



Association between Personality traits and Coping Strategies in HIV/AIDS Patients

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ABSTRACT

This study was conducted at Drug treatments centers and Centers for HIV/AIDS treatment in Karachi, Pakistan. The data was collected after seeking approval from authorities who are dealing with these cases under the United Nation AIDS Control Programs and Sindh AIDS Control Programs, they provide list of different hospitals/ originations in Karachi Pakistan. Then 60 patients with HIV/AIDS were selected through purposive sampling technique. Basic information, NEO five factors Inventory (NEO – FFI) and Coping Responses Inventory Adult-Form (CRI-Adult Form) were administered and responses were scored according to the procedure given in manual. Mean \pm SD of age was 32.00 ± 8.40 years. Mean \pm SD of duration of illness was 2.5 ± 1.26 years. Significant correlation was found between personality traits; Extraversion, Conscientiousness and Openness to experience with problem focused coping. It is to be concluded that in patients with HIV/AIDS; Extraversion, Conscientiousness and Openness to experience personality traits are directly related to problem focused coping.

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Introduction

Some people are able to cope with major life stressors while some people even do not cope with minor life problems and develop more psychological problems is the subject matter of research for many researchers. Personality characteristics of the individual can be important factors in coping with life stressors such as life threatening disease HIV/AIDS and different personality traits affect differently in coping with HIV/AIDS and its related psychological problems. Personality can be defined as the 'intrinsic organization of an individual's mental world that is stable overtime and consistent over situations'. Personality is structured system within the individual not imposed by the environment and through the inner system; person organizes themselves and interact with the outer world. Every person has a different structure inside which make them unique from others and enables individual to handle the external demands differently and choose goals and directions in life (1-2).

Recent work in the area of personality uses the five-factor model to understand the dimensions of personality in different settings. Big five have different factors such as Neuroticism, extraversion, openness to experience, agreeableness and conscientiousness. Researches showed the generalization of the five-factor model in different cultures. Five-factor model is a comprehensive description of normal personality disposition but it can provide valuable information to understand abnormal functioning (3).

Coping with disease depends on many factors such as personality, environmental and individual personal resources.

Further it is showed that personality has important role in mediation between physical illness and stress. Significant correlation found between situational and dispositional coping and personality traits. Moreover, neuroticism was found to be significantly associated with psychological aspects of quality of life than physical aspects and other variables such as personality, coping styles and social support played role of mediating variables (4-5)

Five factors of personality (Neuroticism, Extraversion, Openness to experience, Agreeableness and Conscientiousness) were significantly related to selecting coping strategy (6). Dispositional trait such as problem-solving style, anxiety and person perception about stressful event is associated with selecting a coping style. Personality more strongly predicted coping in young, stressed and samples reporting dispositional rather than situation-specific coping. Extraversion and Conscientiousness predicted more problem-solving while Neuroticism predicted emotion-focused coping (7-8).

People high in personality trait neuroticism were more prone to the psychological problems and engaged in unhealthy coping strategies such as use of drugs while personality traits like; conscientiousness, Openness to experience and extraversion are positively related with positive health-outcomes and healthy coping in various diseases including HIV (9-10).

Method Sample

The sample of the present study was consisted of 60 male substance addicts at recovered stage, suffering from HIV/AIDS. Age range of participants was 18 years to 50 years (mean age 32 years; SD=8.4). Sample was collected through purposive sampling technique from different hospitals and organizations (in-patients) located in Karachi Pakistan. Duration of their illness of HIV/AIDS was from one to five years.

1) Demographic factors

Demographic factors applied in this study were age, gender, job status, socio economic, marital status, duration of illness, family structure and educational level.

2) NEO – Five Factor Inventory (NEO -FFI; Costa and McCrae 1992)

NEO five factors Inventory is a 60-item questionnaire grouped into five domains: Extraversion, neuroticism, agreeableness, openness to experience and conscientiousness. Each of the five personality traits is assessed using 12-items. The respondent is required to rate on a 5-point Likert scale which is ranging from 1-strongly disagrees to 5- strongly agree. NEO-FFI has demonstrated good cross observer, convergent and discriminant validity. Coefficient was .86 for N, .77 for E, .73 for O, .68 for A, and .81 for C.

3) Coping Responses Inventory- Adult Form (CRI-Adult; Moos, 1993):

Coping Responses Inventory-Adult Form (CRI-Adult) consisted of 48-item. Which are combined under two approaches Approach coping responses and Avoidance coping responses? Each group has four sub-scales. Each scale consists of 6 items. In responding to CRI-Adult, individual uses a 4-point scale varying from 'not at all' to 'fairly often' to rate their reliance on each 48 coping item. Urdu translation of this scale was used in the present study.

Data Collection

The data was collected after seeking approval from authorities who were dealing with these cases under the United Nation AIDS Control Programs and Sindh AIDS Control Programs, they provide list of different hospitals and organizations in Karachi Pakistan. Then 60 patients with HIV/AIDS were selected through purposive sampling technique. The purpose procedure, risk and benefits of the study were explained, confidentiality ensured and informed consent was taken from the patients fulfilling the inclusion criteria. Basic information, NEO five factors Inventory (NEO -FFI) and Coping Responses Inventory Adult-Form (CRI-Adult Form) were administrated and responses were scored according to the procedure given in manuals.

