Chapter III
Review of Literature
CHAPTER III

REVIEW OF LITERATURE

*Use your health, even to the point of wearing it out. That is what it is for.*

*Spend all you have before you die; do not outlive yourself.*

-George Bernard Shaw

The review of literature in the present chapter throws some light on the interplay between cognitive distortions, cognitive emotion regulation, emotional experience, emotional expression and emotional competence, psychological distress and health.

I. HEALTH AND COGNITIVE DISTORTIONS:

Cognitive distortions refer to the irrational beliefs and thoughts processes that disrupt the thinking patterns of the individual, which has adverse consequences on a number of psychological processes, viz., self-esteem, self-worth, phobia, depression, and health.

When a person does not evaluate himself/herself positively and tends to see oneself as full of mistakes and with a negative self-attitude, all this has an adverse effect on the health status of the individual, be it physical or mental health.
Einsberg et al. (1994) hypothesized that empathetic over-arousal in situations involving negative affect results in an aversive over-aroused emotional state, which leads to a focus on one's need and personal distress.

Cognitive distortions have been found to be in greater quantity among depressed population than non-depressed population (Mc Dermit, Haaga, & Bilek, 1997).

A descriptive correlational study revealed a positive relationship between the degree of cognitive distortion and the level of depression in bulimic patients (Dankberg, 2007).

Katherine and Marshall (2007) examined cognitive distortions in writing samples of 36 eminent depressed authors, and 36 eminent non-depressed authors. The results indicated that depressed authors have more distortions in their writings than the non-depressed group. Even the non-depressed prose writers had fewer cognitive distortions than non-depressed poets and depressed poets.

Cognitive theory further predicts that those who engage in maladaptive cognitive coping strategies will experience greater stress than those who engage in adaptive cognitive coping strategies (Lazarus, 1993), and also negative thoughts about oneself, blaming others; rumination and catastrophizing are related to the experience of emotional distress (Lazarus & Folkman, 1984).
Further, a study examined the role of university student cognitive distortions, their sense of autonomy, using the Cognitive Distortions Scale (Briere, 2000) and the Iowa Developing Autonomy Inventory (Jackson & Hood, 1985). The results suggested that distortions have a significantly negative impact on Chinese student’s sense of autonomy (Zhanga, 2008), which, in turn, can affect health.

Cognitive models of depression help to explain the development of depressive symptoms and disorders in patients with chronic pain. Seventy-two patients with rheumatoid completed the Beck Depression Inventory, Cognitive Errors Questionnaire and Arthritis Helplessness Index during an initial assessment and again four years later. The results suggested that cognitive distortions and helplessness contribute to disturbed health and depressed mood.

Thus, cognitive distortions – the inaccurate thinking patterns - can have a significant effect on health. These irrational thoughts disrupt the normal functioning of the individual and could thereby, affect health status.

II. HEALTH AND COGNITIVE EMOTION REGULATION:

Healthy living imbibes positive interventions that are directed towards curtailing negative emotions and amplifying positive ones. Adequate and proper management of emotions, whether positive or negative, is an
important step towards healthy and positive living.

Cognitive emotion regulation is considered relevant to both, the experience and the treatment of emotional and physical distress (Lazarus, 1993). However, adaptive coping is associated with the implementation of effective health behaviour (Lee, Baggley, Delongis, Voorhoeve & Greenglass, 2004); has implications for psychological distress (Bauchard, Guillemette & Landry-Leger, 2004); and does not allow coping deficits to appear in mental disorder (Britton, 2004).

Maladaptive coping strategies defined as 'unsuccessful strategies', that individuals use to deal with stressors, have been found to be associated with psychological distress, symptoms’ severity, and depression (Somerfield & McCrae, 2000). Many negative emotional states lead to a limited and narrow view of coping skills and behavior. For instance, when experiencing fear, stress, or anxiety, the fight or flight response may be the primary focus of dealing with the emotions. Negative emotions lead to a narrow view of problem solving and coping, and when chronic, tend to prompt a downward spiral in mood.

Cognitive emotion regulation involves the management of emotion and an in-flow of positive emotion that can contribute to psychological and physical well-being via more effective coping. Coping strategies related to the occurrence and maintenance of positive emotions (e.g., positive reappraisal, problem focused coping and infusing ordinary events with
positive meaning) help buffer against stress (Folkman & Markowitz, 2004) and depressed mood (Davis, Nolen-Hoeksema & Larson, 1998). These strategies help individuals emerge from crisis with new coping skills, closer relationship and a new appreciation of life, all of which predicts increasing psychological and physical health.

Fredrickson & Joiner (2002) examined affective experiences and broad-minded coping across two assessment periods five weeks apart. Over this period, the relation between positive emotions and broad-minded coping became stronger, which in turn, created an upward spiral towards enhanced health. The regulation of negative affect is thought to precipitate relapse in weight control program (Gritoet et al., 1989), cigarette smoking (Carmody, 1989) and alcoholism (Coohey et al., 1997).

Furthermore, cognitive theory predicts that those who engage in maladaptive coping strategies will experience greater stress than those who engage in adaptive cognitive coping strategies (Lazarus, 1993).

Investigators have found that negative emotional arousal, especially for reflective affective states such as sadness (Green & Sedikides, 1999) is associated with focus on the self (Wood et al., 1990), and that people exhibit high psychological arousal and sometimes report more distress in situation likely to elicit emotion in contrast to sympathy (Eisenberg & Fabes, 1991).
Emotion regulation tends to influence every aspect of human beings, and bears a very strong relation with personality too. According to Personality Theory, emotion regulation facilitates personality functioning in two major ways; first, by preventing people from becoming locked up in specific motivational emotional states, it promotes flexibility in personality functioning (Rotheround et al., 2008); second is by stimulating the dynamic exchange between personality processes (Baumann et al., 2005).

Emotion regulation refers to the internal and transactional processes through which individual’s consciously or unconsciously modulate one or more component of emotion, by modifying either, their own experiences/behaviour/expression or the emotion eliciting situation (Eisenberg, Fabes, Guthrie, & Reiser, 2000).

Richards et al. (2003) demonstrated that self-reported self-monitoring efforts were heightened among suppressors relative to control participants because suppressors focus on thinking about their own behaviour and the need to control it.

In a study, 90 mother-young adult child dyad (57 daughters and 39 sons) reported on their perception about relationship quality and the extent to which they employed one emotion regulation strategy (expressive suppression) and two emotion regulation goals (self-oriented and other-oriented), when controlling anger towards partner. Results showed that suppression and both emotion regulation goals predicted one's own reports of
relationship quality, also relation between emotion regulation processes and relationship quality were comparable for both generations (Martini & Busseri, 2011).

