

Relationship of Defensive Pessimism with Perceived Stress, Coping and Psychological Functioning in Youth

Asha Ravi and Manjula M.

National Institute of Mental Health and Neuro Sciences, Bangalore

Defensive pessimism is considered as a cognitive coping strategy found to be useful in performance related stressful situations. In the background of scanty literature in the Indian context the study aims to examine defensive pessimism, coping and psychological functioning among youth and also to examine the relationship between defensive pessimism, perceived stress, coping and psychological functioning. The study was exploratory in nature, conducted with 200 undergraduate students. They were assessed on Defensive Pessimism Questionnaire, Cohen's' Perceived Stress Scale, Proactive Coping Inventory, Rosenberg Self Esteem Scale and Adult Self Report. Descriptive statistics, correlation and t test were used to analyze data. Results indicate that the participants have high defensive pessimism and perceived stress. With respect to coping strategies used, strategic planning was used more. Defensive pessimism has high correlation with perceived stress and proactive, preventive, reflective, and strategic coping. There was average self esteem among the participants. On Adult Self Report, anxiety depression was found more in females, so was perceived stress and instrumental coping. Defensive pessimism is associated with thought problems. Anxiety/depression, withdrawal and attention problems had negative correlation with proactive, preventive and emotional coping. The findings have implications in planning interventions keeping the coping patterns and the nature of stress in mind..

Keywords: Defensive pessimism, Youth, Perceived Stress, Self Esteem, Coping.

Defensive pessimism is a cognitive strategy in which people set low expectations and reflect extensively on possible outcomes prior to an event, situation or performance (Norem & Canter, 1986). This strategy can help anxious people harness their anxiety so that it works for rather than against them (Showers & Ruben, 1990). Defensive Pessimists, even if they have done well in the past, feel anxious and out of control as they anticipate future situations. Their pessimism is said to be strategic because it appears to serve two goals: 1. preparing the individual for the possibility of failure, 2. Increasing effort to enhance the likelihood of doing well (Showers & Ruben, 1990). Their mental rehearsal of possible bad outcomes helps to visualize how they might prevent those outcomes, and then they put their plans into action. As their strategy unfolds, the defensive pessimist's anxiety typically subsides, and subsequently does not interfere with their performance (Norem & Illingworth, 1993). Setting low expectations is said to prevent a

loss of self-esteem should failure occur. They also generally have moderately positive self views and self esteem which itself will help in maintaining the self esteem (Norem, 2001). With respect to the domains of defensive pessimism research shows that in Chinese college students' reflectivity subscale correlated with Chinese cultural values and contributed to hope and positive growth initiative (Lie & Duan, 2016). In a two year follow-up study on university students it was found that four types of achievement strategy were identified: optimistic, defensive-pessimistic, impulsive and self-handicapping. An optimistic strategy was associated with academic satisfaction and well-being, defensive pessimism was related to academic achievement (Eronen, Nurmi & Salmela-Aro, 1998).

Stress occurs when one is confronted with a situation which is perceived to be overwhelming and one cannot cope with (Agolla & Ongori, 2009). Perceived stress is found to be high in

college youth and often it is related to workload (Augustine, Sylvia, Rao & Rao, 2011; Kausar, 2010). Females had higher scores on perceived stress compared to males (Backovic, Zivojinovi, Maksimovi & Maksimovi, 2012; Saleh, Camart & Romo, 2017; Shamsuddin et al. 2013). Coping is constantly changing cognitive and behavioral effort to manage specific external and/or internal demands that are seen as taxing or exceeding the resources of the person (Lazarus & Folkman, 1984). Coping methods are known to influence experience of stress. Most college youth used both emotion and problems focused coping, however emotion focused coping was used more by female students and problem focused coping was used by males (Ramya & Parthasarathy, 2009). Psychological functioning refers to the optimum functioning of a person's emotions, cognitions and physical nature and also in the interaction with the environment. It also means an absence of any dysfunction. Thus the expectations, self worth and the coping strategies that we use influence the psychological functioning in an individual (Ross & Mirowsky, 2006). Literature shows contrary findings with respect to type of coping and its association with psychological problems. Some studies show that emotion-focused coping is found to be associated with increased odds of depression and task-oriented coping with a lower likelihood (Verschuur et al. 2004; Carpenter et al. 2011; Goodwin, 2006). Avoidance coping was found to moderate negative life events and suicide (Sun & Jang, 2015). Another study found that logical analysis and cognitive avoidance coping skills were negatively associated with mental disorders, and taking problem-solving action and acceptance/resignation coping were positively associated with mental disorders (Li & Zhang, 2012).

