COPING WITH HIV IN RELATION TO PERSONALITY

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ABSTRACT
Living with the diagnosis of HIV can be frightening and anxiety producing experience, including the uncertainty of future, fear of death and disfigurement. Two general strategies that people living with HIV/AIDS may use- emotion focused coping and/or problem focused coping. Personality characteristics and coping styles reflect differences in appraisal and response to stressors that may influence immune function. Personality involves the essentially stable, consistent ways in which individuals think, feel, and act across a variety of situations. With the understanding that the role of personality in coping can broaden the person centred change efforts to encompass simultaneous growth in personal resources, the present study aimed to find out whether HIV positive people’s choice of coping response is a function of their more general personality dispositions (Extraversion, Neuroticism and Psychoticism). Correlational design was adopted for relating the coping strategies adopted by the HIV positive persons and their personality characteristics. The target population of the present study was HIV infected people in the reproductive age group of 15 to 49 years. The subjects were contacted through networks of positive people, Community Care Centres, Drop in centres, informal groups, etc. Measures used in the present study were Brief Cope Scale and Eysenck’s Personality Questionnaire-R. Pearson’s coefficient of correlation was used to statistically analyze the data and the results have been discussed in the same light.

Key Words: HIV, Coping, Personality
The Human Immuno Deficiency Virus (HIV) epidemic is a multi-faceted national and international problem. It poses one of the greatest challenges faced by the human race. It is a new type of global emergency—an unprecedented threat to human development requiring sustained action and commitment from each and every one of us over the long term. In words of UN Secretary, General Kofi Annan.

Talking of India, government has taken intensive steps in the form of National AIDS Control Programme to meet the demands of fight against the deadly virus. Some of the achievements of the programme include reducing the transmission of HIV through blood and blood products from 6.07 percent in 1999 to 1.93 percent in 2006. Further, Prevention of Parent to Child Transmission (PPTCT) services are currently available across the country through 2,423 centres located at various Medical Colleges, District Hospitals, Community Health Centres and also Private Hospitals which have a good maternity load HIV medicine. National AIDS Control Organization (NACO) has also supported setting up of STI clinics up to the district hospital level. At present there are 120 ART centres in 29 states of the country and more than 47,330 people living with HIV and AIDS (PLHAs) are already availing free treatment through them, with the numbers growing continually. As a result of these continuous efforts and new treatments, survival of people with HIV is prolonged. However, HIV-related symptoms, side effects of therapy, the financial burden of treatment, and the specter of premature death remain potent sources of stress for this population. Hence, managing the mental, emotional and medical challenges of living with HIV/AIDS as a chronic illness is a new area of research study and intervention.

Coping is a multidimensional process that may vary with each situation and/or nature of stressor. Types of situations that require coping range widely, both in their objective severity and in the way in which they are perceived by an individual. Literature shows that people differ markedly in their coping in normal circumstances and traumatic ones. As already stated, for HIV, disease-related stressors include potential presence and amount of certain symptoms, treatments, side effects and other physical variables, in addition to social concerns. When a person is first informed about his seropositive status, he/she is likely to confront the realization of suffering from a probably terminal condition. There is loss of self esteem, feelings of guilt or regret about the previous lifestyle and fear of death. Besides these issues, dealing with stigma or the adverse responses of others adds an additional layer of difficulty and may pose severe threats to the individual. Therefore, HIV & AIDS easily qualifies in the category of traumatic situation making the coping to the stressors associated with living with HIV unique to that with other chronic illnesses.

However, personal reactions to life’s circumstances may sometimes be more important than the events themselves and personality may be an important
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determinant of people's reactions. Personality characteristics and coping styles reflect individual differences in appraisal and response to stressors that may influence immune function.

Eysenck defined personality as: “a more or less stable and enduring organization of a person's character, temperament, intellect, and physique, which determines his unique adjustment to the environment. Character denotes a person's more or less stable and enduring system of conative behaviour (will); temperament, his more or less stable and enduring system of affective behaviour (emotion); intellect, his more or less stable and enduring system of cognitive behaviour (intelligence); physique, his more or less stable and enduring system of bodily configuration and neuroendocrine endowment”. Eysenck’s definition of personality focuses on traits, essentially stable, long-lasting characteristics, which are grouped together in a hierarchical fashion. His model consists of three personality dimensions: extraversion, neuroticism, and psychoticism.