Gilland, Wild, Deigham, & Gillanders (2008), in a cross-sectional study of emotion regulation, affect, psychological functioning and well-being in hemodialysis patients, found that greater use of re-appraisal was associated with lower level of anxiety, greater acceptance of the disease, greater experience and expression of positive emotion, and less experience and expression of negative emotion.

Thus, some forms of emotion regulation are aimed at decreasing the intensity of an emotional response (down-regulation), other forms of emotion regulation involve the up-regulation or maintenance of an emotional response. In the latter cases, emotion regulation is aimed at increasing the intensity of an emotional response (up-regulation) or at keeping the intensity of an emotional response stable over time (maintenance), consequently influencing health.

III. HEALTH AND EMOTIONAL EXPERIENCE:

Emotions are considered as an organism’s direct evaluative experience of himself and the environmental field around him, which is not mediated either by thought or verbal judgement, but is an immediate response (Perls et al., 1979). This indicates that emotions, in any form -
whether experience, expression, control/competence, are an important processor of an individual's interaction pattern with the outside world. They can play a communicative role by revealing the moral values and concerns to others and ourselves (Blum, 1980).

Since they form the basics of the interaction pattern, they have far-reaching effect on the thought process, coping mechanism, health status, and other lifestyle factors. Positive emotions tend to have a soothing and calm effect on the individual instead of negative emotions, which result in distress, jealousy, etc.

Good feelings predict how long people live. Several well-controlled longitudinal studies document a clear link between frequent positive affect and longevity (Austria, Markides, Black, and Godwin, 2000; Danner, Snowdon, Friensier, 2001; Levy, Slade, Kunkel, & Kasl, 2002).

Experiments have shown that positive affect widens the scope of attention (Fredrickson, & Branigan, 2005), increase intuition (Bolte, Goschkey, & Kuhl, 2003), and creativity (Isen, Daubman, & Nowicki, 1987), induce speedy recovery from cardiovascular after-effects (Fredrickson, Mancouso, Branign, & Tugade, 2000), alter frontal brain asymmetry, and increase immune functioning (Davidson et al., 2003).

Emotions have a strong relationship with health. Good feelings predict various positive outcomes for physical and mental health. Prospective studies have shown that frequent positive affect predicts resilience to adversity,
increased happiness (Fredrickson & Joiner, 2002), psychological growth
(Fredrickson et al., 2003) and lower level of cortisol (Steptose, Wardle, &
Marmot, 2005), reduced inflammatory response to stress (Steptoe et al.,
2005) and reduction in subsequent day physical pain.

The experience of positive emotions leads to novel thoughts,
activities, and relationships, which in turn, provides more personal resources,
such as social support, improved skills, and resilience to overcome obstacles.

**Broaden-and-build theory of positive emotions:**

Fredrickson is probably best known for her ‘Broaden-and-Build
Theory of Positive Emotions’. In this theory, she proposes “that the positive
emotions broaden an individual’s momentary mindset, and by doing so help
to build enduring personal resources” (Fredrickson, 2003, p. 332).

*The broadening effect:* Positive emotions, such as joy, curiosity, hope,
and contentment, can broaden the cognitive capacity to be more flexible and
receptive to new ideas and novel possibilities. People may be more creative
and open-minded, be willing to seek out social support, and develop greater
emotional and intellectual resources for problem solving.

*The building effect:* As positive emotions increase and broaden
possibilities, relationships, and behavior, it leads to building greater personal
resources. Specifically, it leads to improved health, greater hope, optimism,
and better quality relationships.
Individuals who discover novel approaches are able to incorporate and establish these resources through expanding social support, learning new skills, increasing knowledge, and applying these when coping with struggles.

*The upward spiral:* The benefit of positive emotions does not stop with broadening options and building resources. They also lead to greater life satisfaction. As a result of the growing and enduring resources that people start to develop, it leads to greater health, fulfillment, and overall better functioning, which in turn, leads to a perpetual upward spiral of positive emotions.

In general, people will be in a better situation and more contented, hence leading to more opportunities and the capability to experience more positive emotions.

In the culmination of the broadening and building effects of positive emotions on social, physical, and mental resources, one is able to build a framework for later use to adequately manage life’s threats and obstacles, as well as having more outlets for increasing emotional well-being and finding fulfillment.

The experience of emotion refers to the first-hand reporting of how the person felt, or the cognitive and physiological change that occurred on encountering the particular emotion. The experience of positive/negative emotions has far-reaching effects on the physical and mental health.
The experience of positive emotions and other positive states have been linked to broaden the scope of cognition, action and enchanted physical, intellectual and social resources (Fredrickson, 1998). Experiments have shown that practicing grateful thinking on a regular basis can enhance positive affect and the measures of well-being (Emmons & McCullough, 2003).

The experience of positive emotions after a negative event can have an undoing effect also. Fredrickson, Mancuso et al. (2000) documented through their experiments that positive emotions can undo the cardiovascular reactivity that lingers following a negative emotion, and that this undoing effect is both, reliable and generalizable.

Researchers have shown that experience of positive affect helps to have a better attention towards negative self-relevant information (Reed & Aspinwall, 1998). On the other hand, negative affect has been related with disastrous outcomes. For instance, Watson, Clark, and Carrey (1988) have found that negative affect is positively related with self-reported stress and health complaints.

Heidrich (1993) reported that poor health is associated with more depression, anxiety, lower level of positive relation to autonomy. Research has shown that high positive affect and lower negative affect have been associated with subjective reports of better health (Sullivan, Lacroix, Russ, & Walker, 2001).
The experience of emotions also influences the relationship quality of the individual involved. Research has confirmed that the frequency and intensity of positive daily emotions experienced in relationship act as a good barometer of how close individual's feel to their partners (Barrett, Robin, Pietromonaco, & Eyssell, 1998).

Hence, the experience of positive emotions offsets a series of physiological, cognitive, affective, and behavioral consequences that are associated with fewer physical health symptoms, and could promote health.

**IV. HEALTH AND EMOTIONAL EXPRESSION:**

The mind and body are linked, and must function as an integrated whole to remain healthy. Thus, the choices we make about the emotional expression have as much, if not more of an impact on our health.

Adverse cardiovascular health outcomes have been found to be particularly pronounced for individuals who overly express their anger (Harburg et al., 1991).

