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Prof. Dr. S. Subramanian, Ph.D.,  
The Professor and Head,  
Department of Psychology,  
Bharathiar University,  
Coimbatore 641 046,  
Tamil Nadu,  
India

E-mail: [sugisubbu@hotmail.com](mailto:sugisubbu@hotmail.com) / [ssmsoma@yahoo.com.sg](mailto:ssmsoma@yahoo.com.sg)

Mobile: 99947 58447

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D.V. Nithyanandan, M.Phil., Ph.D.,  
Doctoral Research Fellow,  
Department of Psychology,  
Bharathiar University  
Coimbatore 641 046,  
Tamil Nadu,  
India

E-mail: [nithyanandan1981@gmail.com](mailto:nithyanandan1981@gmail.com)

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**ABSTRACT**

Research on the promotion of resiliency and personal competency among those, who had encountered negative life events revealed that strength of individual's internal resources tend to have a sizable impact on the adoption of different types of coping strategies. Among the various internal resources, the two factors such as "Hardiness" and "Optimism" are identified as General Health promoting factors, which enable the individuals to remain both psychologically and physically healthy despite encountering negative life events in adolescence stages.

Data on Hardiness, Optimism and Pessimism Scale and the types of Cognitive Emotion Regulation Strategies from 160 adolescents, who had encountered negative life events were collected. Results showed that those adolescents, who scored high on Hardiness and Optimism scales are more likely to engage in problem focused, active and support seeking coping strategies such as Positive Refocusing, Refocus on Planning, Positive Reappraisal and Putting into Right Perspectives with Positive Interpretation. Adolescents, who scored very low in Hardiness and Optimism scale are more likely to engage in distant, avoidant and emotionally focused coping strategies such as self- blame, blaming others, ruminating, and catastrophizing. The implications of results were discussed with possible interventions to improve the internal resources among the adolescents, who had encountered negative life events.

## **Introduction**

Since the promotion of resiliency and competence has become the focus of current health care efforts, concepts, which are relevant to understanding how an individual's psychological health might well be enhanced need to be addressed. Competency refers to the effectiveness of one's actions in the world and a personal sense of well being in diverse areas of functioning (Baldwin et.al. 1993, Florian et.al 1995). Although the domain in which one can achieve competence vary widely (e.g., behavioural, social, academic), the term implies that an individual has demonstrated achievement in one or more areas and will continue to have the capacity to succeed in future. Resiliency has the capacity for successful adaptation despite challenging or threatening circumstances and the development of competence and conditions of severe adversity (Funk, 1992, Kobasa et. al. 1982).

Protective factors, which contribute to the development of resilience and competence (Weissberg, 1991, Williams et.al., 1992), increase the functioning of the individual under conditions of significant adversity. Specifically, they serve to moderate the impact of individual vulnerability or threatening environments.

While given relatively little attention by intervention strategies and programs, results within the risk, resiliency and trauma literature have documented that an individual's internal resources and their contributions to resiliency is an additional and important area to pay attention. Two concepts, which have recently emerged within the area of psychological resiliency and, which address the relevance of "internal

characteristics” in helping one to overcome and deal with negative life experiences, are Hardiness and Optimism. Emerging from the medical literature, the concept of Hardiness was first identified by Kobasa(1982) as a resistance factor in the early 1980’s. Preliminary findings revealed that individuals, who experienced high levels of stress, but remained healthy had a different personality structure than individuals who experienced high levels of stress and became ill. The central domain of this personality structure, labeled as Hardiness, was subsequently defined as “the use of ego resources necessary to appraise, interpret and respond to healthy stressors”. Although it continue to be employed most frequently in the contexts of medicine and illness, researchers are beginning to conceptualize Hardiness as a General Health promoting factor, which enables the individual to remain both psychologically and physically healthy despite confronted by stressful situations or experiences (Maddi and Kobasa 1984, Maddi et al., 2006).

In contrast to Hardiness, the concept of Optimism reflects an individual’s expectation of a positive outcome in most situations (Scheier and Carver, 1985, Schneider and Leitenberg., 1989). It has been argued that optimism enables the individual to set goals, make commitments, cope with adversity and pain and recover from trauma and stress. Numerous studies have examined the role an “Optimistic Bias” plays in adolescent and adult mental health and reported a strong relationship between the possession of an optimistic outlook and current self-reported happiness (Scheier and Carver, 1985, Schneider and Leitenberg., 1989).

