

Full Length Research Paper

A study of seeking guidance and support coping strategy of cancer patients

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This study on seeking guidance and support coping strategy was conducted with 120 cancer patients of Lok Nayak Jay Prakash Hospital, New Delhi. The study was based on 2×2×2 factorial design experiment with two conditions of mode of treatment (chemotherapy and surgery), two types of extroversion (extrovert and introvert), and two types of neuroticism (emotionally stable and emotionally unstable). Thus, there were eight groups of subjects with 15 subjects in each group. Coping Response Inventory and Eysenck Personality Inventory was used to collect data from all subjects. The statistical analysis of data revealed that seeking guidance and support coping of extrovert cancer patients was significantly more than that of introvert cancer patients; and seeking guidance and support coping of emotionally stable cancer patients was significantly more than that of emotionally unstable cancer patients. The interaction between the mode of treatment and extroversion, and another interaction between extroversion and neuroticism was also significant.

Key words: Personality, coping, guidance and support, extroversion, neuroticism, cancer patients.

INTRODUCTION

The diagnosis of cancer can have a shocking impact upon individuals and their families. Cancer is traumatic emotionally because of deformity and functional impairment resulting from both the cancer and its treatment. Many concerns exist from a psychological perspective for the cancer patient, including the reaction to the cancer itself, the threat to one's mortality, body image issues, fear of treatment (surgery, radiation, and chemotherapy) and potential disfigurement, family, social and vocational issues, and normal psychological responses such as anxiety and depression (Lackey et al., 2001; Kearney and Richardson, 2006; Norton and Manne, 2007).

Coping involves cognitive and behavioural efforts to manage problems caused by stressful situations. Coping

as a dynamic process is based on an individual's appraisal of the extent to which the stressor outweighs their psychological resources (Lazarus, 1984). Coping includes adaptive efforts to manage the external or environmental aspects of a stressor, and avoidant behaviours to minimize exposure to the stressful situation (Lazarus, 1993).

Many researchers have studied the person's ability to cope with cancer and their coping strategies that a person uses to deal with serious illness. Many different types of coping have been identified and defined for people dealing with cancer. These include denial, information seeking, and avoidance, thinking about past good times, learning illness related procedures, blaming

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others, and seeking the support of others (Moos, 1977; Cohen and Lazarus, 1979; Corr et al., 2003; Doka, 1996; Samson, 2006).

More recently, coping strategies have been categorized by several researchers. (Krause, 1993) categorized the coping of cancer patients into four types: Active-cognitive, active-behavioural, problem focused, and emotion-focused. She described active-cognitive coping as an attempt to manage one's appraisal of a stressful event, such as considering several alternative ways to handle the situation, and active-behavioural as using behavioural attempts to deal with the illness. (Krause, 1993) defined problem-focused coping is any attempt to eliminate the sources of stress in the life of a person with cancer, while attempts to manage emotional stress and to maintain equilibrium were grouped under emotion-focused coping.

Evidence from research suggests that an individual's preferred coping style is influenced by situational and dispositional factors (Carver et al., 1989). However, different coping styles may influence an individual's ability to master, tolerate, reduce a source of stress. Active coping methods include coping efforts that others have referred to as problem-focused, which are directed at altering the person-environment relationship, and emotion-focused which are efforts directed at regulating the emotional response to the situation (Goodkin et al., 1992). Problem-focused coping has been associated with less depression, fewer physical symptoms, improved quality of life and better immune function. Avoidant coping is referred to by some as Emotion-focused coping has been linked to anxiety, depression, emotional and physical distress and poorer quality of life (Swindells et al., 1999). However, in some chronic stress conditions, both problem- and emotion-focused coping appear to have positive benefits of health and well-being (Swindells et al., 1999). Thus, the effects of coping may not depend as much on whether problem or emotion-focused coping styles are used, but rather if active or avoidant methods are utilized, particularly in situations of cancer patients.

Coping through emotional approach (that is, coping through actively processing and expressing emotion; (Stanton et al., 1994; Stanton et al., 2000) may enhance adjustment in cancer patients. The adjustment to cancer indicates that coping through cognitive and behavioural avoidance is detrimental to adjustment and perhaps to health status (Carver et al., 1993; Stanton and Snider, 1993; Epping-Jordan et al., 1994; Jensen, 1987). Given these findings, one would expect that the opposing strategy of actively approaching the stressor through processing and expressing emotions would be beneficial. However, studies with breast cancer patients have not used adequate measures to cope up with emotional approach.

