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Relationship of personality traits and coping strategies in cancer patients

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Abstract
A diagnosis of cancer along with its treatment can challenge patients to deal with a variety of stressors. Although there is a plethora of studies assessing patient's quality of life and adjustment to cancer, we know very little about personality factors that predict the way in which patients cope with cancer. The objective of this study was to investigate the relationship of personality traits with the coping strategies in a sample group of cancer patients. The sample of the study consisted of 286 cancer patients who were selected purposively from Department of Radiation Oncology, Government Medical College and Associated Hospitals, Karan Nagar, Srinagar, Florence Hospital, Chanapora Srinagar, Noora Hospital, Zainakote, Srinagar. The participants completed the sample survey packets comprised of NEO Five-Factor Inventory (NEO-FFI) (Costa, P & McCrae, R, 1992), and Brief Cope, (Carver, 1997). The results of the study showed that personality traits viz. Neuroticism, Extraversion, Openness and Conscientiousness are significantly correlated with active-adaptive coping whereas there is an insignificant correlation between Agreeableness and active-adaptive coping. Further the results showed that avoidance coping is significantly correlated with personality traits viz. Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness. The findings of this study can provide support for personality traits and coping strategies as targets of intervention and help both clinicians and patients in dealing with the trauma of cancer.

Keywords: cancer, personality traits, coping

Introduction

The diagnosis of cancer is a dreadful experience. Few life experiences can be the source of more dread and angst than receiving an adult cancer diagnosis, with the existential threats that it entails and the whirl of decisions, treatments, and challenges that it sets in motion. Popular accounts of the experience of coping with cancer are riveting, portraying the image of a disease that has typically been approached as a supreme test for medical science-with the emotional and psychological needs of patients and their families, and issues of post-treatment survivorship, often comprising distant considerations. In many ways, the race to find more effective biomedical treatments appears to have outpaced the search for ways to aid patients' psychosocial well-being (Rowland, 2008) [21]. The predominant metaphor in recent times has been that of waging a war on cancer, on eradicating a ruthless and rapacious enemy within the patient. This contrasts to a growing recognition of the importance of attending to the holistic needs of the person in which this "enemy" resides both during and after treatment.

Yet this situation has been gradually changing in recent years. Due to advances in cancer detection, screening technologies, treatment, maintenance therapies, and supportive care, the population of long-term cancer survivors has been growing rapidly (Robinson, 2004; Rowland, 2008) [21]. This increase in survivors has led to a shifting conception of cancer as a chronic, rather than an acute, challenge for many persons and to the emerging field of cancer survivorship (Feuerstein, 2007; Rowland, 2008) [21]. Following treatment, many survivors show "no evidence of disease" (NED), but their health and wellbeing states are often similar to people living with chronic, long-term health concerns (Maher & Fenlon, 2010) [14], with frequent usage of health care services (Nord, Mykletun, Thorsen, Bjoro, & Fossa, 2005) [17].

Cancer is an unpleasant and undesirable experience for any individual. This disease disrupts the patient's occupation, socioeconomic status and family life and deteriorates one's quality of life. Response to cancer depends on many factors including the disease itself, patient's psychological status, coping with the disease as a stressor, family and social environments, disabilities and deformities caused by the disease and the treatment process. Cancer patients respond to perceptions of threat, harm, and loss in diverse ways, many of which receive the label "coping." Response to the cancer diagnosis is influenced by a number of factors, personality being one of them. Personality does influence coping in many ways, however, some of which occur prior to coping. Even prior to coping, personality influences the frequency of exposure to stressors, the type of stressors experienced, and appraisals (Vollrath 2001) [27]. Given exposure to stressors, personality can be expected to influence coping responses in several ways. From a biological view, responses to stress presumably stem from temperament based approach, avoidance, and attentional regulation systems (Derryberry *et al.* 2003, Skinner & Zimmer-Gembeck 2007) [9, 23]. From an expectancy-value view, coping efforts presumably are influenced by expectations of future outcomes (Carver *et al.* 2009) [4].

