide an insight into the role of emotional intelligence in work settings.

Team members' sharing positive moods with each other can also promote work effectiveness (Effenbein, 2006). Teams who have leaders who express positive moods exhibit more coordination and expend less effort than the teams with leaders in negative moods (Sy, Cote, & Saavedra, 2005). These findings suggest that group emotions and the contagion of emotional tone (Barsade, 2002) can influence cooperation, performance and conflict (Effenbein, 2006).

4.6 *Emotional Intelligence and Recruitment*

Employee selection processes are guided by the assumption that individuals with certain characteristics will perform better and may eventually affect the overall performance of the organization (Aydin, Leblebici, Arslan, Kilic, & Oktem, 2005). Cognitive tests aimed at measuring reasoning ability and other mental capabilities like memory, inductive reasoning, verbal fluency and numerical abilities do predict performance somewhat, but leave much unpredicted variance, especially for employees operating in stressful circumstances (Holloway, 1999 as cited in Aydin et al., 2005).

Using a self-report emotional intelligence measure to test job applicants can reduce number of costly mismatches in organizational performance. For example, the EQ-I identified high and low performance among U.S. Air Force recruiters; it had an accuracy of 72%, that is, nearly 7 out of 10 individuals could be correctly identified as having the potential for being a high or low performing recruiter (Bar-On et al, 2006).

These findings could not be accounted for by relationships between emotional intelligence and gender, ethnicity, education, age, geography, or hours worked (Bar-On, et al., 2006).

As Bar-On, et al. (2006) reported that before this study was conducted it cost the US Air Force \$3million per year for an average of 100 mismatches. These mismatches involved approximately 25% of recruits. The researchers' model was able to correctly classify 81% of all successful and unsuccessful recruits after only one year of using a preemployment emotional intelligence screening device for hiring recruits.

4.6.1 *Emotional Intelligence and career success*

A relatively consistent pattern has been found between career success and emotional intelligence. Those with higher emotional intelligence have higher salaries, higher job satisfaction, including satisfaction with goals, and more promotions (Sala, 2006). Additional findings showed that those with higher emotional intelligence felt more respected and accepted by both peers and superiors alike (Sevinc, 2001 cited in Sala, 2006).

CHAPTER 5

SELF-EFFICACY

5.1 *Overview*

Self efficacy beliefs consist of “beliefs in one’s capabilities to organize and execute the courses of action required to produce a given attainment” (Bandura, 1997, p. 3). To understand how self-efficacy develops requires an understanding of the broader theoretical concepts of social cognitive theory (Maddux, 2002). This theory is an approach to understanding human cognition, action, motivation, and emotion that has as its underlying assumption that an individual has active participation in the shaping of his or her environment (Bandura, 1986, 1997) that enables him or her to bring about self-development, adaptation, and change (Bandura, 2001).

5.2 *Social Cognitive Theory*

Social cognitive theory suggests that the development of self-efficacy is strongly influenced by the capacity for understanding cause and effect relationships and the capacity for self-observation and self-awareness (Maddux, 2002). These cognitive structures provide standards of reference against which behaviour can be judged, together with a set of functions for the perception, evaluation, and regulation of action (Bandura, 1986). For example, as infants come to learn that their actions affect the environment and produce results, they begin to test their sense of agency through planning intentional action, and as they do so, their expectations, through this exploration, verify their agentive or self capabilities, and provide the knowledge that they can make things happen (Bandura, 1997).

The processes of social cognitive theory are based on the following basic premises (Bandura, 1997; Maddux, 2002): humans have powerful cognitive or

symbolizing abilities that can 1) create internal models of experience, 2) develop innovative courses of action; 3) create hypothetical testing of these courses of action through the prediction of outcomes, and 4) communicate complex ideas and experiences to others.

Second, environmental events and personal occurrences, such as the cognitive, emotional, and biological, are all reciprocally influenced. Cognition gives humans the means to exercise control over behaviour which in turn influences not only the environment but also emotional and physiological states. Third, the social orientation of personality and self are not just what a person brings to the interaction with others, personality and self are actually created in these interactions, and therefore change through these interactions.