Self esteem is found to have an influence with defensive pessimism. Growth- curve analysis of changes in self esteem during college show that defensive pessimist's increased their self esteem over time, whereas equivalently anxious individuals who did not use defensive pessimism showed decreases in self esteem (Norem & Bordzovic, 2007). Positive self esteem was correlated with proactive coping (Lo, 2002), reflective coping together with self-esteem would

reduce depression and proactive coping reduced anxiety and enhanced self esteem (Griva & Anantostopoulouse, 2010; Wei et al. 2008).

From the literature it is not clear if defensive pessimism is used in college youth and if it is, the relationship between defensive pessimism, stress, coping, and self esteem needs to be understood. It would be relevant to study defensive pessimism in college students as it is largely used in stressful performance situations like an exam or deadline. Also the relationship between psychological problems and defensive pessimism is not explored. Similarly the other coping strategies used along with defensive pessimism is not understood. Psychological functioning is conceptualized to include presence of psychological problems and self-esteem for the current study. In this background the study aimed to understand the use of defensive pessimism, its relation to stress and coping, psychological problems and self esteem. The results would have implications in planning interventions for stress management in student population. The knowledge about the above mentioned variables would be useful to assert whether a particular style of a person is effective in promoting positive mental health.

Method

The study used exploratory design with a sample of 200 students pursuing undergraduate and post graduate courses from colleges in Bangalore. Inclusion criteria for the study included: Individuals in the age group of 18-26 years, who can read and write English language. The objectives proposed for the study were examined using the following tools:

Sociodemographic Data Sheet was developed by the researcher in order to obtain socio-demographic information of the sample. The details such as, age, gender, education, socioeconomic details, occupation and marital status were recorded.

Defensive Pessimism Questionnaire by Norem & Cantor (1986), comprises of 9 items assessing defensive pessimistic coping style, rated on a 7-point Likert-type scale ranging from 1 (not at all true of me) to 7 (very true of me). Out of this 4 questions measure defensive orientation/defensive pessimism,

4 questions measures optimistic orientation/strategic optimism and 1 item measures actual past performance. A single score is formed by adding all the items. Those scoring in the upper quartile are defensive pessimists, those in the lower quartile are strategic optimists, and the middles are considered aschematic (Norem, 2001). Reliability and validity of the scale is been established.

Perceived Stress Scale developed by Cohen (1983) measures the degree to which situations in one's life are appraised as stressful. Items were designed to tap how unpredictable, uncontrollable, and overloaded respondents find their lives. The questions ask about feelings and thoughts during the last month. It is a 10 item scale and responses are measured on 5- point Likert scale ranging from never to very often. It has got good reliability and validity. Test –retest reliability of this scale is 0.85 and predictive validity is found to be quite high

Proactive Coping Inventory (Greenglass, 1998) has 7 scales: Proactive coping, reflective coping, strategic planning, preventive coping, instrumental support seeking, emotional support seeking and avoidance seeking. It is rated on a 4 point scale and from the range of scores obtained the scale is further divided into different sub scales. The scale has got good validity and high internal consistency. It has got high Chronbach alpha ranging from 0.71 to 0.85.

Adult Self Report (Achenbach, 2003) belongs to Achenbach's system of empirically based assessments. ASR is a 126 item self report questionnaire which is meant for adults of ages 18-59. The scale provides scores on 9 empirically derived syndrome scales. It is a self administered questionnaire. ASR has the 9 syndrome based scales namely anxious/depressed, withdrawn, thought problems, attention problems, aggressive behaviour, rule breaking behaviour, intrusive behaviour, other problems, somatic complaints. These are scored on a 3 point Likert scale. This has been found to have excellent reliability and validity. Reliability ranging from 0.63-0.94 and correlations ranging from 0.7 – 0.56.

Rosenberg Self Esteem Scale (Rosenberg, 1965) is a 10-item scale scored on a four-point

response system where participants indicated their level of agreement with a series of statements about themselves. It demonstrates a Guttman scale coefficient of reproducibility of 0.92 indicating excellent internal consistency. Test-retest reliability over a period of 2 weeks reveals correlations of 0.85 and 0.88, indicating excellent stability over time. The validity has also been established to be very high.