Personality may affect coping strategy selection directly, by constraining or facilitating use of specific strategies, or indirectly, by influencing the nature and severity of stressors experienced or the effectiveness of coping strategies (Bolger & Zuckerman, 1995) [1]. Direct effects of personality on coping may begin in early childhood, with biologically based appetitive, defensive, and attentional systems providing the framework in which coping develops (Derryberry, Reed, & Pilkenton-Taylor, 2003) [9]. By facilitating approach to rewards, withdrawal from threats, and engagement or disengagement of attention, these biological tendencies may affect coping selection throughout the lifespan. For example, the sociability and approach underlying Extraversion may encourage support seeking, and the threat sensitivity underlying Neuroticism may trigger disengagement. Personality may also indirectly affect coping. Because coping is motivated by stress-exposure, stress-reactivity, and situational demands, the influence of personality on the frequency, intensity, and nature of stressors experienced may partially explain relations between personality and coping. For example, Neuroticism is associated with high rates of stress exposure and intense emotional and physiological reactivity to stress, Agreeableness with infrequent interpersonal conflict, Conscientiousness with limited stress-exposure due to preventive efforts, and Extraversion with low stress-reactivity and positive appraisals of available coping resources (Gunthert, Cohen, & Armeli, 1999; Penley & Tomaka, 2002; Vollrath, 2001; Suls & Martin, 2005) [27, 11, 18, 25]. Individuals who experience numerous stressors or are highly stress reactive may disengage to tame their own unpleasant arousal, whereas individuals who experience few stressors, are low in stress reactivity, and generate positive appraisals may be better positioned to use engagement coping. Finally, personality traits may influence the effectiveness of coping strategies, with strategies that are beneficial for some individuals being less effective, or even harmful, for those with different personality traits (Bolger & Zuckerman, 1995; De Longis & Holtzman, 2005) [1, 8]. In daily report studies, support seeking and self-controlling coping have predicted increased negative affect for high Neuroticism, but decreased negative affect for low Neuroticism, individuals, and avoidance has predicted increased negative affect for low Neuroticism, but not high Neuroticism, individuals (Bolger & Zuckerman, 1995; Gunthert *et al.*, 1999) [1, 11]. Although avoidance is typically associated with negative, and engagement with positive, long-term results, the short term costs and benefits of each strategy may play a powerful role in shaping future coping strategy selection. For example, the short-term, personality-related benefits of disengagement for high Neuroticism individuals may amplify the direct effect of Neuroticism on the tendency to disengage, explaining why high Neuroticism individuals continue to use strategies that produce poor long-term results. Accordingly the purpose of this study was to investigate the relationship between personality traits and coping strategies in cancer patients.

Method

Sample and Procedure

This study is based on a sample of 286 cancer patients selected purposively from three major hospitals of Kashmir. After the study was ethically approved the researcher approached the patients. After obtaining their consent for participating in the study the researcher administered the scales in face to face format. All the necessary instructions were given by the researcher and help was provided in marking the answers. For illiterate patients the scales were administered by the researcher providing all help in understanding the questions and marking the answers. Data was collected from both out-patient department (OPD) as well as in-patient department (IPD).

Measures

Personality

For the assessment of personality NEO-FFI (Costa & McCrae, 1992) [7] was used. This scale consists of 60 items which are rated on a five point Likert scale from "Strongly Disagree" to "Strongly Agree" The NEO-FFI Scales show correlations of .75 to .89. For the NEO-FFI, the internal consistencies reported were N= .79, E=.79, O=.80, A=.75, C= .83. Using the NEO FFI to study perfectionism had the internal consistencies at: N = .85, E = .80, O = .68, A = .75, C = .83 (Sherry, Hewitt, Flett, Lee-Baggley & Hall, 2007) [22].

Coping

Coping was measured in this study by the Brief COPE (Carver, 1997) [3]. The Brief COPE assesses a wide array of coping responses, which permits testing of diverse coping responses. It consists of 28 items rated on a 4-point Likert scale from "I haven't been doing this at all" to "I have been doing this a lot". These items are divided into fourteen sub-scales. Higher scores indicate increased utilization of that specific coping strategy. Empirical evidence exists indicating the sound psychometric properties of the scale. Internal reliabilities for the 14 subscales range from α= 0.57-0.90 (Carver, 1997) [3]. The scale was divided into active-adaptive coping and avoidance coping by adding up the sub-scales. For more practical measure one sub-scale of substance abuse was discarded due to cultural issues and absence of variance in this study.

Statistical Analysis

Descriptive analyses were performed and means and standard deviations will be presented. Concerning the relationship between coping strategies and personality we used Pearson's correlation ($p \leq 0.05$).

Results

Descriptives

Table 1 presents the means, standard deviations and ranges of the study variables. In table 2 and table 3 the relationships among study variables are shown. Regarding the relationship between study variables we found a personality traits viz. Neuroticism, Extraversion, Openness and Conscientiousness significantly correlated with active-adaptive coping (r = -0.29, p<0.01, r =0.33, p<0.01, r =0.27, p<0.01, r =0.38, p<0.01) whereas an insignificant correlation between Agreeableness and active-adaptive coping was found. Further the results showed that avoidance coping was significantly correlated with personality traits viz. Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness (r = 0.28,

$p<0.01$, r = -0.31, $p<0.01$, r = -0.16, $p<0.01$, r = -0.35, $p<0.01$, r = -0.25, $p<0.01$).