According to Kobasa (1982), the effects of hardiness on mental health are mediated by the individual's cognitive appraisal of a stressful situation and his/her repertoire of coping strategies. Specifically, hardiness alters two appraisal components – it reduces the appraisal of threat and increases one's expectation that coping efforts will be successful (Maddi et.al., 2006). Hardiness has also been shown to be associated with the individual's use of active, problem focused coping strategies for dealing with stressful events (Genrty and Kobasa, 1984, Kobasa, 1982). These two mechanisms are, in turn, hypothesized to reduce the amount of psychological distress one experiences and to contribute to the long term psychological well being of an individual.

Emotional regulation refers to all the strategies that are used to reduce, maintain or increase emotions (Gross, 2001). Emotional regulation strategies are implicated in personality and emotional, cognitive, and social development, including resiliency. When they are biased, they also play a prominent role in the development and maintenance of emotional disorders. In fact, the concept of emotional regulation is very broad and encompasses a wide range of conscious and unconscious physiological, behavioral and cognitive processes (Gross, 2001). Garnefski et. al. (2002) showed that people, who adopt adaptive strategies report fewer depression and anxiety symptoms than people, who use non-adaptive strategies. It is reported that less hardy individuals, who are more likely to engage in distancing, avoidance and emotionally focused coping strategies and individuals who score high on hardiness measures are more likely to engage in problem-focused, active and support seeking coping strategies (William et.al, 1992, Evans and Dunn, 1995).

**Objectives of the Study:**

The primary objectives of the research study are given as below:

- i) To explore the extent to which hardness and optimism moderate the types of cognitive emotion regulation strategies among adolescents who had encountered negative life events.
- ii) To find out the difference between the adaptive and non-adaptive cognitive emotion regulation strategies among adolescents who had encountered negative life events.

**Methodology:****Sample:**

The sample for this study consists of 160 adolescent students who had failed in the higher secondary school examinations (Tamil Nadu State Board Higher Secondary +2 level Examination) and at present enrolled in tutorial colleges to continue their studies. Ages ranged from 17 to 19 years with a mean age of 18.3 (SD = 1.01). They had failed in their higher secondary examination first time and had encountered negative life events more significantly at their young age and had depressed state of feelings for quite some time.

The administration of CERQ, Hardiness and Optimism was part of a larger evaluation process including other questionnaire and cognitive tasks. All participants were tested individually after given their consent in writing. The questionnaire was completed anonymously and no compensation was given for participation. A total of 160 male adolescent boys responded to a set of questionnaires. Among them 20 responses

were not usable due to incomplete information in some of the items. There fore only 140 subjects were involved in this study.

### **Measures:**

#### **i) Cognitive Emotion Regulation Questionnaire (CERQ):**

The CERQ is a 36 item self reporting questionnaire with a 5 point Likert response format (1 almost never to 5 almost always) designed to evaluate the cognitive aspects of emotion regulation. The questionnaire is introduced by the following sentences, which are written at the top: “Every one gets confronted with negative or unpleasant events now and then and everyone responds to them in his/her own way. With the following question, you are asked to indicate, what you generally think, when you experience negative or unpleasant events.

This questionnaire consists of nine dimensions such as:

**a) Acceptance:** (Having thoughts of acceptance and resignation with regard to what one has experienced. e.g. I think that I have to accept that this has happened).

**b) Positive Refocusing:** (Having positive, happy and pleasant thoughts instead of thinking about threatening and stressful events. e.g. I think of nicer things that what I have experienced).

**c) Refocus on Planning:** (Having thoughts about what to do and how to handle the experience one has had. e.g. I think of what I can do best)

**d) Positive Reappraisal:** (Having thoughts the goal of which is to give a positive meaning to the negative events in terms of personal growth. e.g. I think I can learn something from the situation).

**e) Putting into perspective:** (Having thoughts that realize the negative event compared to other events; e.g. I think that it all could have been much worse).

**f) Self-blame:** (Having thoughts that blame oneself or what one has experienced. e.g. I feel that I am the one to blame for it).

**g) Rumination:** (Having thoughts about the feelings and thoughts that are associated with negative events. e.g. I often think about how I feel about what I have experienced).

**i) Catastrophizing:** (Having thoughts that emphasize the negativity of the experience. e.g. I continually think how horrible the situation has been).

**j) Blaming others:** (Having thoughts that blame others for what one has experienced. e.g. I feel that others are to blame for it).