Finally, humans are capable of self-regulation. For example, goals are chosen and then behaviour is regulated in order to pursue these goals. At the foundation of self-regulation is the ability to anticipate outcomes, that is, to use past knowledge and previous experiences to develop beliefs about the future and beliefs about competencies and behaviour.

5.2.1 Knowledge, skills and self-efficacy

Competencies are developed in varying degrees with varying diversity and different competencies, all requiring different knowledge and skills (Bandura, 1997). Bandura (1997) argued that efficacy is not a fixed ability that an individual has or does not have as part of his or her behavioural repertoire any more than one “would regard linguistic efficacy as a collection of words ...in a verbal repertoire” ...instead, “efficacy is a generative capability in which cognitive, social, emotional, and

behavioural sub-skills must be organized and effectively orchestrated to serve innumerable purposes” (Bandura, 1997, p. 36-37).

Perceived self-efficacy does not relate to the number of skills or sub-skills a person has, but to the person’s belief about what he or she can do with what he or she has, and what can be brought about under varying circumstances (Bandura, 1997).

An individual may have needed skills, yet may not be able to integrate these appropriately in order to bring about an effective outcome (Bandura, 1997).

5.3 *Four Sources of Self-Efficacy*

Bandura (1986; 1997) proposed four fundamental sources of self-efficacy; enactive mastery (personal achievement or attainment), vicarious experiences (e.g. modelling), verbal persuasion (guidance and support) and physiological and affective states (such as anxiety and arousal).

5.3.1 *Enactive mastery*

Enactive mastery experiences provide the most genuine evidence of whether a person can actually achieve positive outcomes. Through mastery, a person builds a sound belief in his or her own personal efficacy, and then acts on his or her beliefs through appraising the achieved performance (Bandura, 1997). In some circumstances, failure may undermine this belief. Successful conditions have been found to elicit higher self-efficacy, whereas failure has been found to result in less efficacy (Gernigon, Fleurance & Feine, 2000). Yet, as Bandura (1997) pointed out, failure situations can sometimes also be the opportunity to turn failure into success by persevering in the face of adversity.

Enactive mastery relates not just to existing behaviour, it involves being able to acquire the cognitive, behavioural and self-regulatory tools for creating and

carrying out courses of action (Bandura, 1986). Yet in some instances, acquiring the cognitive, behavioural and self-regulatory tools for creating and carrying out courses of action to manage changing circumstances does not lead to an enactive mastery (Majer, Jason, Ferrari, Olson, & North, 2003). Majer et al. (2003) studied a group of residents living in a substance recovery facility. Although residents' scores on optimism and abstinence self-efficacy were significantly and positively correlated, residents' enactive mastery scores were significantly and negative related to both optimism and abstinence self-efficacy. Majer, et al., argued that these paradoxical findings may be due to communal living and a 12-step philosophy that can be antithetical to a sense of control, which may have influenced the residents' emotional regulation of stress.

5.3.2 *Vicarious experience*

Vicarious experience, involving observing people mastering a task can increase one's own beliefs that one can do likewise and is a further means through which people can increase their efficacy appraisals (Bandura, 1997). Vicarious and imaginal images can teach new skills and enhance the confidence or self-efficacy to undertake these skills. Sources of vicarious information include modelling films and videotapes, which have been successfully used to encourage children to interact with their peers (Maddux, 2002). For example, when children view films in which they see other children who are similar to themselves experience success, they come to the understanding that they can do the same as the children on the video clip (Conger & Keane, 1981).

Further examples of how vicarious experiences can enhance self-efficacy include testimonials from well-known people, who express how they have been able

to lose weight or stop smoking. They communicate the idea that the observer can also accomplish these tasks, no matter how difficult the tasks appear (Maddux, 2002).

Bandura (1997) emphasised that the reason modelling is effective is that most events do not have an absolute measure of adequacy, therefore, appraising one's own capabilities is achieved in part through appraising the capabilities and attainments of others. Perceived self-efficacy is particularly susceptible to change through modelling influences when a person has had little experience with which to weigh up his or her own capabilities. The contribution of the modelling experience is also important when a perceived lack of efficacy signifies a deficit in actual skill rather than an incorrect appraisal of an existing skill (Bandura, 1986).