According to Moos (1992), Billings and Moos (1984), Folkman and Lazarus (1985) and Roth and Cohen (1986), the coping approach is similar to problem-focused coping, while avoidance coping is similar to emotion-

focused coping. Seeking guidance support coping strategy and is one of the problem-focused coping strategies.

Personality plays an important role in almost every aspect of the coping process. It has been linked to (Bolger and Schilling, 1991; Bolger and Zuckerman, 1995), the likelihood of engaging in certain coping strategies (David and Suls, 1999; O'Brien and DeLongis, 1996; Watson and Hubbard, 1996), and the effectiveness or outcomes of these coping strategies (Bolger and Zuckerman, 1995; Gunthert et al., 1999).

One model of personality that has been found particularly useful in understanding coping is the two-Factor (Eysenck and Eysenck, 1964). These personality dimensions are Neuroticism (N), and Extraversion (E). Further, it has long been recognized that the behavioural expression of personality traits may differ depending upon situational factors (Magnussen and Endler, 1977). However, the extent to which the role of personality in coping varies by situation has remained relatively unexamined in the coping literature.

Neuroticism (N)

In a study examining coping with a broad set of stressors, we found those higher on N to report lower levels of problem solving, and higher levels of confrontation, escape avoidance, and self-blame (O'Brien and DeLongis, 1996). Consistent with this, in coping with family stressors, those higher on N reported higher levels of interpersonal withdrawal, escape avoidance, and self blame (Lee-Bagglely et al., 2004) as compared to those lower on N. However, those high on N are not necessarily rigid copers, nor do they necessarily lack the ability to cope using a given adaptive strategy. Rather, they appear to choose the wrong strategies, given the particular situation with which they are coping. Across several studies, we have found evidence that, like others, those high on N do vary their coping across situations.

Extraversion (E)

Consistent with the findings of retrospective research on coping (McCrae and Costa, 1986), findings suggest that individuals higher on E appear to be effective and active copers in that they are more likely to use a variety of ways of coping and to do so effectively (Lee-Bagglely et al., 2004; Newth and DeLongis, 2004), including cognitive reframing and active problem solving. In one study we found that those higher on E were more likely to benefit from engaging in cognitive reframing in comparison to those lower on E.

There are very few studies that have explored the relationship between personality and coping strategies. Therefore, to mitigate the lack of empirical research on these topics, the present research has been proposed to

Table 1a. Mode of treatment.

	Chemotherapy		Surgery		Σ
	Extrovert	Introvert	Extrovert	Introvert	
Emotionally stable	15	15	15	15	60
Emotionally unstable	15	15	15	15	60
Σ	30	30	30	30	120

explore the relationship between personality and coping strategies specially seeking guidance and support coping among the cancer patients in India.

METHODOLOGY

Sample

The sample consisted of 120 cancer patients, registered for treatment since last two years for the chemotherapy, radiotherapy and surgery in LNJP Hospital, New Delhi. The age of patients ranged between 20 to 65 years. 60% of the sample had undergone chemotherapy, 40% had undergone radiotherapy, at the time of the study. They were regular visitors for treatment in the hospital. From the point of view of the location of cancer in the body it was heterogeneous ranging from brain tumor to urinary bladder cancer and the diagnosis was confirmed in all the patients. The socioeconomic status of cancer patients centering on lower or middle class and the education level varied from illiterate to Post-Graduate.

Measures

The measure adopted was Coping Response Inventory (Moos, 1992). This measure consisted of 48 items, tapping 8 coping strategies: logical analysis, positive reappraisal, seeking guidance and support, problem solving, cognitive avoidance, acceptance or resignation, seeking alternative rewards, and emotional discharge. The first four coping styles are considered examples of approach coping strategies, and the last four are examples of avoidance strategies. Another measure adopted was Eysenck Personality Inventory (Eysenck and Eysenck, 1964) a 57-item measure designed to assess the personality dimensions of Extroversion (E) and Neuroticism (N). The EPI also includes a Lie scale (L) to identify participants who tend to respond in a socially desirable fashion.