These nine dimensions were classified into two categories as adaptive strategies (Acceptance, Positive Focusing, Refocus on Planning, Positive Reappraisal and putting into Perspective) and non adoptive strategies (Self-Blame, Rumination, Catastrophizing and Blaming Others).

### **ii) Hardiness:**

Twenty item abridged Hardiness Scale developed by Kobasa,(1982) was used to measure Hardiness. Total score on this scale is considered for the assessment of Hardiness. The higher score on this scale indicates the higher the Hardiness.

### **iii) Optimism:**

A 10 item scale developed by Scheier, Carver, and Bridges (1994) was used to measure Optimism levels of the participants. This measures dispositional Optimism. The scale consists of two filler items, four positively-worded items, and four reverse-coded items. Respondents indicate their degree of agreement with statements such as, "In

uncertain times, I usually expect the best," using a five-point response scale ranging from "strongly disagree" to "strongly agree". It has been used extensively in studies of stress, both with college students and with people going through stressful events, such as medical populations facing or recovering from serious diseases or treatments.

## **Results and Discussion:**

### **Relationship between Hardiness and Emotion Regulation Strategies:**

Pearson's Product Moment correlation between Hardiness and Cognitive Emotion Regulation Strategies, Optimism and Cognitive and Emotion Regulation subscales were calculated and presented in Table 1.

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Insert Table I about here

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The results in Table-I show that the four adaptive strategies, i.e. Positive Refocusing, Positive Reappraisal, Putting into Perspective and Adaptive strategies were significantly and positively correlated with Hardiness and Optimism. Four non-adaptive strategies i.e. Self-Blame, Rumination, Catastrophizing and Non-adaptive strategies were significantly and negatively correlated with Hardiness and Optimism. This shows that the internal characteristics will have a significant impact on the types of adaptive and non-adaptive emotion regulation strategies, while coping with the adverse situations. A psychological intervention among those depressed people targeting these emotion regulation strategies will enhance their mental health.

## **High and Low levels of Hardiness and Optimism and Cognitive Emotion Regulation**

### **Strategies:**

Hardiness and Optimism scores were rank ordered from highest score to the lowest and accordingly those, who fell under the Q1 (top 25 per cent) were categorized as high group and those who fell under the Q4 (bottom 25 per cent) area were categorized as low group in Hardiness and Optimism . The significance of difference between high and low groups were found out by 't' test and the results are presented in Table 2 and 3.

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Insert Table 2 about here

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The results obtained in table 2 show that the adolescents with low hardiness as compared to those with high hardiness have significantly adopted more of non-adoptive strategies such as self-blame, rumination and catastrophizing. Whereas adolescents with high level of hardiness tend to follow the more adaptive emotion strategies such as positive refocusing, positive reappraisal and putting into perspective than those adolescents, who were low in hardiness.

However, the high and low hardiness groups did not differ significantly on Acceptance, Refocus in Planning and Blaming others. The comparison of these two groups of adolescents (High and Low levels of Hardiness) who had encountered the similar types of negative life events such as failure in higher secondary school

examination (+2 level examination) revealed that the level of hardiness is likely to moderate the cognitive process at significant level and affect the overall emotional regulation strategies.

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Insert Table 3 about here

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The results in the table 3 show that Optimism as a moderator plays the same role as the Hardiness. This is meaningful in the sense the hardy individual lays emphasis on his /her own resources to deal with the failure or negative incident and develops an optimistic attitude. Or in other words Hardiness results I the development of an Optimistic Attitude.

Hardy and optimistic adolescents use more of adaptive cognitive coping strategies, when coping with negative incidents. The CERQ can be used for the diagnosis of individuals with the purpose of explaining the extent to which someone, when using the nine specific cognitive coping strategies varied from his or her standard group. It is expected that the same cohort, which had encountered the same negative incident may likely to exhibit more or less the similar type of cognitive coping strategies. But, it is revealed that the level of hardiness and optimism tend to moderate the adoption of the types of coping strategies significantly. This information can be of much importance in determining the purpose and content of the assistance. For example, the internal resources of individual can be enhanced sizeably through some intervention, which will facilitate to

overcome non-adaptive cognitive strategies and subsequently in facilitating the adoption of more adaptive coping strategies to deal with negative events.