5.3.3 *Verbal encouragement*

Verbal persuasion from others relates to a person's ability to accomplish the behaviour successfully. People who are verbally persuaded that they have the ability to master a task are more likely to maintain the effort required to do so than those who are not encouraged (Bandura, 1997). Bandura argued that verbal persuasion can bolster people's beliefs that they do have the capability to achieve their goals. Goals can be in a variety of realms, and can include giving up smoking, losing weight, or confronting a difficult employee (Maddux, 2002).

Verbal transmission of information can influence internal scripts relating to efficacy. The scripts people have collected over a lifetime can negatively shape their experience and anticipation of current situations. For example, for many people in sub-Saharan Africa, HIV and other threats to reproductive health involve scripts of stigmatization, isolation and social paralysis (Galavoti, Pappas-DeLuca, & Lansky, 2001). The Modelling and Reinforcement to Combat HIV (MARCH) program,

linking radio and television to the power of social and cultural narratives, is providing the required information to equip young people with the necessary resources to rewrite such scripts (Galavoti, et al., 2001).

It is easier to develop and maintain a sense of efficacy if significant others express support and faith in one's capabilities, as long as these positive appraisals are within realistic bounds (Bandura, 1997) and the level of verbal appraisal is slightly above a person's level of confidence about the belief (Pender, 1996).

5.3.4 Physiological and affective arousal

Physiological states such as anxiety, stress, arousal, and other mood states can also influence efficacy beliefs. Altering a person's physiological and affective states and negative emotional reactions can increase his or her beliefs in the ability to master tasks (Bandura, 1997). Individuals often gauge their self-efficacy or confidence by the emotional state they experience as they contemplate an action; for example, when individuals conjure up an anticipated outcome they tend to have a certain affective reaction (Bandura, 1984). When people experience aversive thoughts about their capabilities, the resulting negative affective reactions can reduce perceptions of capability, which in turn can trigger the stress and agitation that in turn reinforce further the dysfunctions they fear (Bandura, 1997).

5.4 Further Predictive Value of Self-efficacy

Research has confirmed the predictive value of the sources of self efficacy and how the changes in the four sources of self-efficacy can lead to corresponding improvements in performance (Bandura, 1997). An example is provided by a study which focused on a group of adolescent females, all competitive gymnastics who had sustained a gymnastic related injury and who subsequently experienced a fear of

injury (Chase, Magyar, & Drake, 2005). Results indicated that their greatest fear related to the difficulty in returning to sport and being unable to participate in practices and competitions while injured. The gymnasts ascribed aspects of their past performance and related experiences to the four sources of self-efficacy such as success and consistency (enactive mastery), communication with significant others (verbal persuasion) and coaches' influence (modelling). Strategies used to overcome their fear of injury (physiological and affective arousal) included mental preparation, such as imagery and relaxation.

Other studies found that increased sources of self-efficacy improved computer skill performance (Bassam, 2006) and changes in army officers' level of post traumatic stress disorder (Contreras, Trujillo, Uribe, & Rodrigues, 2000).

5.4.1 *Self-efficacy and academia*

Self-efficacy beliefs have received attention in educational research in relation to self-estimates of ability (Brown, Lent, & Gore, 2000), academic self concept (Bong & Skaalvik, 2003), academic success (Chemers, Hu, & Garcia, 2001; Chu & Choi, 2005; Elias & Loomis, 2000; Williams, 1996), academic goal setting (Bandura & Locke, 2003; Lehto, 2004), and academic persistence. A path analysis showed that cognitive and academic performances were significant predictors of grade point average, and this relationship was mediated by efficacy beliefs (Elias, & Loomis, 2002). Self-efficacy beliefs assessed at the beginning of the semester or school year were found to predict final year or semester outcomes (Bandura, 1997). Bandura (p. 67) argued that "the relation between efficacy beliefs and action is revealed more accurately when they are measured in close temporal proximity, the closer the time, the better the test of causation". However, when Bong (2002) tested this hypothesis,

predictive relations between self-efficacy and achievement were not greatly affected by their temporal contiguity.