A study on 52 breast cancer women among online support group revealed that greater expression of anger was associated with better quality of life and lower depression, while the expression of fear and anxiety was associated with lower quality of life and higher depression (Lieberman & Goldstein, 2005).
Some researchers have focused specifically on whether inhibiting emotions disrupts the flow of communication during face-to-face interactions. In one study by Butler et al. (2003), unacquainted pairs of women were asked to view an upsetting film and then talk about their emotional reactions. In one group, partners were given instructions about how to express themselves and in the other group, one partner was instructed to conceal feelings. Results showed that suppressors were less responsive than non-suppressing participants.

Individuals who view their relationships as communal-oriented rather than exchange-oriented, report experiencing more positive emotions and expressing more negative emotions, when interacting with their romantic partner (Clark & Brissetic, 2000).

Research has also highlighted the consequences of non-expression of emotions on health and other related outcomes. Richards and Gross (1999) showed that difficulty in expressing emotions is related with high depression, hopelessness, and low life satisfaction because people who have difficulty in expressing may not make their needs known to others. Specifically, the work of inhibiting rather than expressing is more cognitively demanding, serves as a stressor, impedes the individual’s ability to work through difficult life problems (Pennebaker, 1993).

Bonamo et al. (2004) showed that people who concealed their emotional facial expression in response to pleasant and unpleasant slides
shown to them, remembered the slides less well than controls.

Further, a research by Berry and Pennebaker (1993) suggests that when individuals must actively inhibit emotional expression, they are at increased risk for a variety of health problems. Several experiments indicate that verbally expressing traumatic experiences by writing or talking improves physical health, enhances immune function and is associated with fewer medical visits. Although less research is available regarding non-verbal expression, but it is likely that non-verbal expression also bears some relation to health status.

King and Emmons (1990) studied expressiveness among women using the personal striving framework that measured ambivalent emotional striving, measures of ambivalence in which they found that women scored significantly higher on ambivalent emotional striving and expressiveness.

It can be concluded that emotional expression of positive and negative emotions has beneficial effects on the physical and mental health of the individual. It helps to vent out the emotion, and tends to make the person feel emotionally more relaxed and satisfied, which in turn, can affect health.

V. HEALTH AND EMOTIONAL COMPETENCE:

Emotional competence is the ability or capability to handle and manage emotions appropriately according to the situations. However, when problems are defects occur in this process, then it may cause diverse health
problems like stress, health disease, low self-esteem, and the like.

Bandura (1997) talked about self-efficacy and health outcomes. He said that people who view their health as personally determined but believe that they lack the necessary skill for the same, would have low self-esteem and that would reduce positive health outcomes.

Ciarrochi et al. (2002), and Nolem-Hoeksema, Larson, and Garyson (1999) showed that stressful events relate to lower psychological health and lower emotional competence. A large number of variables like frustration, anxiety, gender, religious affiliation and socio-economic status affect the level of competence and its related competencies in a varied manner.

On the other hand, people who perceive their health to be good and who can cope with the demands of work, family and life in general have a better cognitive performance (Steven et al., 1995). In a study, 132 participants were randomly assigned to an emotional competence enhancing intervention program for 15 hours. The results revealed that level of emotional competence increased significantly in the intervention group, and there was lower cortisol secretion, enhanced subjective and physical well-being, also an improved quality of social and marital relationship (Kotsou et al., 2011).

In the results of study 2 by Nelis et al. (2011), it was found that the development of the emotional competence brought about positive changes in psychological well-being, subjective health, quality of social relationships
and employability.

In a study by Boyer et al. (2010), a total of 315 fibromyalgia syndrome patients of various primary care centre participated and completed measures of health status, control beliefs, coping and anxiety, and depression. The analysis revealed that control belief (i.e., competence element of self-efficacy and perceived health competence) has a direct effect on health status. There was also a mediating role of emotions between competence belief and both, physical and psychosocial impact.

Hence, when an individual is able to manage his emotions, it helps to better cope with the demands of work and life, as a result of which he enjoys better psychological and physical health.

VI. HEALTH AND PSYCHOLOGICAL DISTRESS:

In general, studies have found a significant relationship between endorsing external health locus of control and psychological distress, whereas internal health control beliefs are linked with positive psychological adjustment to various health outcomes (Sun, & Stewart, 2000; Takakura & Sarihara, 2001).

Philip et al. (2004), in their study, addressed the reciprocal associations between physical health (objectively assessed and self-rated) and psychological distress among older adults. They found that psychological distress (both depressive symptoms and anxiety level) made a
significant independent contribution to the prediction of concurrent and future negative perception of one’s health, over and above objective health.

Preville, Potvin, Boyer, and Boulerice (2000) used data from Quebec health survey QHS to examine the influence of physical health status on response to the somatic and affective-cognitive component of the QHS psychological distress inventory (PDI) in three age groups namely, 18-34 years, 40-64 years, and 65 years and above. The results showed that affective-cognitive component of distress was the main explanatory factor in the somatic symptom index and physical health directly affects responses to the somatic component of the psychological distress inventory among all age groups.

Apart from examining the relation between health and cognitive and affective correlates, the link between cognitive correlates (cognitive distortions and cognitive coping) and affective correlates (emotional experience, emotional expression, emotional competence, and psychological distress) are noteworthy. There is scarcity of research literature on the relation between these cognitive and affective correlates. However, a few studies provide evidence for the relation between some of the above-mentioned variables.
VII. COGNITIVE DISTORTIONS AND COGNITIVE EMOTION REGULATION:

Evidence exists to indicate the relation between cognitive emotion regulation and cognitive distortions. Cognitive distortions and cognitive coping tend to be inter-linked. Maladaptive coping leads to negative thinking patterns and negative perceptions, and this negative thinking, in turn, enhances maladaptive coping. There is evidence that the more frequently people utilize maladaptive/passive coping strategies, higher is the level of anxiety (Heppner et al., 1995) and that these maladaptive coping behaviours can be precipitated by negative thinking (Beck & Clark, 1997). According to the information processing model of anxiety, negative cognitive processing of stressful events activates the primal cognitive mode which may lead to maladaptive coping (such as avoidance) whereas, positive perceptions may enhance adaptive coping.

Cukowicz et al. (2008) examined coping style and thought suppression as predictors of suicide risk in a sample of depressed individuals. The results indicated that elevated emotional coping and thought suppression were associated with increased suicide risk, while lower avoidance coping was also associated with higher suicide risk. Thus, negative emotions enhance the negative thinking patterns.

Coping has long been considered relevant to both, the experience and the treatment of emotional and physical distress (Lazarus, 1993), and is
inversely related to psychological distress (Bouchard, Guillemette, & Landry-Leger, 2004). Emotional response to stressful events can be regulated by the use of coping strategies (Ridder & Schreurs, 2001).