Procedure

The patients were tested individually in the hospital with their written consent. First few minutes were spent in rapport formation, the personal data sheet, which included age, sex, education, occupation, income, marital status, type of cancer and treatment. The testing took approximately one hour and the same procedure was followed for other patients as well. The sample consisted of 120 cancer patients accommodate each of eight cells in the $2 \times 2 \times 2$ factorial design.

RESULTS

From Tables 1a and 1b, it was seen that mean seeking

guidance and support coping strategy score of extrovert cancer patients was more than that of introvert cancer patients. Further mean seeking guidance and support coping strategy score of emotionally stable cancer patients was higher than that of emotionally unstable cancer patients. With a view to find out whether the aforesaid trends of differences between the mean seeking guidance and support coping strategy scores stated earlier were significant or not, analysis of variance was computed. Its result is mentioned hereunder in Table 2

It has been found from Table 2 that the first hypothesis regarding mode of treatment of cancer patients was retained. It can be said that the mode of treatment of cancer patients did not play any significant role for seeking guidance and support coping strategy differences. The second hypothesis regarding the extroversion of cancer patients was rejected at 0.01 level. The mean value of extrovert patients was 11.45 and introvert patients was 10.03. Similarly the third hypothesis regarding the neuroticism of cancer patients was rejected at 0.01 level. The mean value of emotionally stable patients was 11.85 and emotionally unstable patients are 9.63.

The interaction between the mode of treatment and extroversion was significant, as the F ratio was 43.26. It meant that the Mode of treatment and extroversion trait of patients bring significant effect upon the seeking guidance and support coping strategy scores of cancer patients. Another interaction between extroversion and neuroticism was significant as the F ratio was 5.66. It meant that the extroversion and neuroticism trait of patients bring significant effect upon the seeking guidance and support coping strategy scores of cancer patients.

The significant results of bivariate interaction (mode of treatment \times extroversion and extroversion \times neuroticism) may be elaborated further using t-test comparison. The computed t- ratios are depicted in Tables 3 and 4 respectively.

It was noted from Table 3 that mean seeking guidance and support score of extrovert cancer patients treated by surgery was significantly higher than that of introvert cancer patients. It meant that Extrovert patients used seeking guidance and support coping strategy better than the patients of introvert personality, if they are treated through surgery.

Again, mean seeking guidance and support score of

Table 1b. Mean and Std. Deviation values of seeking guidance and support coping strategy of cancer patients.

Mode of treatment	Extroversion	Neuroticism	Mean	S. D.	N
Chemotherapy	Extrovert	Emotionally stable	10.53	2.10	15
		Emotionally unstable	9.80	1.82	15
		Total	10.17	1.97	30
	Introvert	Emotionally stable	12.60	1.80	15
		Emotionally unstable	9.60	2.06	15
		Total	11.10	2.44	30
	Total	Emotionally stable	11.57	2.19	30
		Emotionally unstable	9.70	1.91	30
		Total	10.63	2.25	60
Surgery	Extrovert	Emotionally stable	13.73	1.22	15
		Emotionally unstable	11.73	1.39	15
		Total	12.73	1.64	30
	Introvert	Emotionally stable	10.53	2.44	15
		Emotionally unstable	7.40	1.92	15
		Total	8.97	2.68	30
	Total	Emotionally stable	12.13	2.50	30
		Emotionally unstable	9.57	2.75	30
		Total	10.85	2.91	60
Total	Extrovert	Emotionally stable	12.13	2.34	30
		Emotionally unstable	10.77	1.87	30
		Total	11.45	2.21	60
	Introvert	Emotionally stable	11.57	2.36	30
		Emotionally unstable	8.50	2.25	30
		Total	10.03	2.76	60
	Total	Emotionally stable	11.85	2.35	60
		Emotionally unstable	9.63	2.35	60
		Total	10.74	2.59	120

Table 2. ANOVA summary on the seeking guidance and support coping strategy (P < .05).