5.4.2 *Self-efficacy and self-esteem*

Self-efficacy and self-esteem are moderately correlated; empirical results showed that although related, these two constructs were empirically as well as conceptually distinguishable (Chen, Gully, & Eden, 2004). Chen et al., (2004) found that self-efficacy was related more highly to motivational variables than self-esteem, whereas self-esteem was more highly related to affective variables than self-efficacy.

5.4.3 *Self-efficacy and counselling skills*

Efficacy in dealing with a client involves a capability in which cognitive, social and behavioural skills need to be organized into integrated courses of action to serve numerous functions (Larson & Daniels, 1998; Bandura, 1997). Counsellors in session with their client have to be efficacious, and to have to “orchestrate and continuously improvise multiple subskills to manage ever-changing circumstances in the course of a session” (Larson & Daniels, 1998, p.180). In exploring the effectiveness of interventions designed to decrease anxiety in trainee counsellors Larson (1988a cited in Larson & Daniels, 1998) found that trainees with higher counsellor self-efficacy appear to perceive their supervisors and the supervisory environments more positively and their work environments as being more supportive.

5.5 *Self-Efficacy and Emotional Coping*

Findings from diverse studies on the generalized role of perceived coping self-efficacy were integrated to examine the recovery from different types of traumatic events, such as natural disasters, terrorist attacks, military combat and criminal assaults (Benight & Bandura, 2004). Multivariate analyses found that perceived

coping self-efficacy emerged as an independent contributor across a wide range of traumas. A focal mediator of posttraumatic recovery was the person's belief that he or she was capable of exercising some measure of control over traumatic life events (Benight & Bandura, 2004).

Research also shows that lost resources associated with major disasters directly influenced general distress, social support, optimism, and coping self-efficacy. Analyses suggested that coping self-efficacy perceptions mediated the relationships between loss of resources and trauma-related distress, social support, general distress, and optimism (Benight, Swift, Sanger, Smith, & Zeplin, 1999).

These findings reinforce the argument that in emotionally threatening situations, those with high self-efficacy beliefs will be more able to perform activities successfully, even when anxious (Bandura, 1997). Perceived self-regulation or confidence to regulate emotions is an important variable in the behavioral effects of both positive and negative affect (Bandura, Caprara, Barbaranelli, Gerbino, & Pastorelli, 2003).

Identifying self-efficacy in the context of predictive risk factors for posttraumatic stress symptoms has proved useful (Heinrichs, Schoch, Soravia, Hellhammer, & Ehlert, 2005). Professional fire fighters were assessed immediately after training for symptoms of PTSD, depression, anxiety, self-efficacy and alexithymia. Multiple linear regression analysed posttraumatic stress symptoms at 24-month follow-up; findings revealed that a high level of hostility and a low level of self-efficacy at baseline accounted for forty-two percent of the variance in posttraumatic stress symptoms after two years.

Fire-fighters who had both hostility and low-self-efficacy risk factors at baseline showed a significant increase in measures of PTSD symptoms, depression, anxiety, general psychological morbidity, global symptom severity, and alexithymia during the two year period (Heinrichs et al., 2005). Heinrich et al. (2005) concluded that specific markers may constitute a vulnerability to the development of psychopathological symptoms after trauma exposure. For example, a person's impulse control may break down during emotional distress because the person indulges in immediate impulses (instant gratification) in order to feel better, which is similar to opting for a short-term affect regulation over longer lasting self-regulatory goals (Tice, Bratslavsky, & Baumeister, 2001).

5.5.1 *Self-efficacy and self-regulation*

The inability to self-regulate stress has been shown to impair immune function, yet exposure to the same stressors with high personal efficacy of control over the stressors does not impair this function (Maier, Laudenslager, & Ryan, 1985 cited in Bandura, 1997). Self-efficacy to regulate positive and negative affect has been found to be accompanied by a high level of self-efficacy to manage academic development, as well as being able to resist social pressures for antisocial behaviour, and to engage empathetically in other person's emotional experience (Bandura, et al., 2003). Bandura et al. (2003) found that perceived empathic self-efficacy operated as a generalized contributor to psychosocial functioning. Empathic self-efficacy was associated with pro-social behaviour and low involvement in delinquency. Perceived self-efficacy for affect regulation also acted mediationaly.