In recent years, the field of Health Psychology has been actively studying the role of personality in the stress and coping process, and its relationship to physical and emotional health and well-being. There have been strong evidences linking personality to the development of particular disease. For example, a number of researchers attempted to identify personality variables that predisposed individuals to allergic disorders (Feingold, Gorman, Singer & Schlesinger, 1962; Freeman, Gorman, Singer, Affelder & Feingold, 1967), skin reactivity to injected allergens (i.e., wheal and flare size) was weaker in individuals with personality styles described as passive, negative, withdrawn, unhappy, anxious, dissatisfied, and impulsive (Cassell & Fisher, 1963). In another arena, relatives of patients with rheumatoid arthritis who lacked rheumatoid factor in their serum were more anxious and dysphoric than those who had the factor (Solomon & Moos, 1965).

In the last few years, a few studies have assessed the personality characteristics of subjects affected by HIV (Perkins, Davidson, Lesermen, Liao & Evans, 1993; Jacobsberg, Frances & Perry, 1995). Personality traits of individuals with HIV may influence conditions for the infection itself. Anderson and Spencer (2000) examined long term relationship of personality (self esteem and optimism) on primary and secondary appraisal and outcomes of well being, mood, CD4 and T lymphocyte count and selected activities. Sample included 56 men and 42 women infected with HIV. Results revealed that self esteem uniquely accounted for 6% variance in primary (threat) appraisal and 5% in secondary (resource) appraisal. Primary and secondary appraisals mediated differences between personality and outcome variables. A strong predictor of well being, mood disturbances and activity disruption at time 2 was participants’ initial level of these variables. It was concluded that Self Esteem and Optimism are important but different resources for adapting to HIV disease. Neff, Amodei, Valescu,
Austin and Pomeroy (2003) examined the relative importance of mastery and self esteem and specific coping styles with regard to psychological distress among women with HIV by using interview method. They reported that self esteem and mastery may be more salient predictors of depression and anxiety symptoms than are specific coping strategies.

Personality implies stability, that is, an individual’s personality comprises behavioural expressions, emotional reactions, and thought patterns that recur over time and across situations. Interest in personality with respect to the disease has been a natural outgrowth of the fact that there are individual differences in response to the disease—causing conditions or micro organisms. Different people may employ different types of coping behaviour; ranging from active attacks on the problem to downplaying the situation or trying to remain calm in face of adversity. The choice of coping behaviour might moderate the degree to which psychological distress results from the disease related to stress. Although, the role of individual differences in coping has been emphasized by few research studies, still there are some unresolved issues concerning the measurement of coping among HIV infected population with regards to their personality characteristics. Despite its huge connotation, the research base of personality and coping with HIV remains thin. Therefore, with the purpose of filling in the gap in knowledge with regards to personality and coping with HIV infection, the present study attempted to examine the relationship between personality and coping among HIV infected people. The researchers tried to assess whether HIV positive people’s choice among coping response is a function of their more general personality dispositions specifically Extraversion, Neuroticism and Psychoticism dimensions of personality. It was hypothesized that

1. Individuals high in extraversion would be more likely to use problem-focused coping.
2. Individuals high in neuroticism would be more likely to use emotion-focused coping.
3. High scores on Psychoticism scale would be significantly correlated more with emotion focused coping than the problem focused coping.

**METHOD**

**Design**

The correlational design was adopted for relating the coping strategies adopted by the HIV positive persons and their personality characteristics.

**Sample**

Sample included 247 HIV positive people (both males and females) in reproductive age group of 15 years to 49 years. The age group of the subjects was selected in light of the data put forth by National AIDS Control Organisation (2002) revealing approximately 90 percent of AIDS cases falling within most
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ecologically productive/reproductive age group. However, the number of female respondents was found to be markedly low. The subjects were approached through networks of positive people. Since all the members of the networks are HIV positive it became much easier to access its own members as well as other HIV positive people in the community. Besides this, those attending counselling sessions in hospitals, community care centres and drop in centres were also approached. The present study was conducted in National Capital Region and Delhi State. The rationale for selection of particular site was because the capital region is hub of medical and care support services and caters to almost entire northern region (Haryana, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand, Delhi etc.) of country. Furthermore, it is marked by heterogeneity and diversity of its population, in many spheres.

**Tools: Brief Cope Scale (Carver, 1997)**

The Brief Cope scale measures 14 conceptually differentiable coping reactions, some that are task-oriented and adaptive (problem-focused), and others that are passive and may be problematic (emotion-focused). The 14 coping response scales are: Self-distraction, Active coping, Denial, Substance use, Use of emotional support, Use of Instrumental support, Behavioural disengagement, Venting, Positive reframing, Planning, Humor, Acceptance, Religion, Self-blame. Emotion-focused coping response scales include: Self-distraction, Denial, Humor, Religion, Behavioural disengagement, Using emotional support, Self-blame, Venting, and Substance use. Each scale is comprised of two items each. Hence, the questions measure self-reported responses for 28-items reflecting frequency of occurrence, on a 4-point scale, ranging from: 1) “I usually don’t do this at all” to 4) “I usually do this a lot”. The responses are summed up separately for each scale, to yield 14 individual coping scores.