Procedure:

The study was approved for ethical consideration by the Institute review board. The selected study tools were administered on 200 undergraduate and postgraduate students after obtaining the permission from the college authorities and informed consent from the participants. The sample was drawn from 3 colleges. The administration of study tools were done in a group format. One class room of students was considered as one group. The data was coded for computer analysis and analyzed using SPSS version 15. The data was analyzed using descriptive statistics. Relationship between variables was established by correlation analysis. Comparison of the subgroups based on gender and different kind of psychological functioning were done by using t test at significant of 0.05 level.

Results

Majority were females (83.5%), belonged to middle class socio-economic status (55%), and followed by upper middle class (24%). The mean age of the sample was 20.8 years.

Average scores on DPQ shows that the study sample was defensive pessimists rather than strategic optimists. The mean for perceived stress indicates high stress. The mean scores on subscales of coping scale show that compared to others proactive coping is used less. However strategic planning is found to be used by majority of them. Participants had average level of self esteem. In the case of syndrome scales of ASR, scores on all the clinical scales were within normal range both for overall average scores and also for males and females separately except for withdrawal subscale for females. Withdrawal score for females was in the borderline range.

There were no gender differences with respect to defensive pessimism. There were

Table 1: Scores on Defensive Pessimism, Perceived Stress scale, Proactive coping scale, and Adult self report scale for overall sample and for males and females.

	Mean±SD (N=200)	Males (N=33) Mean±SD	Females (N=167) Mean±SD	t value/ U value	Sig
DPQ	41.66±8.26	39.69±6.25	41.97±8.612	2326.500	0.158
Perceived Stress	22.15±5.15	19.57±3.38	22.67±5.288	4.325	0.001*
Proactive Coping	13.2±9.46	38.15±4.809	37.77±6.034	2647.500	0.722
Reflective Coping	32.9±9.81	28.27±5.36	29.75±5.75	2340.000	0.170
Strategic Planning	54.70±6.28	10.21±2.9	10.20±2.47	2632.500	0.683
Preventive Coping	26.68±5.15	26.57±4.87	26.70±5.218	2568.000	0.536
Instrumental Coping	22.51±5.22	20.51±4.14	22.85±5.36	2024.000	0.016*
Emotional Coping	14.23±3.61	14.00±3.06	14.28±3.725	2605.000	0.619
RSES	18.83±5.31	18.72±5.63	18.95±4.99	2650.500	0.729
ASR-AD	12.78±6.08	11.51±5.618	14.05±6.566	2118.000	0.036*
ASR-W	5.86±3.13	5.60±2.957	6.13±3.317	2512.000	0.420
ASR-AP	10.99±4.82	10.31±4.424	11.67±5.234	2330.500	0.251
ASR-TP	5.36±3.45	5.36±3.822	5.37±3.091	2656.500	0.743
ASR-AB	10.59±4.95	10.12±4.702	11.06±5.215	2405.000	0.268
ASR-RULE	5.93±4.02	6.60±4.443	5.27±3.613	2266.000	0.105
ASR-INT	4.29±2.35	4.24±2.462	4.34±2.256	2677.500	0.796
ASR-SOM	5.85±4.26	5.90±4.495	5.802±4.042	2725.500	0.921

DPQ = Defensive pessimism questionnaire; ASR-A/D: Anxiety / Depression; ASR-W: Withdrawal; ASR-AP: Attention Problem; ASR-TP: Thought Problem; ASR-AB: Aggressive Behavior; ASR-RULE: Rule Breaking; ASR-INT: Intrusive Behavior; ASR-SOM: Somatic Problem

significant differences between males and females on the scores of perceived stress. With respect to coping, females had higher score on instrumental coping, and anxiety /depression syndrome scale with females showing higher scores.

Table 2 indicates that there is significant relation between defensive pessimism and different kinds of coping such as proactive coping, reflective coping, strategic planning and preventive coping. Defensive pessimism also has a significant relation with thought problems and other minor problems among the syndromes of Adult Self Report.

Perceived stress is not correlated with proactive coping however, has significant correlation with most of the syndromes of adult self report, except rule breaking and intrusive behavior. Self esteem has significant correlation

with proactive coping, reflective coping, strategic planning, preventive coping, as well as intrusive behavior subscale of Adult Self Report.