Source of variation	SS	Df	MS	F	P
Treatment	402.47	7	57.49		
Mode of treatment (MOT)	1.41	1	1.41	0.37	
Extroversion (E)	60.21	1	60.21	15.72	< 0.01
Neuroticism (N)	147.41	1	147.41	38.49	< 0.01
MOT × Extroversion	165.67	1	165.67	43.26	< 0.01
MOT × Neuroticism	3.67	1	3.67	0.96	
Extroversion × Neuroticism	21.67	1	21.67	5.66	< 0.05
MOT × E × N	2.43	1	2.43	0.63	
Error	428.52	112	3.83		
Total	830.99	119			

SS=Sum of square; Df=Degree of freedom; MS=Mean square.

Table 3. Breakup of the significant results of bivariate interaction (Mode of treatment × Extroversion)

S/No.	Mode of treatment	Extroversion	Mean	S.D.	t	P
1.	Chemotherapy	Extrovert	10.17	1.97	1.63	
		Introvert	11.10	2.44		
2.	Surgery	Extrovert	12.73	1.64	6.56	< 0.01
		Introvert	8.97	2.68		
		Extroversion	Mode of Treatment			
3.	Extrovert	Chemotherapy	10.17	1.97	5.49	< 0.01
		Surgery	12.73	1.64		
4.	Introvert	Chemotherapy	11.10	2.44	3.22	< 0.01
		Surgery	8.97	2.68		

Table 4. Breakup of the significant results of bivariate interaction (Extroversion × Neuroticism)

S/No.	Extroversion	Neuroticisms	Mean	S.D.	t	P
1.	Extrovert	Emotionally stable	12.13	2.34	2.49	< 0.05
		Emotionally unstable	10.77	1.87		
2.	Introvert	Emotionally stable	11.57	2.36	5.15	< 0.01
		Emotionally unstable	8.50	2.25		
		Neuroticism	Extroversion			
3.	Emotionally stable	Extrovert	12.13	2.34	0.93	
		Introvert	11.57	2.36		
4.	Emotionally unstable	Extrovert	10.77	1.87	4.24	< 0.01
		Introvert	8.50	2.25		

surgical cancer patients was significantly higher than that of chemotherapy patients. It meant that surgical cancer patients used seeking guidance and support coping strategy better than the patients of chemotherapy, if they are in extrovert nature.

Further, mean seeking guidance and support score of chemotherapy cancer patients was significantly higher than that of surgical cancer patients. It meant that chemotherapy cancer patients used seeking guidance and support coping strategy better than the surgical patients, if they are in introvert nature.

In other words extrovert trait in patients treated by surgery increases the seeking guidance and support coping strategy whereas introvert trait in patients treated by chemotherapy increases the seeking guidance and support coping strategy in them.

In Figure 1 the y-axis is used to show scores on the seeking guidance and support coping strategy scores. Lines are used to connect the means for the two levels of the extroversion factor. That is, one line connects the two means for extrovert (12.73 and 10.17) and another line connects the two means for introvert (8.97 and 11.10). The fact that those two lines are not parallel is an

indication that there is an interaction between the two factors. However, extroversion seems to have a different effect (mean=12.73 and 8.97) at the level of surgery, we say that there is an interaction between the extrovert and introvert at the level of surgery.

In Figure 2 the lines are not parallel, so there is likely to be an interaction. Because the lines intersect, it appears that the two mean of chemotherapy (11.10 and 10.17) are not higher or lower than the two mean of surgery (8.97 and 12.73), so there is no main effect of mode of treatment of cancer patients. However, mode of treatment seems to have a different effect between the two levels of extroversion, we say that there is an interaction between the mode of treatment and extroversion.

From Table 4 it was observed that mean seeking guidance and support score of emotionally stable cancer patients with extrovert trait was significantly higher than that of emotionally unstable cancer patients with extrovert trait. It meant that emotionally stable cancer patients used seeking guidance and support coping strategy better than the emotionally unstable cancer patients.