The scale has been used in research with breast cancer patients, with a community sample recovering from Hurricane Andrew, and with other samples as well. Soundness of the internal structure of Brief Cope comes from reliability analyses. In community sample being studied after Hurricane Andrew, alpha reliabilities met or exceeded the value of .50 and all but 3 of 14 scales exceeded .60. These were venting (.50), denial (.54), and acceptance (.57). The Brief COPE hence provides researchers a way to assess potentially important coping responses quickly.

**Eysenck’s Personality Questionnaire-R (Eysenck and Eysenck, 1980)**

This questionnaire is designed to give ready measure of three important personality dimensions: Psychoticism, Extraversion, Neuroticism. Each of these three traits is measured by means of 90 questions. These three dimensions are conceived of as being quite independent. Psychoticism describes the personality as lacking in empathy, cruel, hostile to others, sensation seeking and thinking.
odd and unusual things. Neuroticism refers to the general emotional liability of a person, emotional over responsiveness and his/her liability to neurotic breakdown under stress. Extraversion as opposed to introversion refers to the outgoing, uninhibited, sociable activities of a person. Since the personality questionnaires are subject to faking, EPQ-R had a lie scale comprising some questions intended to diagnose lying. It is correlated with various other tests of deceitful conduct such as stealing, out of class cheating and the correlations range from 0.11 to 0.40.

The test retest reliability with a time interval of one month mostly lie in the .80 to .90. Alpha coefficients are also satisfactory, most above .80, with only P scale reliabilities falling below this value.

Procedure

The measures were administered individually to all the participants. Informed consent was obtained from all participants prior to the administration. Though all the questionnaires/inventories were self administered but for the sake of clarity with regard to the administration, the general instructions were given for both the measures.

RESULTS AND DISCUSSION

In recent years, there has been interest in examining the relationship between personality traits, coping and outcomes (Synder, 1999). Researchers have used dispositional coping measures (Ayers, Sandler, West & Roosa, 1996; Carver, Scheier, & Weintraub, 1989) firstly to assess how people generally respond to stressors. Coping styles are felt to be relatively stable over time, as well as essentially consistent across a variety of situations. Secondly, researchers have examined how coping response correlate with the personality traits. Traits such as optimism, hardiness and self esteem (Carver et. al., 1989) have been studied in relation to coping. Thirdly, the focus is on coping in relation to established models of personality traits. The Big Three (Eysenck & Eysenck, 1975) and the Big five model (Digman, 1990; McCrae & Costa, 1987). Models of personality allow researchers to study broad dimensions of personality in relation to dispositional characteristics and coping responses in an organized, timely fashion (Watson & Hubbard, 1996).
### TABLE 1
Correlation Matrix of Personality and Coping Strategies

<table>
<thead>
<tr>
<th>Personality Dimensions</th>
<th>Cope 1</th>
<th>Cope 2</th>
<th>Cope 3</th>
<th>Cope 4</th>
<th>Cope 5</th>
<th>Cope 6</th>
<th>Cope 7</th>
<th>Cope 8</th>
<th>Cope 9</th>
<th>Cope 10</th>
<th>Cope 11</th>
<th>Cope 12</th>
<th>Cope 13</th>
<th>Cope 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>0.11</td>
<td>0.03</td>
<td>0.04</td>
<td>0.04</td>
<td>0.06</td>
<td>-0.08</td>
<td>-0.16</td>
<td>-0.18</td>
<td>-0.18</td>
<td>-0.18</td>
<td>-0.15</td>
<td>-0.15</td>
<td>-0.15</td>
<td>-0.05</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>-0.05</td>
<td>0.05</td>
<td>0.04</td>
<td>0.06</td>
<td>-0.08</td>
<td>0.02</td>
<td>0.08</td>
<td>0.16*</td>
<td>0.16*</td>
<td>0.15</td>
<td>0.15</td>
<td>0.15</td>
<td>0.15</td>
<td>0.03</td>
</tr>
<tr>
<td>Psychoticism</td>
<td>0.06</td>
<td>0.34</td>
<td>0.35</td>
<td>0.04</td>
<td>0.04</td>
<td>0.15*</td>
<td>0.15*</td>
<td>0.15*</td>
<td>0.15*</td>
<td>0.15*</td>
<td>0.15*</td>
<td>0.15*</td>
<td>0.15*</td>
<td>0.15*</td>
</tr>
<tr>
<td>Lie</td>
<td>0.09</td>
<td>0.11</td>
<td>0.04</td>
<td>0.15*</td>
<td>0.25*</td>
<td>0.33**</td>
<td>0.21**</td>
<td>0.13*</td>
<td>0.13*</td>
<td>0.12**</td>
<td>0.19**</td>
<td>0.19**</td>
<td>0.19**</td>
<td>0.19**</td>
</tr>
</tbody>
</table>