Defensive pessimism has a significant correlation with perceived stress ($r=0.197$, $p<0.01$). However, self esteem did not have any correlation with perceived stress nor defensive pessimism

Anxiety /depression syndrome is negatively correlated with proactive coping, emotional coping. This shows that people with more anxiety depression syndrome use less proactive and emotional coping strategy. The withdrawal syndrome has significant negative correlation with proactive coping, preventive coping, instrumental coping, and emotional coping. Attention problem had significant negative correlation with proactive coping, preventive coping, and emotional coping. Rule breaking

Table 2: Relation between Defensive pessimism, Perceived stress and Self esteem with Proactive coping and Psychological problems

Spearman's Rho		Defensive Pessimism Questionnaire	Cohen's Perceived Stress	Rosenberg's Self Esteem Scale
Proactive Coping Inventory	Proactive	0.249**	-0.087	0.186**
	Reflective	0.350**	0.101	0.204**
	Strategic	0.307**	-0.014	0.176*
	Preventive	0.307**	-0.008	0.288**
	Instrumental	0.139	0.085	0.134
	Emotional	0.132	-0.078	0.072
Adult Self Report	ASR-AD	0.097	0.457**	0.075
	ASR-W	0.069	0.275**	0.068
	ASR-AP	0.009	0.200**	0.074
	ASR-TP	0.180*	0.323**	0.127
	ASR-AB	0.091	0.346**	0.098
	ASR-RULE	-0.011	0.088	0.113
	ASR-INT	0.015	0.069	0.179*
	ASR-SOM	0.024	0.389**	0.016

*correlation is significant at 0.05 level; **correlation is significant at 0.01 level

Table 3: Relation between Adult Self Report and Proactive Coping Inventory

Adult Self Report	Proactive Coping Inventory					
	Pro-active	Reflective	Strategic	Preventive	Instrumental	Emotional
ASR-AD	-0.200**	-0.037	-0.103	-0.110	-0.002	-0.222**
ASR-W	-0.172*	-0.081	-0.106	-0.171*	-0.209**	-0.397**
ASR-AP	-0.155*	-0.027	-0.118	-0.195**	-0.100	-0.153*
ASR-TP	0.036	0.088	-0.003	0.029	0.022	-0.009
ASR-AB	-0.015	0.036	-0.035	-0.055	-0.042	-0.124
ASR-RULE	-0.059	-0.019	-0.153*	-0.180*	-0.115	-0.164*
ASR-INT	0.163*	0.032	0.035	0.161*	0.050	0.051
ASR-OP	0.047	0.119	-0.026	0.044	0.095	-0.041
ASR-SOM	-0.012	-0.016	-0.094	-0.057	0.034	-0.098

*correlation is significant at 0.05 level; **correlation is significant at 0.01 level

was negatively correlated with strategic planning, preventive coping, and emotional coping. Intrusive behavior is positively correlated with proactive coping and preventive coping.

Discussion

This study examined defensive pessimism, perceived stress, coping and psychological functioning in youth as well as the relationship

between these variables. The sample comprised of more females reason being that the data was largely collected in Girls/women only colleges. Majority of them belonged to middle to upper middle class groups. This is because the data was collected from private colleges and those who could afford to such colleges are generally from middle class status.

Defensive pessimism, stress, coping and psychological functioning

Overall the participants were defensive pessimists rather than strategic optimists (table 1). Defensive pessimism is found to be one of the common strategies used among college youth (Eronen, Nurmi & Salmela-Aro, 1998; Lie & Duan, 2016). Defensive pessimism is considered as a good adaptive form of pessimism and the studies have shown that they do not essentially underperform (Cantor & Norem, 1989; Golub, 2004). However, no significant gender differences were found indicating that it may be a common strategy used by both genders. However there is no supportive literature for gender differences.

Perceived stress is high among the participants. The finding is corroborative of the earlier findings on college youth that they perceive high stress and their perception of stress is also related to workload (Augustine et al., 2011; Kausar, 2010). Females had higher scores on perceived stress compared to males. The findings resonate with many other earlier studies conducted on college youth (Backovic et al., 2012; Saleh, Camart & Romo, 2017; Shamsuddin et al. 2013). However, there are contrary findings as well (Acharya, 2003; Ahern and Norris, 2011). Probably factors contributing to stress just cannot be explained by gender alone, there may be many situational, individual and academic related factors as well as methods of coping that might be contributing to experience stress which require an in-depth examination.