Table 1: showing Descriptives of Study Variables

Study Variables	M	SD	Range
Neuroticism	18.99	8.70	0-41
Extraversion	34.34	6.72	13-48
Agreeableness	28.90	4.68	18-46
Openness	38.76	5.67	21-48
Conscientiousness	33.66	5.27	21-46
Active-adaptive Coping	62.59	6.41	40-78
Avoidance Coping	11.55	2.77	8-20

Table 2: Pearson's Correlation between Active-adaptive Coping and Personality Traits

Personality Traits	Active-Adaptive Coping
Neuroticism	-0.29**
Extraversion	0.33**
Agreeableness	0.04^{NS}
Openness	0.27**
Conscientiousness	0.38**

**p≤0.01; NS=Insignificant

Table 3: Pearson's Correlation between Avoidance Coping and Personality Traits

Personality Traits	Avoidance Coping
Neuroticism	0.28**
Extraversion	-0.31**
Agreeableness	-0.16**
Openness	-0.35**
Conscientiousness	-0.25**

**p≤0.01; NS=Insignificant

Discussion

The aim of this study was to examine the relationship between personality traits and coping in cancer patients. The result there is a significant relationship between personality traits and coping strategies is in line with the previous studies (Connor-Smith & Flachsbart, 2007) [6]. Coping is believed to be influenced by personality of an individual. Personality influences the frequency of exposure to stressors, the type of stressors experienced, and appraisals (Vollrath 2001) [27]. This study found extraversion to be positively correlated with active-adaptive coping and negatively correlated with avoidance coping. Extraversion, grounded in an approach temperament, involves sensitivity to reward, positive emotions, sociability, assertiveness, and high energy (Caspi *et al*. 2005, McCrae & John 1992, Rothbart & Hwang 2005) [5, 7, 20]. Strong approach tendencies and assertiveness should provide the energy required to initiate and persist in problem solving (Lengua *et al.* 1999, Vollrath 2001) [13, 27]; positive affect should facilitate cognitive restructuring; and an orientation toward others and access to a social network should facilitate social support coping.

Neuroticism was found to be negatively correlated with active-adaptive coping and positively correlated with avoidance coping. This may be because neuroticism, grounded in an avoidance temperament, reflects tendencies to experience fear, sadness, distress, and physiological arousal (McCrae & John 1992, Miles & Hempel 2003, Rothbart & Hwang 2005) [7, 20, 16]. Given this vulnerability to distress, neuroticism should lead to emotion-focused coping and disengagement from threat. Disengagement may be reinforced through short-term relief of distress (Lengua *et al.* 1999) [13]; this relief may reduce motivation to return to the stressor, thus minimizing engagement coping. Furthermore, the mere presence of intense emotional arousal can interfere with the use of engagement strategies that require careful planning. Negative affect should also make positive thinking and cognitive restructuring difficult.

Conscientiousness implies persistence, self-discipline, organization, achievement orientation, and a deliberative approach (Caspi *et al.* 2005, McCrae & John 1992) [5, 7]. The planful, disciplined properties of this trait should facilitate problem solving and make disengagement less likely (Lengua *et al.* 1999, Vollrath 2001) [27, 13]. The strong attention-regulation capacity underpinning conscientiousness (Derryberry *et al.* 2003) [9] should predict success at cognitive restructuring, which requires a capacity to disengage from powerful negative thoughts. This explains the significant relationship of conscientiousness with coping in present study.

The finding that agreeableness is negatively correlated with the avoidance coping is also consistent with the fact that agreeableness involves high levels of trust and concern for others (Caspi *et al.* 2005, McCrae & John 1992) [5, 7]. Because those high in agreeableness tend to have strong social networks (Bowling *et al.* 2005, Tong *et al.* 2004) [2, 26], agreeableness may predict social support coping. Openness to experience involves the tendency to be imaginative, creative, curious, flexible, attuned to inner feelings, and inclined toward new activities and ideas (John & Srivastava 1999, McCrae & John 1992) [12, 7]. These tendencies may facilitate engagement coping strategies that require considering new perspectives, such as cognitive restructuring and problem solving, but may also facilitate use of disengagement strategies such as wishful thinking thus explaining the finding of this study where openness was found to be positively correlated with active-adaptive coping and negatively correlated with avoidance coping. The findings of the present study can have implications for clinical interventions. Personality and coping can be targets of intervention and help patients to deal with the trauma of cancer. Greater insight into the interplay of personality and coping will aid in the design of more effective intervention and prevention programs by making it possible to tailor programs to fit the unique needs of individuals