5.6 *Self-efficacy and Workplace Functioning*

Self-efficacy has been found to be positively related to leadership emergence, good mentoring, reduced turnover intentions, and raised levels of satisfaction with job, pay and promotions (Pittenger & Heimann, 2000). Self-efficacy is related to work motivation, behaviour and performance (Judge & Bono, 2001). For example, self efficacy beliefs can impact upon whether individuals think in self-enhancing or self-defeating ways (Bandura & Locke, 2003). Self efficacy beliefs also impact upon how well a person perseveres in the face of difficulties as well as the quality of his or her emotional well-being and vulnerability to stress and depression (Bandura & Locke, 2003).

5.6.1 *Collective-efficacy*

Perceived collective efficacy is defined as “a group’s shared belief in its joint capabilities to organize and execute the course of action required to organize and follow the course of action required to produce given levels of attainments” (Bandura, 1997, p. 477). When faced with obstacles, groups with higher levels of collective efficacy are more likely to persist in trying to solve the problem at hand (Bandura, 2000). For example, the collective efficacy of an athletic team will influence the team’s success or failure (Hodges & Carron, 1992 cited in Maddux, 2002).

One form of collective efficacy is organizational efficacy, which in its most basic form is a sense of “can do” that is interchangeable with organizational confidence and describes the generative capacity within an organization to cope effectively with the demands, challenges, stressors, and opportunities encountered within the business environment (Bohn, 2002).

5.6.2 *Four sources of collective self-efficacy*

Brown (2003) argued from a theoretical perspective that the same four sources that bolster individual self-efficacy can also increase collective efficacy (Bandura, 1997), particularly verbal self-guidance, a form of self-regulation (Bandura, 1997) in which a person develops beneficial self statements that guide effective performance, increased self-efficacy and subsequent performance. Verbal self guidance can enhance enactive mastery experiences and verbal persuasion as employees observe how team members master tasks and use self-statements to overcome obstacles (Brown, 2003).

To gain insight into how people perceive organizational confidence, Bohn (2002) conducted a sentence completion exercise and found a leader needed to provide direction, consistency, imbue confidence, give verbal persuasion and become a good role model for others to follow. Leaders who created anxiety through lack of assurance were not good role models, and could damage employees' self-confidence and negatively affect a group or team. For example, without reassurance regarding job loss or other uncertainties, employees' self- efficacy may decline and this loss of confidence can have a negative impact on performance (Bohn, 2002).

Perceived personal and collective efficacy both operate through similar processes (Bandura, 1997). Bandura explained that even though employees behave collectively in teams, their actions are still regulated by individual psychosocial processes. For example, whether working together produces better performances than working independently depends on employees' perceived self-efficacy in contributing to the group performance and how they expect their work to be evaluated by the social group. Bandura argued that employees with a high sense of efficacy expect

positive outcomes for the effort exerted and therefore may perform better when they have their work individually assessed than when it is evaluated as part of a group effort. Conversely, employees with low self-efficacy, who are concerned that deficient work will meet with disdain, may perform less well when singled out, and so often prefer their team effort to go unidentified.

5.7 Judgement when Organizing and Executing a Given Course of Action

A person's judgement when organizing and executing a given course of action in order to attain a desired outcome (Bandura, 1997) may, for some individuals, involve a level of self-deception, a dispositional tendency to have an unrealistically positive self-image (Sackeim, 1983).

5.7.1 Self-efficacy and over-estimation of abilities

Bandura (1997) argued that generally when individuals err in their self-appraisals, they tend to overestimate their capabilities. An optimistic belief in one's efficacy is considered a necessity, not a flaw, as this raises a person's self-appraisals of capability, which in turn raises aspirations to sustain motivation that enables individuals to achieve the most from their talents (Bandura, 1997). Optimistic efficacy appraisals have been shown to be beneficial while "veridical judgments can be self-limiting" (Bandura, 1997, p. 72). Minimal research describes the pervasive personal and social debilitation costs of under-confidence (Bandura & Locke, 2003).