On subscales of coping scale higher scores were found on strategic planning followed by reflective and preventive coping strategies. This can be explained in relation to scores on defensive pessimism. Literature shows that defensive pessimists use the strategy of preparing and planning for the worst. A study by Norem (2008) also reported that defensive pessimists were found to plan and prepare beforehand. Similarly planning for all kinds of outcomes is a feature of strategic planning. It was also found that strategic planning had high correlation with planning and goal oriented preparation (Greenglass & Fiksenbaum, 2009). Planning and goal-oriented preparation is described as

characteristic of defensive pessimism. Similarly, reflectivity is found to be associated with one's cultural values and contributed to hope and positive growth initiative (Lie & Duan, 2016). The higher scores in the current study probably indicate that being reflective helps defensive pessimists to introspect and modify strategies of coping with a variety of stress such that the outcomes are positive. Their planning may largely be focused towards preventing failures by preparing for all possible worst outcomes (Norem & Illingworth, 1993). This resonates with the literature finding that defensive pessimism was related to academic achievement (Eronen, Nurmi & Aro, 1998). Lower scores on emotional coping, instrumental coping and proactive coping indicates that defensive pessimism is probably is a cognitive coping strategy which is different from problem focused coping and emotion focused coping.

With respect to gender differences, females had higher scores on instrumental coping which is similar to other studies (Kaiseler, Polman, & Nicholls, 2012). The reason may be that females are known to seek help compared to males when faced with stressful situations (Misigo, 2015).

Psychological functioning according to the current study means adaptive functioning and behavioral problems as well as self esteem of a person. The participants had moderate level of self esteem and there was no gender difference. Literature on self esteem in college students report that academic performance and family support contributed to their high self-esteem (Crocker, 2002; Hisken, 2011). In the current sample since factors associated with self esteem are not assessed, it is difficult to hypothesise the reasons. However, the sample did not have any psychological problems on ASR, meaning that the psychological distress is low in this sample which might have contributed to self esteem. Also, current sample had higher scores on defensive pessimism and defensive pessimists are reported to have higher self esteem (Norem & Bordzovic, 2007).

Gender differences were noted on anxiety/depression where in females had higher scores than males. The findings are consistent other studies (e.g. Nolen-Hoeksema et al., 1999;

Hankin, 2009). A study on college students by Lavanya & Manjula (2017) also found that females had higher scores on anxiety and depression subscale of Youth self report. Some of the reasons quoted by other researchers are that they tend to internalize their emotions (Pigott, 2003); differences in the brain structures, function, and stress responsivity; exposure to reproductive hormones and social experiences and expectations (Altemusa, Sarvaiya & Epperson, 2014).

Relationship between defensive pessimism, stress, coping, and psychological functioning: There is significant positive relationship between perceived stress and defensive pessimism. The findings resonate with the previous research which proposes that defensive pessimism is used as a coping strategy to deal with stress (Oruko, 2013; Sanna, 1996). It may be possible that those who experience high levels of stress use defensive pessimism to handle the stress as well as to cope better in the stressful situation (Zimmerman & LaDuke, 2017).

Defensive pessimism was found to have high correlation with proactive coping (table 2). Proactive coping is a strategy that combines autonomous goal setting with self-regulatory goal attainment cognitions and behavior (Schwarzer, 1999a). Defensive pessimists are known to have cognitions about their outcomes prior to the event so that they control their behaviour adaptively and the stress levels do not increase (Hosogoshi & Kodama, 2006; Norem & Chnag, 2002). Hence this high correlation can be explained. Similarly there is significant correlation between defensive pessimism and reflective coping. Reflective coping describes simulation and contemplation about a variety of possible behavioral alternatives by comparing their imagined effectiveness and includes brainstorming, analyzing problems and resources, and generating hypothetical plans of action (Greenglass, Schwarzer, Jakubiec, Fiksenbaum, & Taubert, 1999). Similar is the case with defensive pessimists who give a lot of time in planning and analyzing possible negative outcomes and preparing to address them adequately.

Strategic planning and preventive coping are also significantly correlated with defensive

pessimism. This can be explained where defensive pessimism as a concept includes strategic planning for all sorts of outcomes. Thus in the process of preparing for preventing worst outcomes, they actively plan strategies to address the problems effectively as well as prevent the feared outcomes. However, further research needs to be done to elaborate more about this.

Lower correlation with instrumental and emotional coping, indicates that defensive pessimism is more of a cognitive coping strategy.