In another study, Einsteins and Lanning (1998) found that shame and anxious guilt were positively co-related with negative emotionality (i.e., neuroticism as in big five personality factor) but not in situational guilt.

Studies by Cooper, Shaver, and Collins (1998), and Repetti, Taylor, and Seeman (2002) have shown that individual differences in capacities and strategies for emotion regulation learnt in childhood carry over into adulthood, where they influence coping styles, problem solving, social support processes, relationship quality, and mental and physical health.

Thus, studies show that adaptive cognitive emotion regulation strategies help to reduce the effect of negative thinking whereas, maladaptive cognitive emotion regulation and cognitive distortions may be positively related.

**VIII. COGNITIVE DISTORTIONS AND EMOTIONAL EXPERIENCE:**

Distortions in thinking pattern affect the emotional experience attached thereby. Maladaptive thinking enhances heightened experience of negative emotions (like anger, aggression, anxiety, etc.) whereas, adaptive thinking leads to experience of more positive emotions. Garnefski et al.
(2001), in their study on adolescent and adults samples, found that cognitive emotion regulation strategies, such as self-blame, catastrophizing, and rumination, were positively related with maladjustment and negative emotional states, while positive reappraisal was negatively related with the same. In a similar vein, researchers (Carver, Scheier, & Weintraub, 1989; Anderson, Miller, Riger, Dill, & Sedikides, 1994) found that cognitive emotion regulation strategies, like self-blame, catastrophizing, and rumination were positively related with depression and other measures of ill-health.

Krebs and Denton (1992) proposed that moderate positive cognitive bias is a variety of cognitive distortion, and they determined that when individuals operate in groups, self-serving attributions, over-estimation of personal abilities, illusion of control correlated with greater self-esteem, improved affect experience and more adaptive behavior.

Study on adolescents shows that aggressive adolescents are at a heightened risk for experience of negative affect like anger because their cognitions get disturbed due to which they tend to attend selectively to the most negative features of the situation (Felsten & Hill, 1999).

Distortions in cognitions affect the emotional states than the person undergoes thereby, leading to more of negative emotional experiences. On the other hand, positive emotional experiences may help to reduce the distortions in cognitions.
IX. COGNITIVE DISTORTIONS AND EMOTIONAL EXPRESSION:

Very few researchers have focused on the association between cognitive distortions and emotional expression. Expressive writing has been used in the treatment of distortions like depression and anger, where negative, recurring thoughts are problematic to yield positive outcomes.

Blaming others is often emphasized in theories of negative emotions, particularly the experience and expression of anger (EcKhardt & Kassinove, 1998). Studies have found that blaming others is positively correlated with experiencing and expressing anger.

Maladaptive anger expression is known to be associated with a variety of negative consequences (Deffenbacher, Oetting, Lynch, & Morris, 1996), irrational beliefs and cognitive distortions in anger (Lopez & Thurman, 1986; Martin & Dahlen, 2004).

A study on school-age children revealed that aggressive symptoms were associated with decreased ability to verbally express negative feelings, exhibit empathy towards others, and display a range of emotions (Shield & Cicchetti, 1998).

Haga, Kraft, & Corby (2007) investigated the use of cognitive emotion reappraisal and expressive suppression in 489 university students in Norway, Australia, and the United States, and how these strategies were
related to measures of well-being. Emotion regulation strategies were found to vary across, age, gender, and culture. Private self-consciousness was found to be a central antecedent for the use of cognitive reappraisal.

Thus, the above review of literature shows that cognitive distortions and emotional expression may be interrelated. Moreover, the work in the field of cognitive distortions and emotional expression has been generally done with children and adolescents’ and needs to be studied in the adult population.

X. COGNITIVE DISTORTIONS AND EMOTIONAL COMPETENCE:

Emotional competence refers to the ability to manage and handle emotions in a more productive manner. Noer (1998) suggests that individuals, who maintain a sense of internal control, believe in their own abilities, are self-reliant, show far better emotionality.

In a study by Jain (1993) on late adolescents, it was found that in comparison to the group having moderate anxiety, the group having low anxiety had greater ability to cope with problem emotions, ability to function with emotions and encouragement of positive emotions and emotional competence in general.

The emotional intelligence framework related to emotional competence elaborates that one must be competent at understanding of one’s
emotions (including negative emotions) to be able to process emotional information accurately and be skillful in using emotions and managing them (Mayer & Salovey, 1997). Such individuals find it easier to adjust to stressful life events thereby, having increased self-control skills, self-awareness and are more likely to engage in adaptive coping.

Sapra (2007) found that aggressive behavior is greater in those having low level of adequate depth of feelings, less ability to function with emotions in general, and less ability to cope with problem emotions and lower level of encouragement of positive emotions in general.

In turn, aggression is linked with maladaptive thinking and attribution styles. As such, it is possible that maladaptive cognitive appraisal may trigger emotional reactivity, which may obstruct the effective experience, expression and management of emotions.

Cognitive distortions motivate the individual toward substance use in order to reduce the negative emotions attached with the distorted thinking. Studies show that in comparison to chemical dependents, non-dependents (normal) have greater adequate depth of feelings, ability to function with emotions and encouragement of positive emotions. On the other hand, Bhardwaj and Sharma (1997) found equivocal results in chemical dependents and non-dependents with regard to the level of ability to cope with problem emotions.
In spite of some equivocal evidence, it can be said that emotional competence serves as a constructive force in shaping the individuals behavior, whereas, maladaptive cognitive appraisals may be related with serious disturbances in emotional experience, expression, control and management.

XI. COGNITIVE DISTORTIONS AND PSYCHOLOGICAL DISTRESS:

Cognitive distortions distort the way we see things, leading to negative thoughts. These negative thoughts often lead to increased perceived threat, and hence, increased emotional arousal. This increased emotional arousal may further inhibit adaptive and realistic cognitive appraisal leading to disturbances. Thus, cognitive distortions can result in emotional arousal which in turn generates more emotional arousal.

Garnefski, Boon, and Kraaj (2003) found that emotion regulation strategies such as self-blaming, catastrophizing and rumination showed strong relationship with internalizing problem behavior like disordered mood, withdrawal, anxiety, and depression.