Cope = Sub Scales of Brief Coping Scale

- Cope 1: Self-distraction
- Cope 2: Active coping
- Cope 3: Denial
- Cope 4: Substance use
- Cope 5: Use of emotional support
- Cope 6: Use of instrumental support
- Cope 7: Behavioural disengagement
- Cope 8: Venting
- Cope 9: Positive reframing
- Cope 10: Planning
- Cope 11: Humor
- Cope 12: Acceptance
- Cope 13: Religion
- Cope 14: Self-blame
The major issue addressed here was whether the coping preferences of HIV infected people related in a systematic way to the personality variables. Correlations were computed between these two variables of interest. The Brief COPE scale assessed both the types of coping strategies—problem focused as well as emotion focused. Problem-focused coping deals with behaviours geared towards modifying the stressor, and it involves two areas: preparation (information-seeking, planning) and action (problem solving, active coping). Problem-focused coping seeks to change or eliminate the stressor. Problem-focused coping focuses on actions taken towards the stressor itself. Conversely, Emotion-focused coping involves changing a person’s response to a stressor. Emotion-focused coping often involves avoidance or distraction from stressors.

Results as given in Table 1 suggest that extraversion was significantly and negatively correlated with Turning to religion (r = -.17, p<.01), an emotion focused coping. No significant correlation emerged between extraversion and thirteen other coping responses. Hence, the first hypothesis stating that “Individuals high in extraversion will be more likely to use problem-focused coping” has not been proved by present results.

As for the other personality dimension i.e. Neuroticism, positive correlations were found with Acceptance (r = .21, p<.01), Planning (r = .16, p<.01) and Positive framing (r = .16, p<.01) whereas negative correlations with emotional support (r = -.19, p<.01). In view of the fact that all these three coping responses are problem focused, the second hypothesis stating that “Individuals high in neuroticism will be more likely to use emotion-focused coping” has not been supported by the present results.

The third dimension of personality, i.e., Psychoticism correlated positively with seven coping strategies. In order of their magnitude these were Denial (r = .21, p<.01), Positive framing (r = .16, p<.01), Humor (r = .15, p<.05), Acceptance (r = .15, p<.05), Active coping (r = .15, p<.05), Behaviour disengagement (r = .15, p<.05) and Emotional support (r = .13, p<.05). Four of these seven coping responses were emotion focused. Hence, the third hypothesis stating that “Psychoticism scale will be significantly correlated more with emotion focused coping than the problem focused coping” has been supported by the present findings.

Personality characteristics of people are general dispositions which draw upon to help them withstand threats posed by events and objects in the environment. Presumably, such individual difference factors predispose people to certain types of specific coping behaviours, leading to a more or less consistent style of coping. Hence, these are important in the assessment of coping. While examining possible correlations between personality dimensions and coping in this study, it emerged that out of three personality dimensions studied, psychoticism was correlated with a number of coping responses like denial, behaviour disengagement, emotional support, etc. However, contrary to the
expectations, all the correlations found between personality dimensions and coping were at best of weak magnitude.

Extraverts are often described as outgoing, assertive, optimistic and action oriented towards conflict and problems in their lives (Costa and McCrae, 1980). Prior researches have found that extraverts have tendency to engage more in coping efforts like information seeking, planning and problem solving to help change or eliminate a stressor (Tamres, Janicki and Helgeson, 2002). Based on these earlier findings it was anticipated that by virtue of their characteristics of being sociable and carefree, the extraversion dimension of personality would be associated with problem focused form of coping. However, the present results are not in accord with the expectations and put one in dilemma.