References

1. Bolger N, Zuckerman A. A framework for studying personality in the stress process. Journal of Personality and Social Psychology, 1995; 69:890-902.
2. Bowling N, Beehr T, Swader W. Giving and receiving social support at work: the roles of personality and reciprocity. J Vocat. Behav, 2005; 67:476-89.
3. Carver CS. You want to Measure Coping but Your Protocol is Too Long: Consider the Brief COPE. International Journal of Behavioural Medicine. 1997; 4(1):92-100.
4. Carver CS, Scheier MF, Miller CJ, Fulford D. Optimism. In Oxford Handbook of Positive Psychology, ed. C. R

Snyder, & SJ Lopez, New York: Oxford Univ. Press. 2nd ed, 2009; 303-11.
5. Caspi A, Roberts BW, Shiner RL. Personality development: stability and change. Annu. Rev. Psychol, 2005; 56:453-84.
6. Connor-Smith JK, Flachsbart C. Relations between personality and coping: a meta-analysis. J. Personal. Soc. Psychol, 2007; 93:1080-107.
7. Costa PT, Jr. McCrae RR. Revised NEO Personality Inventory NEO-PI-R and NEO Five-Factor Inventory NEO-FFI manual. Odessa, FL: Psychological Assessment Resources, 1992.
8. De Longis A, Holtzman S. Coping in context: The role of stress, social support, and personality in coping. Journal of Personality, 2005; 73:1633-1656.
9. Derryberry D, Reed MA, Pilkenton-Taylor C. Temperament and coping: advantages of an individual differences perspective. Dev. Psychopathol, 2003; 15:1049-66.
10. Feuerstein M. Cancer survivorship: A bird's eye view from an insider. In M. Feuerstein Ed., Handbook of cancer survivorship New York: Springer, 2007, 1-6.
11. Gunthert KC, Cohen LH, Armeli S. The role of neuroticism in daily stress and coping. Journal of Personality and Social Psychology, 1999; 77:1087-1100.
12. John OP, Srivastava S. The Big Five trait taxonomy: history, measurement, and theoretical perspectives. In Handbook of Personality: Theory and Research, ed. LA Pervin, OP John. New York: Guilford. 2nd ed, 199, 102-38.
13. Lengua LJ, Sandler IN, West SG, Wolchik SA, Curran PJ. Emotionality and self-regulation, threat appraisal, and coping in children of divorce. Dev. Psychopathol, 1999; 11:15-37.
14. Maher EJ, Fenlon D. The psychosocial issues of survivorship in breast cancer. Advances in Breast Cancer. 2010; 7(2):17-22.
15. McCrae RR, John OP. Introduction to the five-factor model and its applications. J. Personal, 1992; 60:175-215.
16. Miles JNV, Hempel S. The Eysenck personality scales: the Eysenck Personality Questionnaire-Revised EPQ-R and the Eysenck Personality Profiler EPP. In Comprehensive Handbook of Psychological Assessment: Personality Assessment, ed. M Hersen, M Hilsenroth, D Segal, New York: Wiley, 2003; 2:99-107.
17. Nord C, Mykletun A, Thorsen L, Bjoro T, Fossa SD. Self-reported health and use of health care services in long term cancer survivors. International Journal of Cancer, 2005; 114:307-316.
18. Penley JA, Tomaka J. Associations among the Big Five, emotional responses, and coping with acute stress. Personality and Individual Differences, 2002; 32:1215-1228.
19. Robinson L. Cancer survivorship: Unique opportunities for research. Cancer Epidemiology, 2004; 13:1093.
20. Rothbart MK, Hwang J.Temperament and the development of competence and motivation. In Handbook of Competence and Motivation, ed. AJ Elliot, CS Dweck, New York: Guilford, 2005, 167-84.
21. Rowland JH. What are cancer survivors telling us? The Cancer Journal, 2008; 14:361-368.
22. Sherry SB, Hewitt PL, Flett GL, Lee-Baggley DL, Hall PA. Trait perfectionism and perfectionistic self-presentation in personality pathology. Personality and Individual Differences, 2007; 42:477-490.
23. Skinner EA, Zimmer-Gembeck MJ. The development of coping. Annu. Rev. Psychol, 2007.
24. Solberg Nes L, Segerstrom SC. Dispositional optimism and coping: a meta-analytic review. Personal. Soc. Psychol. Rev., 2006; 10:235-51.
25. Suls J, Martin R. The daily life of the garden-variety neurotic: Reactivity, stressor exposure, mood spillover, and maladaptive coping. Journal of Personality, 2005; 73:1485–1509.
26. Tong EM, Bishop GD, Diong SM, Enkelmann HC, Why YP, *et al.* Social support and personality among male police officers in Singapore. Personal. Individ. Differ, 2004; 36:109-23.
27. Vollrath M. Personality and stress. Scand. J Psychol, 2001; 42:335-47.