Barkley (2006) reported that adults with attention deficit hyperactive disorder are often accused of willfully engaging in poor self-management and problem-solving skills. As a result, they often suffer distress emotionally, financially, and socially.
Barrault and Varescon (2013) aimed to assess cognitive distortions and psychological distress (anxiety and depression) among online poker players of different levels of gambling intensity (i.e., non-pathological gamblers [NPG], problem gamblers [PbG], and pathological gamblers [PG]), and to examine the relationship between these variables and gambling pathology. For this, 245 regular online poker players were recruited on an Internet forum, who completed online self-report scales assessing pathological gambling (South Oaks Gambling Screen [SOGS]), psychological distress (Hospital Anxiety and Depression Scale [HADS]) and cognitive distortions (Gambling-Related Cognition Scale). Results showed that all poker players appeared to be more anxious than depressive. Pathological gamblers exhibited higher levels of depression and anxiety than did non-pathological gamblers and problem gamblers.

Thus, review of the literature reveals that there could exist a positive relation between cognitive distortions and psychological distress. However, major work in this field has been done with the clinical population, and these variables need to be explored in the non-clinical population too.

**XII. COGNITIVE EMOTION REGULATION AND EMOTIONAL EXPERIENCE:**

There is empirical evidence that emotion regulation also influences the experience of emotions in-hand. Tsai, Kunston, & Fung (2006) showed that different people can be motivated to experience different emotions and also
in different situations (Tamir & Ford, 2009).

Butler et al. (2003, study 2) in an experimental study, where they directly manipulated suppression in the context of conversations between peers, found that those individuals who had been asked to suppress their emotions during conversations experience less positive and more negative emotions about their partners.

Polivy (1998) reported that suppression of emotions, hunger, and thirst lead to negative affect, health problems, cognitive disruptions and eventual behavioural excess.

Gilland, Wild, Deigham, and Gillanders (2008), in a cross-sectional study of emotion regulation, affect, psychological functioning and well-being in hermadialysis patients, found that greater use of re-appraisal was associated with lower level of anxiety, greater acceptance of the disease, greater experience and expression of positive emotion, and less experience and expression of negative emotion.

Cognitive coping theory too, predicts that negative thought about oneself, blaming others, rumination and catastrophizing are related to experience of negative emotions about oneself and others (Beck, 1967; Lazarus & Folkman, 1984).
XIII. COGNITIVE EMOTION REGULATION AND EMOTIONAL EXPRESSION:

Individuals who express or report higher level of positive emotions show more constructive and flexible coping, more abstract and long-term thinking (Ketlner & Bonanno, 1997) and greater emotional distance following stressful negative events (Lyubomirsky & Tugnjoer, 1998).

Even research evidence demonstrates that expression or repression of emotions has a direct effect on the functioning of our immune system, and this working is either enhanced or inhibited depending on our own proficiency in dealing with them. Writing is one form of expression and writing about one's life goal, and feelings may have beneficial effect because it can reduce goal conflict (Pennebaker, 1998) as well as bring greater awareness and clarity to one's priorities, motivation and values (Omedei & Wearing, 1990).

Miles and Gross (1999), and Gross et al. (2006) suggest that cognitive reappraisal (a form of emotion regulation) reduces negative emotions and their behavioural expression but it also requires few cognitive resources in doing so.

Thus, the use coping strategies help in better expression of positive and negative emotions thereby, leading to better physical and mental functioning.
xiv. COGNITIVE EMOTION REGULATION AND EMOTIONAL COMPETENCE:

Cognitive emotion regulation helps to enhance emotional competence by enhancing functioning of the entire personality. Person-oriented emotion regulation may prevent people from becoming trapped in specific motivation emotional states, thereby, promoting flexibility in global personality functioning (Rothermund, Voss, & Wentura, 2008). Second, by facilitating emotional changes, emotion regulation may promote coherence in personality functioning and personal growth (Baumann, Kaschel, & Kuhl, 2005).

Howe (2008) argues that successful management of emotions is likely to underpin resilience in social care workers.

The emotional intelligence framework related to emotional competence elaborates that one must be competent at understanding of one’s emotions (including negative emotions), to be able to process emotional information accurately and be skillful in using emotions and managing them (Mayer & Salovey, 1997).

Major work in the area of emotional competence is done with children and adolescents, and there is scarcity of literature with regard to research work done with emotional competence in adults. A large number of studies with children suggest that the capacity to decode, understand, and regulate emotions is associated with social and emotional adaptation and coping (e.g., Eisenberg, Fabes, Guthrie, & Reiser, 2000). Evaluations of school-based
interventions emphasizing the development of emotional competencies also suggest that emotional learning contributes to social and academic adjustment (Greenberg, Kusché, Cook, & Quamma, 1995).

According to Golden (2004), regulation of anger management in adolescents is development in them by enhancing their emotional competence skills, such as identifying and recognizing the negative emotion behind their anger, replacing the unrealistic expectations and conclusions, learning relaxation skills and stress reduction strategies, and developing problem solving skills.

Therefore, children and adolescents who are good at emotion regulation have better emotional competence skills and develop into a healthy personality in adulthood. However, there is dearth of literature among the adult population regarding these variables and needs to be investigated.

**XV. COGNITIVE EMOTION REGULATION AND PSYCHOLOGICAL DISTRESS:**

Coping has long been considered relevant to both, the experience and the treatment of emotional and physical distress (Lazarus, 1993), and is negatively related to psychological distress (Bouchard, Guillemette, & Landry-Leger, 2004).

Cognitive theory further predicts that those who engage in maladaptive cognitive coping strategies will experience greater stress than those who
engage in adaptive cognitive coping strategies (Lazarus, 1993), and also that negative thoughts about oneself, blaming others; rumination and catastrophizing are related to the experience of emotional distress (Lazarus & Folkman, 1984).

Wilkinson et al. (2000) proposed that emotion-oriented coping have negative direct effect (positively predicting distress) compared to task-oriented coping, where high levels of task-oriented coping reduce mental health dysfunction. Nowack (1989), and Sharpley and Yardley (1999) reported for the main effect for cognitive hardiness, with high cognitive hardiness scores related to increased happiness and lowered psychological distress.

Another aversive emotional state which causes distress is anger, which perhaps leads to a desire to engage in binge eating, as a means to reduce the emotional state or replace with a less aversive state (Kenardy, Anrow, & Agras, 1996). Therefore, better the cognitive coping that an individual engages in, lesser is the psychological distress experienced thereby, leading to better physical and mental health state.

Thus, it is evident from above that cognitive emotion regulation and psychological distress seem to be inter-related. The affective correlates of emotional experience, expression, competence, and psychological distress may also be inter-related with each other and are analyzed below.
XVI. EMOTIONAL EXPERIENCE AND EMOTIONAL EXPRESSION:

Some researches indicate positive relation between emotional experience and emotional expression. Emotions begin with the evaluation of external or internal emotional cues and lead to the perception of the related emotion as being either positive or negative. Certain evaluations or appraisals trigger a coordinated set of emotional response tendencies geared to facilitate adaptive action, these response tendencies are called emotional expression of the felt emotion.