The proper analysis of the types of cognitive emotive regulation strategies followed by adolescents in adverse situations will facilitate to take up appropriate remedial corrective measures to put them in the right track and to enhance their psychological well being. In this way, it can be established that the extent to which some one uses adaptive (functional) and non-adaptive (dysfunctional) cognitive emotive coping strategies, while encountering negative incidents can be enhanced by the level of Hardiness and Optimism. This information can be of much importance to determine the purpose and content of the required assistance. For example, the basis of the treatment could be the ways in which one can overcome non-adaptive (dysfunctional) cognitive emotive strategies more effectively and be able to follow the adaptive (functional) strategies. Further, it is quite obvious that, whoever had encountered some adverse incidents are likely to adapt either adaptive (functional) or non-adaptive (dysfunctional) strategies to overcome such incidents. But the functional strategies facilitate to balance the mental health and prevent people to get into more depressive or aggressive states.

The findings of this study revealed that the internal resources such as Hardiness and Optimism mediate the choice of emotion regulation strategies by altering the individual's cognitive appraisal process, such that individuals are able to reframe or reinterpret adverse experiences of failure in the examination. Consequently, it is expected that the level of psychological distress experienced by them may likely to be reduced.

Further, hardy individuals have the ability to cope in a way that is adaptive, once adversity is perceived or encountered. This showed that the hardy person prefer to rely on active, transformational coping strategies, which act to cognitively transform a “potentially negative event” into a “growth producing experience”. Further, it is expected that individuals, who are engaging in problem focused coping, generally demonstrate fewer indications of distress and maladjustment. It is quite evident that the hardiness and optimism in adolescence lead to the development of a range of functional adaptive coping strategies even when affected by adverse situations such as failure in examination.

Implementing suitable interventions early in the developmental stage, particularly at primary and secondary school level will help build adequate internal resources (Hardiness and Optimism) and in turn enrich these cognitive self-regulatory, academic and interpersonal capacities, which may help to promote the development of more adaptive coping strategies.

Table 1: Relations between Cognitive Emotion Regulation Strategies and Hardiness and Optimism.

<b>CERQ sub scales</b>	<b>Hardiness</b>	<b>Optimism</b>
Acceptance	.18	.12
Positive Refocusing	.33**	.28**
Refocus on Planning	.17	.14
Positive Reappraisal	.35**	.38**
Putting into Perspective	.41**	.39**
Self-Blame	-.52**	-.41**
Rumination	-.46**	-.39**
Catastrophizing	-.56**	-.48**
Blaming others	-.09	-.10
Adaptive Strategies	.36**	.31**
Non-adaptive Strategies	-.48**	-.42**

\*\*p<.01

Table 2: High and Low levels of Hardiness and Cognitive Emotion Regulation Strategies.

CERS	Levels of Hardiness		Mean Difference	“t” values
	High (N=35)	Low (N=35)		
	Mean (SD)	Mean(SD)		
Acceptance	10.82(2.72)	10.48(2.06)	0.34	1.17
Positive Refocusing	10.96(2.50)	9.54(2.31)	1.42	4.94**
Refocus on Planning	12.21(2.28)	12.19(3.74)	0.03	2.42
Positive Reappraisal	12.15(2.51)	10.98(2.3)	1.17	4.04**
Putting into Perspective	10.96(2.51)	9.36(3.41)	1.6	4.46**
Self-Blame	7.03(2.00)	8.79(3.16)	1.76	5.45**
Rumination	7.51(2.72)	8.93(3.32)	1.42	4.59**
Catastrophizing	9.69(2.61)	11.65(2.78)	1.96	6.10**
Blaming others	10.82(2.72)	10.48(2.06)	0.34	1.17

\*\*p<.01

Table 3: High and Low levels of Optimism and Cognitive Emotion Regulation Strategies.

CERS	Levels of Optimism		Mean Difference	't' values
	High (N=35)	Low (N=35)		
	Mean(SD)	Mean(SD)		
Acceptance	10.48(3.06)	10.35(1.94)	0.13	0.66
Positive Refocusing	10.94(3.16)	9.86(2.65)	1.08	3.07**
Refocus on Planning	11.89(2.45)	12.15(2.51)	0.26	0.89
Positive Reappraisal	11.29(3.64)	9.69(2.61)	1.60	4.25**
Putting into Perspective	10.96(2.51)	9.54(2.31)	1.42	4.94**
Self-Blame	7.77(2.40)	8.79(3.16)	1.02	2.95**
Rumination	7.51(2.72)	8.84(2.20)	1.33	4.59**
Catastrophizing	9.86(2.65)	10.94(3.16)	1.08	3.07**
Blaming others	9.54(2.31)	9.36(3.41)	0.18	0.36

\*\*p<.01

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