Again, mean seeking guidance and support score of emotionally stable cancer patients with introvert trait was

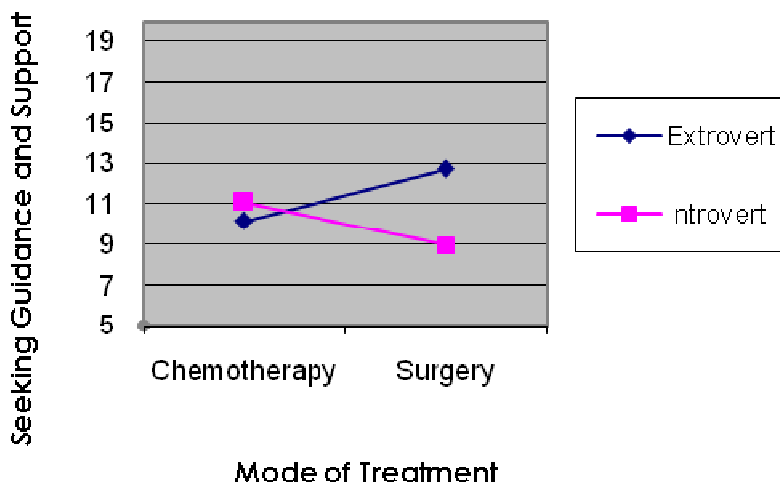


Figure 1. Interaction between extrovert and Introvert at level of mode of treatment.

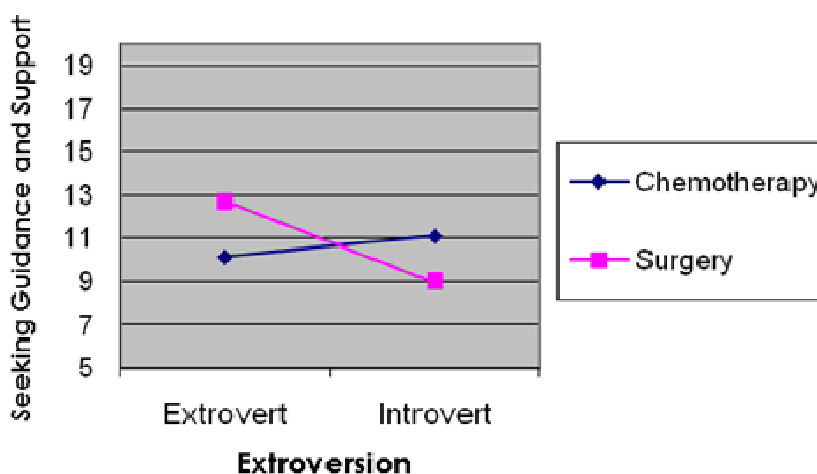


Figure 2. Interaction between chemotherapy and surgery at level of extroversion.

significantly higher than that of emotionally unstable cancer patients with introvert trait. It meant that emotionally stable cancer patients used seeking guidance and support coping strategy better than the emotionally unstable cancer patients.

In other words emotional stability of cancer patients independent of their extroversion trait of personality promotes seeking guidance and support coping strategy in cancer patients.

Further, mean seeking guidance and support score of extrovert cancer patients with emotionally unstable was significantly higher than that of introvert cancer patients with emotionally unstable. It meant that extrovert cancer patients with emotionally unstable used seeking guidance and support coping strategy better than the introvert

cancer patients with emotionally unstable.

In other words, extrovert trait of personality in neurotic cancer patients increases seeking guidance and support coping strategy.

In Figure 3 the both lines are not parallel, so there is likely to be an interaction. It appears that the two mean of emotionally stable (12.13 and 11.57) are higher than the two mean of emotionally unstable (10.77 and 8.50), Neuroticism has an effect on seeking guidance and support coping strategy. However, since neuroticism seems to have a different effect between the two levels of extroversion, we say that there is an interaction between the extroversion and neuroticism. Note that the two profiles deviate from paralleling each other, the interaction effect.