Studies show that when research participants are in situations thought to elicit emotional experience, their facial muscles move (a form of expression); EMG responses have been demonstrated during affective imagery (Schwartz, Fair, Salt, Mandel, & Klerman, 1976), slide viewing (Jancke, 1993), receipt of shock (McHugo & Smith, 1996), performance feedback (Casey, 1993) and social interactions (Blunberg & Izard, 1991).

Further, Gross and John (1997), using the Positive and Negative Affect Schedule (PANAS) as a measure of habitual emotional experience and Berkeley expressivity Questionnaire (BEQ) as a measure of dispositional expressivity, showed that experience and expressivity correlated 0.34 for positive emotions and 0.14 for negative emotions in a sample of more than 1200 participants.
Rojas et al. (2008) studied social anxiety and six measures of emotional expressivity (happiness, amusement, affection, sadness, anger and fear). Results showed that social anxiety did not correlate with the expression of five emotions but showed a moderate negative correlation with expression of affection. However, earlier work on social anxiety and children in 1998 by Shipman and Zeman showed that socially anxious children limited their emotional expression (i.e., not showing sadness, happiness, etc.).

Gross and John (2000, in study 1) examined the relation between experience and expression of negative and positive emotion. They examined the relation between habitual emotion experience and peer-rated experience of negative emotions and found that experience was related to expression only for dispositionally high expressivity participants, not for low expressivity participants. But for positive emotions, experience was related to expression for both groups. This shows that experience of positive or negative emotions has differential influence on their expression.

Thus, a number of studies show a positive, moderate relation between emotional experience and emotional expression.

**XVII. EMOTIONAL EXPERIENCE AND EMOTIONAL COMPETENCE:**

The experience of positive emotions helps to promote the individual’s ability to handle their experience in a more adaptive and efficient manner.
However, in an exploratory study that examined the relationship between emotional competency, trait affectivity, stress and experienced emotions among 43 mental health nurses in Australian Regional hospital, no association was found between competency and experienced emotion. Trait affectivity was found to be associated with experienced emotion but not stress (Humpel et al., 2001).

Stock and Dunn (1990) found that moody or emotionally negative children experience more peer rejection than other children. In a study of preschool children, Sroufe, Schork, Motti, Lawroski, and LaFreniere (1985) found boys negative affect to be negatively related to both, social skills and peer status. They also found that popularity was related to both direct observations and teacher ratings of positive affect.

Thus, experience of positive emotion helps to enhance the individual’s ability to manage his emotions in a more productive manner thereby, increasing his emotional competence abilities and his social skills leading to the development of a healthy personality.

**XVIII. EMOTIONAL EXPRESSION AND EMOTIONAL COMPETENCE:**

Evidence suggests that experience of positive emotions, such as joy, happiness and contentment, holds numerous social, intellectual and physical benefits for the individual (Fredrickson, 2001; Lymbomirsky, King, &
In a group of 143 preschoolers, patterns of emotional expressiveness, emotion regulation, and emotion knowledge were assessed. Their contributions to social competence, as evidenced by socio-metric likability and teacher ratings, were evaluated via latent variable modeling, both concurrently and across time. Moderation of key results by age and sex was also explored. Emotional competence assessed at 3 to 4 years of age contributed to both, concurrent and kindergarten social competence. It was also found that even early in the preschool period, contributions of emotional competence to social competence have long-term implications for the preschoolers (Denham et al., 2003).

Moreover, expression of positive emotions facilitates effective mood management, which in turn, tends to promote emotional competence.

**XIX. EMOTIONAL EXPERIENCE AND PSYCHOLOGICAL DISTRESS:**

Research work done on children indicates that when parents allow the expression of negative affect to run its course, emotional components of the experience are dissipated, allowing cognitive components of the episode to be fully assimilated or integrated by the child. In contrast, control or suppression of negative affect is thought to result in the storage of negative affect in memory (along with other aspects of the situation, including any
maladaptive responses), with the result that cognitive components of the episode remain relatively unassimilated and distorted (Dodge, 1991).

Using data from two national surveys, the researchers examined the relationship between daily negative emotions and mental health outcomes ten years later for a sample of 711 participants (both men and women) who ranged in age from 25 to 74 years. Results showed that participants’ negative emotional responses to daily stressors - such as argument or a problem at work or home - predicted psychological distress and self-reported emotional disorder ten years later. Participants’ overall levels of negative emotions predicted psychological distress (e.g., feeling worthless, hopeless, nervous, and/or restless) and diagnosis of an emotional disorder like anxiety or depression a full decade after the emotions were initially measured (Charles, 2013).

Cohen et al. (2006) examined the co-occurrence of specific adverse childhood events (ACEs) and their relationship to current emotional distress in an international sample of adults without psychopathology. Participants were 1659 men and women recruited for an international neuro-cognitive neuro-imaging database from sites in the United States, Australia, England, and the Netherlands. Participants had no current or prior diagnosis of major depression, anxiety, substance abuse, or neurological brain disorder. The occurrence and age on onset of 19 ACEs was assessed by a self-report questionnaire (ELSQ), and current symptoms of stress, depression, and anxiety by the Depression Anxiety Stress Scale (DASS). Rates of most
specific adverse childhood events were quite similar across the three continents. Various adverse childhood events were significantly associated with current depression, anxiety and stress severity, particularly specific adverse childhood events (ACEs) involving emotional abuse, neglect, family conflict, violence, and breakup. Findings showed that nearly one-third of the sample reported three or more specific adverse childhood events (ACEs) thereby, suggesting a high prevalence in otherwise healthy "normal" adults around the world. Associations between self-reports and current emotional distress suggested that these events have functional relevance.

Other studies have shown that frequent positive affect predicts resilience to adversity, increased happiness (Fredrickson & Joiner, 2002), better psychological growth (Fredrickson et al., 2003).

Thus, the research review cited above provides direct/indirect evidence for the relation between emotional experience and psychological distress.

**XX. EMOTIONAL EXPRESSION AND PSYCHOLOGICAL DISTRESS:**

More the expression of negative emotions, lesser is the psychological distress related with the emotion. However, this expression of negative emotions may at times, lead to negative attribution about oneself thereby, increasing psychological distress, depression, and anxiety. Men are less
emotionally expressive than women. Women have been found to express emotions such as shame, fear, and sadness more often than men, and to report higher levels of sign of psychological distress, like sadness and depression (Lu & Wang, 2012).