Statistical Analysis

Data was analyzed on SPSS version 21. Descriptive statistic was computed to analyze sample characteristics and Pearson Product Moment co-efficient of correlation were computed to see the relationships between personality traits and emotion-focused coping and problem focused coping.

Results

Table 1 shows descriptive statistics, Mean \pm SD of age, duration of illness, frequency and percentages of demographic variables.

The findings of Pearson product moment Coefficient of correlation presented in Table 2.

Table1.Descriptive Statistics of Demographic Information's of entire sample.

Variables	
Demographic characteristics	32.00 \pm 8.40
Age (Mean \pm SD)	
Duration of illness (Mean \pm SD)	2.5 \pm 1.26
Educational level n/%	
- Middle (8 th grade)	39(65%)
- Matric (10 th grade)	12 (19.7%)
- Intermediate (12 th grade)	04 (6.6%)
- Graduation (14 th grade)	05 (8.2%)
Birth Order n/%	
- 1st born	12 (19.7%)
- Middle born	39 (63.9%)
- Last born	9 (14.8%)
Family System n/%	
- Nuclear	26 (42.6%)
- Joint	34 (55.7%)

Table 1 shows that mean age of the sample is 32 years, mean duration of illness is 2 years and 5 months, lower educational level (8th grade, 65%), middle born (63%), and they belong to both nuclear and joint family.

Table 2 Mean scores, Standard deviation and Pearson product moment Coefficient of correlation between Problem focused coping strategies and Extraversion (E), Conscientiousness (C), Openness to experience (O), Agreeableness (A) and Neuroticism personality traits with emotion focused coping strategies of HIV/AIDS patients.

Variables	N	M	SD	r	Sig
Extraversion	60	27.00	4.80	.420	.001*
Conscientiousness	60	29.03	5.31	.255	0.05*
Openness to experience	60	22.30	4.96	.274	0.05*
Agreeableness	60	25.15	3.58	.077	.05
Problem Focused coping	60	35.06	11.80		
Neuroticism	60	22.85	5.34	.065	.05
Emotion- Focused coping	60	30.78	8.38		

Note;

* Shows statistically significant relationship $p < .05$

Discussion

Individuals personality traits affect their tendency to think, feel and act in specific way which influence their health and well-being. Personality characteristics of the individual can be important factors in coping with life stressors such as life threatening disease HIV/AIDS. Some individual have high risk of developing psychological problems and mortality due to their personality traits and unhealthy coping strategies (11). The purpose of the present study was to examine the relationship between personality traits and coping responses among individuals with HIV/AIDS. Results of present study indicated that there is a significant positive relationship between personality traits extraversion, openness to experience and conscientiousness with problem-focused coping. However there was in insignificant relationship between neuroticism and emotion-focused coping responses.

It is indicated that Extraverts seem to have more positive approach towards stressors as they show positive emotions, seek more stimulating environment and have positive intensity in personal interaction. Previous findings also suggested positive relationship between extraversion and problem focused coping (12-13), similarly conscientiousness personality trait is related with problem-solving coping because people who score high on this trait of conscientiousness people have the characteristics of self-disciplines, competence, achievement-oriented and dutifulness and persistency. All these characteristics help these

individuals to concentrate on the task and approach the problems directly and rationally (14). Further there was negative association found between conscientiousness and emotional exhaustion which means that these people solve the problems more rationally during stress (15-16).

Personality trait of Openness to experience found to have a positive correlation with personal accomplishment and negative correlation with depersonalization and those who have the trait of openness to experience perceive the situation less threatening which help them to reduce the stress and cope with it more effectively. It is also found that these people use humor in a way to cope with situation (17-18).

In this study the results do not support the relationship between neuroticism and emotion-focused coping. It was found that most people fall somewhere between the extremes of the each pole of the personality; they were neither purely extroverted nor have high traits of neuroticism. The analysis of the data showed that the score on neuroticism trait is low as compare to other traits; due to this the coping of these individuals affected more by other variables rather than the trait of neuroticism. As we have mentioned earlier that extraversion predicts problem-focused coping and social support plays a role for that. All patients were living in a rehabilitation centers, receiving psychotherapy and social support group. These factors and environment facilitate them to use problem-focused coping more often as compare to emotion-focused coping. Hence our both hypotheses that one related to Neuroticism and emotion-focused coping were not supported by the data.

The combination of different domains of personality may be better predictors of health and health behavior as compare to single domain i.e. neuroticism and extrovert people are more prone to risk taking behavior and researcher found that people with low neuroticism and conscientiousness is associated with less risk taking and better social activities. Neuroticism was more associated with psychological quality of life than physical quality of life and other variables such as coping strategy and other personality traits has weak mediating relationship with Neuroticism (19).

Adjustment with HIV/AIDS also has an effect of coping individuals who were well adjusted with their HIV/AIDS used more effective coping such as high fighting spirit as compare to the group who were maladjusted with disease. Some studies regarding relationship between personality and health outcomes indicated that HIV during one year period has mixed findings. They suggested that Neuroticism and conscientiousness has more protective and positive correlation with health out-comes (20-21).

Conclusion

Findings of the present study suggested that personality traits; Extraversion, Conscientiousness and Openness to experience are significantly related to problem focused coping in HIV/AIDS patients.

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