It was also found that there was no relation between perceived stress and the type of coping strategy used. Studies on stress and coping with nursing and university students gives correlation between the two (Kausar, 2010; Labrague et al. 2016). The result in the current study might indicate that perceived stress in itself may not volunteer use of any particular coping strategy and that people may also use these strategies despite their perception of their stress level.

With respect relationship between defensive pessimism and psychological functioning, defensive pessimism has significant correlation with thought problems. It might be due to the cognitive process of preparing for the worst involved in defensive pessimism which might have resemblance to worrying, vigilance, and rumination. However, there are no prior studies to support the same.

There is significant correlation between stress and anxiety and depression, withdrawal, thought problems, aggressive behavior, and somatic problems. These are supported by previous researches. A by Bergdal and Bergdal (2002) indicates that depression increases with increased perceived stress. Significant association was found between suicidal thoughts, somatisation and perceived stress (Asghari, Sadeghi, Aslani, Saadath, & Khodayari, 2013; Bener, Al-Kazaz, Ftouni, Al-Harthy, & Dafeeah, 2012).

In the current study students who use proactive, reflective, strategic and preventive coping was found to have high self esteem. This finding is well supported by previous studies, wherein they found that positive self esteem was correlated with proactive coping (Lo, 2002),

reflective coping together with self-esteem would reduce depression and proactive coping reduced anxiety and enhanced self esteem (Griva & Anantostopoulouse, 2010; Russell et al 2008). Thus the findings indicate that coping strategies aimed at addressing the stress leads to enhanced self esteem.

Self esteem is also found to have positive correlation with intrusive behavior. Though previous research shows (Freeman et al., 2011), that self-esteem act as a buffer to intrusive thoughts, the results of the current study does not correspond to it. One way of understanding the same may be that due to increased self esteem, people may try to dominate or intrude into others lives/issues. However, this needs further exploration keeping the cultural aspects in mind.

Correlation of clinical syndromes and coping shows that Anxiety /depression, withdrawal, and attention problems are negatively correlated with proactive, preventive, and emotional coping. This shows that people with clinical problems fail to use effective coping methods when required resulting in maintenance of the problems. However, literature shows contrary findings where in emotion-focused coping is found to be associated with increased odds of depression and task-oriented coping with a lower likelihood (Carpenter et al. 2011; Goodwin, 2006; Verschuur et al. 2004). Though there are no studies to explain the link between the rule breaking behaviors and lack of strategic planning, preventive coping, and emotional coping, it seems logical that they are poor at both problem focused and emotion focused coping resulting in oppositional behaviors. Another finding which needs further exploration is the relationship between intrusive behavior and proactive coping and preventive coping.

Some of the limitations of the study are sample size considering the number of variables examined. Therefore the generalization of the study findings becomes difficult. The sample was collected from colleges where females were a major population. Hence the future studies should take equal gender proportions. Since information was obtained based on self report of data, the limitation in terms of providing socially

desirable could be present. Validity of DPQ could not be established.

The strengths of the study are that it is one of the first studies to examine the concept of defensive pessimism in India. A comprehensive assessment was done which covered broad areas of coping, perceived stress as well as psychological functioning. The study has implications in understanding the variation in coping across individuals and matching the interventions to address stress and psychological problems according to the coping styles of the individual. Further future studies should establish validity of the Defensive Pessimism Scale. Replication of the study cross culturally by comparing the strategic optimists with defensive pessimists along the variables used in the study may be useful.

Conclusion

Defensive pessimism emerges as commonly used coping in the study. Strategic planning and reflective coping was used more compared to other strategies. Self esteem was moderate and the sample did not have any psychological problems. Females scored higher on perceived stress, and anxiety depression and they used more instrumental coping compared to males. Most of the subscales of proactive coping (proactive coping, reflective, strategic and preventive coping) were correlated with defensive pessimism and self-esteem. Defensive pessimism was positively correlated with perceived stress. Clinical syndromes were positively correlated with perceived stress. It was found that people with more anxiety depression syndrome use less proactive and emotional coping strategies.

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Asha Ravi, Achutham, Oppsite Town hall, Manjeri, Kerala – 676121. Email: asha.ravi.25@gmail.com

M Manjula, Professor, Department of Clinical Psychology, National Institute of Mental Health and Neuro Sciences, Bangalore- 560029. Email: drmanjula71@gmail.com (Corresponding Author)