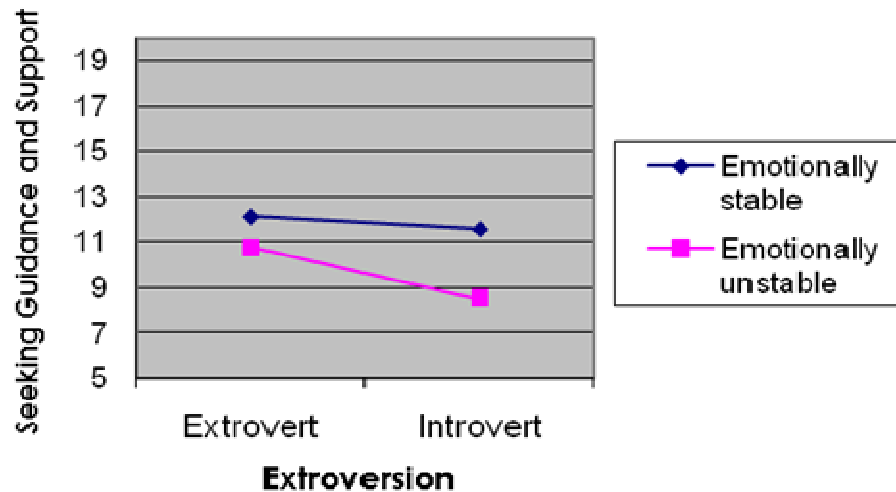


Figure 3. Interaction between emotionally stable and emotionally unstable at level of extroversion.

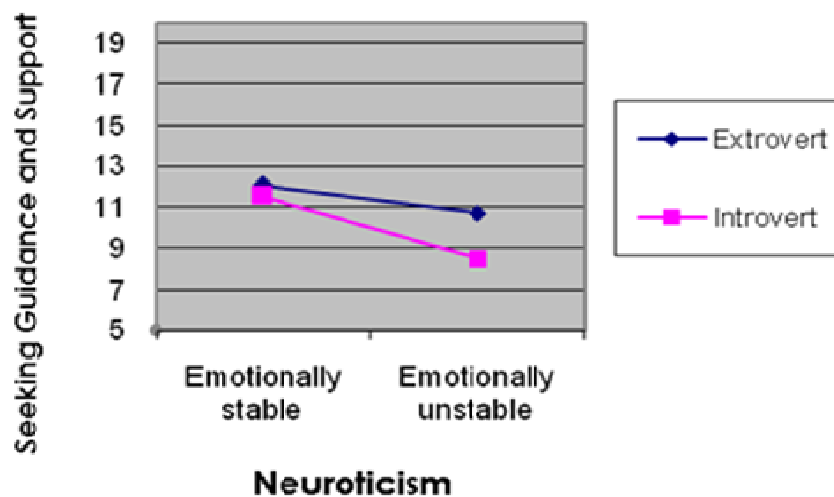


Figure 4. Interaction between extrovert and Introvert at level of neuroticism.

In Figure 4 the both lines are not parallel, so there is likely to be an interaction. It appears that the two mean of extrovert (12.13 and 10.77) are higher than the two mean of introvert (11.57 and 8.50), Extroversion has an effect on seeking guidance and support coping strategy. However, extroversion seems to have a different effect (mean=10.77 and 8.50) at the level of emotionally unstable, we say that there is an interaction between the extrovert and introvert at the level of emotionally unstable.

DISCUSSION

The result of the present study showed that the extrovert cancer patients used seeking guidance and support

coping strategy (Morasso et al., 1996) because they were optimistic, sociable, and enthusiastic; therefore, extrovert patients spent most of their time with other persons or family members (Eysenck and Eysenck, 1964). In this same time they have greater opportunities of interaction due to which they shared their feelings and consulted about their disease and coping strategies. These types of patients always use behavioural attempts to seek information, guidance or support from others. Similarly emotionally stable cancer patients used seeking guidance and support coping strategy to seek information, guidance or support from others (Behen and Rodrigue, 1994; Chen et al., 1996; Huang and Shen, 2000). In other words they might have used seeking guidance and support coping strategy because these patients were

calm, and low even tempered persons. Therefore a number of investigators have examined the relation between coping style and functioning among cancer patients (Stanton et al., 1994, 2000). Seeking guidance and support may also temporarily be a problem-solving resolution. Supportive family members and friends may minimize patients' problems. Moreover seeking guidance and support is not the same as receiving it; distress individuals may request help from those who cannot or will not assist them (Moos, 1992).

The impact of social support and guidance on cancer patients have suggested that social stress decreases, where as social involvement increases the length of time the patients survives and is related to positive coping or approach coping or seeking guidance and support coping strategy and adaptation among the patients. Emotional support by family members inculcates a sense of well being in cancer patients. Wortman et al. (1979) suggested that social support might constitute important resource in coping with cancer. Emotional support refers to behaviour, which assures an individual that his personal feelings are understood by others and considered normal in his situations.

Conflict of Interests

The author(s) have not declared any conflict of interests.

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