5.7.2 Self-efficacy and under-confidence

In the organizational setting, a low sense of efficacy to produce desired results often ends up in the delegating of blame to another person for being inadequate (Bandura, 1997). For example, teachers with a low sense of instructional efficacy often regarded difficult students as lacking in ability and not teachable; conversely

teachers with strong efficacy beliefs do not view students' problems as being insurmountable and instead believe problems could be overcome through extra effort and a variation in teaching approach (Ashton & Webb, 1986 as cited in Bandura, 1997).

Bandura (1997) pointed out that managers who had suffered losses in perceived managerial efficacy were less favorable in their attitudes towards their employees, regarding them as unmotivated and unworthy of supervisory support and believing they should be summarily dismissed. As well as showing lower organizational functioning, managers with low perceived self-efficacy blamed assessments of the situation as being unfair and biased (Jenkins, 1994b as cited in Bandura, 1997). Managers with a high sense of efficacy do not have to externalize blame (Jenkins, 1994a).

5.8 *Self-efficacy and Pro-Social Behaviour*

When young students had the self-efficacy to regulate learning and academic achievements this added to their scholastic achievements, supported high academic aspirations and pro-social behaviour, and reduced vulnerability to feelings of futility and depression (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996b). Having the confidence to regulate achievement was also related to the adherence to moral self-sanctions for anti-social conduct and problem behaviour that could undermine academic pursuits (Bandura, et al., 1996b).

5.8.1 *Moral self-sanctions*

A disconnection from moral undertakings can encourage detrimental or antisocial conduct by reducing pro-socialness and preventative self-censure by supporting cognitive and affective reactions conducive to aggression (Bandura,

Barbaranelli, Caprara, & Pastorelli, 1996a). Such studies support the notion that the impact of social self-efficacy beliefs is mediated through pro-social behaviour (Bandura, Caprara, Barbaranelli, Pastorelli, & Regalia, 2001). Such findings could also help explain academic cheating. Cheating is a transgressive or anti-social-social behaviour that has been found to be reduced by increasing self-efficacy, particularly among academically struggling students (Finn & Frone, 2004).

5.9 *Measuring Self-Efficacy*

Bandura (1986) held that self-efficacy is realm-specific. Evidence for the multifactorial nature of efficacy beliefs highlights the importance of treating the self-efficacy concept as a realm-specific attribute rather than a global trait (Bandura, 1997). Research findings testify to the explanatory and predictive value of domain-linked measures of perceived self-efficacy, which operates differently in various spheres of functioning, and affects social, cognitive, and emotional determinants in differing ways (Bandura et al., 2003).

Many realm-specific measures of self-efficacy have proven useful. For example, in keeping with Bandura's (1986) emphasis on task specific measures, Etter (2000) developed a measure to test the confidence of current and former smokers to abstain from smoking in high-risk situations and found that in smokers baseline self-efficacy scores predicted smoking cessation at 16th month follow-up.

Bandura (1990) developed the Multidimensional Scales of Perceived Self-Efficacy (MSPSE) and tailored the items on the scales to specific academic domains of functioning. Research using the MSPSE has focussed on self-efficacy and the ways in which students become self-regulated learners (Miller, 2000) the relationship between self-efficacy, verbal and math achievement scores and lower aggression

(Skowron, 2005) and young adolescent students with low self-efficacy and post traumatic stress disorder (Saigh, Mroueh, Zimmerman, & Fairbank, 1995).

5.10 *Self-Efficacy for Emotional Intelligence*

Saani (2000, p. 68) argued that emotional competence or emotional intelligence is the “demonstration of self-efficacy in emotion-eliciting social transactions. That is, the individual believes that he or she has the capacity and skills to achieve a desired outcome...and values and beliefs will have been transformed by the self into personal meanings”.

Petrides and Furnham (2003) suggested that self-assessed trait or dispositional emotional intelligence could also be called ‘emotional self-efficacy.’ They defined trait emotional intelligence as “a constellation of emotion-related self-perceptions and dispositions” (p. 40). Although an aspect of self-perception of emotional functioning certainly may be self-efficacy, to equate trait emotional intelligence with self-efficacy for emotional intelligence seems to overgeneralise the role of self-efficacy in dispositional emotional intelligence as it has been generally conceptualised and assessed.