The association between life events and psychological distress was found to be mediated by attitudes towards emotional expression for those with low social support but not for those with high social support. Passive interpersonal behaviour significantly accounted for additional variance in psychological distress to that accounted for by life events and attitudes (Surgenor & Joseph, 2000). Studies show that adverse emotional experiences in childhood are carried on into adulthood, and lead to psychological distress. To assess how chronic emotional inhibition mediated the relationship between a history of childhood emotional invalidation or abuse and adult psychological distress, Krause, Mendelson, and Lynch (2003) asked 277 participants to complete a set of self-report questionnaires and a subset of 88 participants to complete a current avoidance measure. The findings strongly supported that emotional inhibition significantly predicted psychological distress, including depression and anxiety. Childhood psychological abuse, parental punishment and distress in response to negative emotions was associated with chronic emotional inhibition in adulthood, i.e., negative emotional expression, thought suppression and avoidant stress response.

Tan and Carfaginini (2008) reported that women who were high in
depressive symptoms also reported the highest level of self-silencing behavior, anger suppression and anger expression, compared to moderately and non-depressed women.

Hence, expression of positive and negative emotions could have a direct relation with psychological distress. Negative emotion, experience and expression, such as anger expression and suppression enhance feelings of distress and lead to depression whereas, positive emotions tend to decrease distress.

XXI. EMOTIONAL COMPETENCE AND PSYCHOLOGICAL DISTRESS:

There is scarcity of research evidence on the direct relation between emotional competence and psychological distress.

Studies even show that low level of self-efficacy is related to psychological distress, negative affect and behavioural dysfunction in patients with chronic medical conditions as well as psychological maladjustment in elderly people (Wu et al., 2002).

High levels of emotional distress are thought to have disruptive effects in general process models of competence and cognition (Bowlby, 1982; Kopp, 1989), in experimental paradigms of dysfunction such as learned helplessness (Dweck & Elliot, 1983; Dweck & Wortman, 1982), and in research on stress and coping (e.g., Rutter, 1981). Higher trait emotional
competence has been found to be associated with greater well-being and higher self-esteem (Schutte, Malouff, Simunek, McKenley, & Hollander, 2002), as well as a lower risk to develop psychological disorders (Gross & Munoz, 1995) or burnout (Mikolajczak, Menil, & Luminet, 2007).

Campbell (2010) investigated the relationship between emotional intelligence, coping style and experience of psychological distress in 85 Australian high school adolescent students. The results of the study provided indirect evidence, with psychological distress being predicted by coping style, and coping style in turn, predicted by emotional intelligence.

Chow, Chu and Wong (2011) examined how emotional intelligence, personality and social problem solving were linked to depression and life dissatisfaction in 144 Chinese undergraduates students in Hong Kong. Structural equation modeling showed that self-emotional appraisal and use of emotions was linked to somatic and cognitive symptoms of depression, after controlling for personality. Social problem solving was also found to be linked to psychological distress.

Findings suggest the individuals, who use emotional intelligence, find it easier to adjust to stressful life events. Such individuals have increased self-control skills, empathetic skills, self-awareness, and are more likely to engage in adaptive coping and, in turn, report reduced levels of psychological distress.
Hence, the above review of literature indicates that emotional competence may be negatively related with psychological distress.

Another important aspect of the present research was to review gender differences in health and its cognitive/affective correlates, which has been dealt below.

**XXII. GENDER DIFFERENCES:**

Gender differences in emotional functioning are often inconsistent across personality, social, cultural and situational variables, as well as the type of emotional processes and the quality of emotion. Since males and females are socialized to have different motives and goals depending on age, culture and the socialization process, gender differences therefore, tend to occur in emotional processing also.

**i. Gender differences in cognitive correlates:**

Numerous studies have shown that men and women react to the experience of stressors and lack of protective resources in different ways, with women exhibiting high levels of internalizing health outcomes (e.g., psychological distress and ill health) and men showing higher levels of externalizing outcomes (e.g., substance abuse and aggression). The specific configurations of factors that are sufficient to produce ill-health outcomes, however, differ across men and women, Men require a full onslaught of stressors and a dearth of resources to experience high psychological distress.
or ill health and women experience poor health outcomes as a result of, relatively limited combinations of factors.

Tamers, Janicki, and Helgeson (2002) examined recent studies of sex differences in coping. Women were more likely than men to engage in most coping strategies. The strongest effects showed that women were more likely to use strategies that involved verbal expressions to others or the self - to seek emotional support, ruminate about problems, and use positive self-talk.

A study examined whether women are at higher risk of developing stress reactions in situations of war and terror. The study looked at gender differences within two samples - teenagers (n=353) and adults (n=890) regarding the impact of stress that developed in response to a situation of threat of war and terror as a result of Israel's withdrawal from Lebanon. The study tested: (1) gender differences regarding cognitive appraisal of the stressor, coping styles, psychological symptoms, and life satisfaction; (2) whether cognitive appraisal and coping styles mediated gender differences in psychological symptoms and life satisfaction; and (3) whether the two age groups differed regarding the contribution of gender to the studied variables. The results revealed that among the teenagers, gender differences were found only in cognitive appraisal and psychological symptoms, while among adults, gender differences were found in all the studied variables (Kimhi & Shamai, 2006).
Significant gender differences were also found in psychological adjustment to diabetes. The psychological factors negatively related with the psychological adjustment to diabetes in men and women showed depressive coping and depressive symptomatology. In a study Enzlin, Mathieu, and Demyttenaere (2002) examined gender differences in 280 adult patients attending the outpatient diabetes clinic. They completed psychological self-rating questionnaires evaluating coping, depression, marital satisfaction, cognitive and emotional adjustment to diabetes. This study revealed that men used significantly more active coping, less avoiding, less social support seeking and less depressive coping. Women reported more depressive symptomatology than men did, and more women were depressed.

Thus, there are equivocal results regarding gender differences on cognitive emotion regulation among adolescents while there exist differences between men and women on cognitive emotion regulation. The review also highlights that women tend to use more of cognitive coping strategies.

ii. **Gender differences in affective correlates:**

Women, by nature, are more focused on their emotions and refer to them more commonly in conversation than men. Both the genders experience emotions and emotional reactions to different stimuli and situations. However, men and women can experience their emotions differently, and for different reasons. In general, women describe more intense emotions than men and usually report experiencing negative emotions for a longer duration
than men (Fisher & Manstead, 2000).