Extraversion was rather significantly but negatively correlated with Religious coping—a form of emotion focused coping response. Relying upon religious beliefs and practices is a common method of coping with major life stressors such as negative life events and death anxiety. This is referred to as “religious coping” (Pargament, Smith, Koenig, & Perez, 1998). Aspects of religious coping have been recognized as “normative and adaptive coping strategies” for most people (Bjorck & Cohen, 1993). Hood, Spilka, Hunsberger and Gorsuch (1996) discussed three major coping functions of religion: to provide answers to the fundamental needs of meaning, control, and self-esteem especially in times when threatened by life stress. Religious coping may serve to provide comfort, stimulate personal growth, enhance closeness with God and others, and offer meaning and purpose in life (Pargament & Park, 1995). In the present study it was found that extraversion was correlated with religious coping, though negatively. The findings are line with that of Saraglou (2002) who reported religiosity to be weakly correlated with Extraversion. It is unclear as to why Extraverts did not show significant association with any of the problem focused coping. The present results however mimic the findings derived from other studies conducted in past which have also failed to find a significant relationship between E and either problem focused coping (Hooker, et. al., 1994; O’Brien & DeLongis, 1996) or adaptive forms of emotion-focused coping such as seeking support and accepting responsibility (David & Suls, 1999; O’Brien & DeLongis, 1996).

The second dimension of personality assessed was neuroticism. Negative affectivity or neuroticism is one of a small set of global traits that reflect one’s general approach to life and summarize tendencies of individuals. (Denollet, 1993). The personality dimension of neuroticism reflects the tendency to experience emotional distress and inability to cope effectively with stress. Neurotic people have been described in literature as often anxious, moody, fearful in variety of situation, emotionally unstable and vulnerable (Maddi, 1980).

Since neuroticism refers to emotional liability, over responsiveness and liability of a person to neurotic breakdown under stress, it was expected that the person higher on this traits would seek more supports form other for emotional
reasons and would utilize a panoply of emotion focused coping often involving avoidance techniques to prevent thinking about and actively confronting a stressor. This expectation is consistent with clear findings that those higher on Neuroticism (N) tend to experience more negative emotions (Costa & McCrae, 1980). The present study however found inconsistent results.

Neuroticism was correlated positively but weakly with three of the problem focused coping (Acceptance, Positive Framing and Planning). Acceptance is a functional coping response in that people who accept the reality of a stressful situation would seem to be a person who is engaged in the attempt to deal with the situation. Whereas, Planning involves collecting and assessing information, and evaluating solution options for taking action. Positive reframing refers to reappraising the situation positively. The possible explanation for the present findings could be that once having accepted their seropositive status, planning might occur during the secondary appraisal where these neurotics might think about ways to cope with the situation rather than getting or seeking sympathy or moral support from others. Moreover, the neurotics generally will be worried a lot about the problem before taking action to reduce the worry. These findings are not in accord with those of Bolger and Zukerman (1995). They suggested that highly neurotic individuals tend to use less planning and preventative coping efforts which may promote higher level of exposure to stressors.

On same lines, Waston and Hubbard (1996) found neuroticism to be related to passive emotions focused coping with more neurotic participants showing higher scores on behaviour disengagement (abandoning goals) mental disengagement (day dreaming), venting of emotions and denials which is consistent with the idea of neurotic individuals using avoidance techniques to prevent thinking about a confronting stressor (Lazarus, 1999). Moreover, self acceptance, feelings of meaning and purpose in life have been found to be negatively related to neuroticism (Schmutte and Ryff, 1997).

However, the negative correlation between neuroticism and emotional support can be attributed to their characteristics/tendency to experience negative emotions such anxiety, depression and anger. Results are in line with Henderson (1977) who found that people who were neurotic tended to adopt more negative views of others and be more negatively viewed by them and hence exhibit smaller social networks and weak ties.

It needs to be mentioned here that using social supports may not always be adaptive (Tolor and Fehon, 1987). The tendency to seek emotional social support is a double edged sword. It would seem to be functional in a way that people who is made insecure by a stressful transaction can be reassured by obtaining the sort of support thereby fostering a return to problem focused coping. On the other hand, the sources of sympathy sometimes are used more as an outlet for the ventilation of one’s feelings.
The third dimension of personality studied in relation to coping response of HIV infected people was psychoticism. Examples of psychotic tendencies include recklessness, disregard for common sense, and inappropriate emotional expression to name a few. Psychoticism correlated significantly with four of the emotion focused coping namely humor, denial, emotional support and behaviour disengagement. As the psychotic dimension of personality involves the characters of keeping the things within, rather than sharing with others, it is highly correlated with the behaviour of coping by emotion focused. Since this coping is centered in reducing the effect of the problem emotionally, the emotion focused coping behaviour itself is more like the characteristics of psychoticism of the personality dimension.

To summarize, coping is a dynamic process, and future researches may consider a longitudinal approach to more fully explore coping patterns among the HIV infected people and the role of personality in coping. This can broaden the person centred change efforts to encompass simultaneous growth in personal resources and further pave way for successfully expanding interventions aimed at teaching identification of problems and effective coping to sero-positive persons, their family members, and caregivers.

REFERENCES
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