A number of researchers, using self-report measures, have found gender differences in the intensity of emotional experience (Brody & Hall, 2000; Frijita, Diener & Sandvick, 1991). Along with parents, peers, and other socialization agents like media, schools, etc., all tend to influence emotional expression in accordance with gender stereotypic display rules (Brody, 1999). There is evidence in many cultures that women are more comfortable displaying their feelings than are men (Hyde, 2007).

Men certainly show the world lesser of their emotional side. However, men do express their emotions. Compared to women, men often show their emotions to less people, and often only to their nearest and dearest. Also compared to women, men display their emotions with less intensity, and tend to downplay how they are feeling. Men tend to have a greater control over their emotions and what emotions they will display to the world, possibly due to having more difficulty displaying emotion than women.

Expression of emotions is different in men and women. Men tend to be persuaded that somewhat more emotional management is necessary. Though, men and women may share roughly the same sort of emotional experiences in their relationship, but they differ in how freely they express their feelings. Men tend to express their positive and negative emotions less frequently and less intensely than they experience. However, on the other hand women tend to be somewhat more direct in their emotion expression.
(Hatfield, Rapson, & Yenchi, 2009).

There is evidence that in many cultures women are more comfortable displaying their feelings than are men (Hyde, 2007). In conversation, girls and women use more emotion words and talk about emotions than do boys and men (Brody & Hall, 2000; Goldschmidt & Weller, 2000). Theorists argue that women are more likely than men to ruminate chronic strain. Therefore, women report more intense distress for a longer duration than men (Nolen-Hoeksema et al., 1999).

Canli, Desmong, Thao, and Gabriell (2002) conducted a study of young American couples stereotypes as to how men and women generally behave during conflicts. It was concluded that men are conflict-avoidant and women are conflict-confronting; they are frustrated by men's avoidance.

Colligen et al. (2010), in their study, asked participants to categorize fear and disgust expression displayed visually, audio-visually or by auditory reactions. Results revealed an advantage of women in all the conditions of stimulus presentation. Females also showed greater neural integration of different sensory - emotional information.

Lawton and colleagues found that older participants were more likely to endorse statements like, "I seldom cry", than middle aged or younger participants (Lawton et al., 1992) whereas Malatesta and Kalnok (1984) did not find any age differences in self-reported measures on emotional
expression. However, Carstensen and colleagues found that compared to middle-aged couples, older couples showed less interest, humor, anger and disgust during a conversation or about a conflict in their conversation (Carstensen, Goltman, & Levenson, 1995).

Women perceive there is more at stake, so they experience problems in their social relationship (Antonucci, 2001) because women's social interactions are more distressing.

Studies on psychological distress have consistently reported gender differences; women experience more distress than men (Almeida & Kessler, 1998). Scholars have interpreted women’s distress in terms of their greater exposure to the stressors and other emotional factors. Almeida and Kessler (1998) examined men’s and women’s experience of daily stressors and psychological distress in a U.S. sample of 166 married couples, and concluded that the significant gender differences diminished when respondents’ daily stressors were controlled for. Research on the impact of stress on mental health has focused on the role of chronic stressors (i.e., the ongoing and difficult conditions of daily life), and found that exposure to social life stress, financial stress, relationship stress, child (i.e., parenting-related) stress, environmental stress, family health stress, and job strain are positively linked to psychological distress (Denton, Prus, & Walters, 2004).
According to the gender role perspective, women are more distressed than men because women’s roles expose them to more stressors (Gove & Tudor, 1973; McDonough & Walters, 2001; Mirowsky & Ross, 1992).

Research has found that women are more likely to experience emotional problems than men (Horwitz & White, 1994; Kessler & McLeod, 1984; and Turner, 1999). Some explain these findings by arguing that women are exposed to more stress than males (Kaplin & Marks, 1995; Wearing, 1996). Others argue that statistical differences are a result of differential treatment of males and females by medical professionals, and do not signify a genuine difference in the exposure to, and experience of emotional problems (Aneshensel, Rutter, & Lachebruck, 1991). Still other researchers argue that women are more likely to be assumed to be experiencing distress because of their emotional use of language and their willingness to discuss emotional states (Stearn, 1993; Wierzbicka, 1986).

Custrini and Feldman (1989) identified thirty-three 9- to 12-year-olds with above or below average levels of social competence on the Achenbach Child Behavior Checklist and tested their encoding accuracy (i.e., the degree to which others could assess their facial expressions when the children were exposed to a series of affect-inducing film clips). The clips were chosen for their effectiveness at evoking five primary categories of emotion: anger, disgust, happiness, sadness, and combined fear/surprise. They also assessed subjects’ ability at decoding the facial expressions of a sample group of
stimulus persons. Girls with high social competence were more accurate at encoding and decoding than their less competent, same-sex peers; boys showed little difference according to their level of social competence.

Thus, the review of literature throws some light on the relation of health with different cognitive and affective correlates. Hence, the present study was undertaken to examine the contribution of cognitive variables (viz., cognitive emotion regulation and cognitive distortions) and affective variables (viz., emotional experience, emotional expression, emotional competence, and psychological distress) towards health.

**HYPOTHESES**

On the basics of the review of literature, the following hypotheses were formulated for the present investigation:

1. There would be differential predictors of health of adult men and women.
2. Health would be positively related with cognitive emotion regulation, and negatively related with cognitive distortions.
3. Health would be positively related with positive affect, positive expressivity, and emotional competence, whereas it would be negatively related with negative affect, negative expressivity, and psychological distress.
4. Cognitive distortions would be positively related with negative affect, negative expressivity, and psychological distress, and negatively related with cognitive emotion regulation, positive affect, positive expressivity, and emotional competence.

5. Cognitive emotion regulation would be positively related with positive affect, positive expressivity, and emotional competence, and negatively related with negative affect, negative expressivity, and psychological distress.

6. Positive affect would be positively related with positive expressivity and emotional competence, and negatively related with negative expressivity and psychological distress.

7. Negative affect would be positively related with negative expressivity and psychological distress, and negatively related with positive expressivity and emotional competence.

8. Positive expressivity would be positively related with emotional competence, and negatively related with psychological distress. On the other hand, negative expressivity would be negatively related with emotional competence, and positively related with psychological distress.

9. Emotional competence would be negatively related with psychological distress.
10. Males would score higher than females on health and cognitive distortions.

11. Females would score higher than males on emotional experience (positive affect/ negative affect), emotional expression (positive expressivity/ negative expressivity) and psychological distress.

12. There would be no differences between males and females on cognitive emotion regulation and emotional competence.