

## **Adaptive and Maladaptive Coping Strategies in Relation to Depression and Perceived Stress in Individuals Living with HIV**

Martin, Luci A., Vosvick, M. and Smith, Nathan  
University of North Texas

With increases in the success rate of HIV medications, quality of life among HIV+ individuals has become a primary focus of research. Many HIV+ individuals demonstrate accelerated levels of stress and depression. An individual's QOL includes his/her level of stress and depression. Coping is a multidimensional process that varies with each situation and/or stressor. How HIV+ individuals cope with stress and depression greatly affects QOL. A complex view of coping can facilitate understanding of how to adapt to the disease and guide development of interventions to fit the specific disease course. 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. The stressors associated with living with HIV may require different coping mechanisms than living with other chronic illnesses.

This study examined the association between HIV-related ways of coping with depression and perceived stress in a gender-balanced sample of seropositive adults. The purpose of this study was to examine whether adaptive and maladaptive coping mechanisms relate to perceived stress and depression associated with living with HIV/AIDS; to identify the specific coping mechanisms used by individuals living with HIV/AIDS; and to determine how each is associated with stress and depression.

The present study consisted of a battery of self-report measures including demographic, medical and psychological information. Data was collected from the following questionnaires: HIV-related Symptom questionnaire (MACS Instrument, Johns Hopkins Department of Epidemiology, n.d.), Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983), Center for Epidemiologic Studies - Depression scale (CES-D; Radloff, 1977), and the Coping with HIV Scale (CHIV; Jenkins & Guarnaccia, 2003).

In order to control for demographic and HIV-related medical variables, hierarchical regression models consisting of three blocks were constructed. Block 1 included simultaneously entered demographic variables: age, gender and race. Block 2 included simultaneously entered HIV-related medical variables: years since diagnosis, whether prescribed medications were being taken, whether or not an AIDS diagnosis had been given and whether or not HIV-related symptoms were present. Block 3, entered stepwise, included eight coping factors.

Participants (n=193) were recruited from AIDS service organizations (ASOs) in the Dallas-Fort Worth metroplex. The sample was gender balanced with 54.1% female. The sample was ethnically diverse and self-identified as African-American (49.3%), European-American, (33.3%), Latino(a) (12.2%) and other ethnicity (5.2%). The average age of the sample was 41.7 (SD=8.36), ranging from 19 to 68 years. Most of the sample (69.2%) reported annual incomes of less than \$10,000. Eighteen and a half percent of participants reported that they were married or living as if married, while 46.9% reported

that they had children. Participants reported being HIV positive an average of 7.6 years (SD=5.2). About 74.6% of the sample reported that they were on HIV-related medications.

Pearson's product moment correlation coefficients of all variables of interest were analyzed to determine significant relationships. Significant correlations were identified between scales from the CES-D and seven of the coping factors from the CHIV, ranging from  $r = .23, p < .01$  between HIV community and depression, to  $r = .49, p < .001$  between escape fantasy and depression. Similarly, significant relationships were found between scales from the PSS and five of the coping factors from the CHIV, ranging from  $r = .15, p < .05$  between distancing and perceived stress, to  $r = .34, p < .001$  between escape fantasy and perceived stress.

Two models were constructed to test the variance in depression and perceived stress that included HIV-related adaptive and maladaptive coping strategies. HIV-related coping, explained large portions of the variance in both depression and perceived stress. Five CHIV scales (optimistic planning ( $\beta = -.44, t = -5.54, p < .001$ ), escape fantasies ( $\beta = .30, t = 3.71, p < .001$ ), self-isolation ( $\beta = .16, t = 2.26, p < .05$ ), distancing ( $\beta = .18, t = 2.00, p < .05$ ) and anger ( $\beta = .52, t = 2.27, p < .05$ )) explained 37% of the variance in depression (adjusted  $R^2 = .365, F(14, 178) = 8.89, p < .001$ ). One CHIV scale (escape fantasy ( $\beta = .33, t = 4.62, p < .001$ )) along with gender ( $\beta = .15, t = 2.18, p < .05$ ), and being of another race, other than African American, Latino(a) or Caucasian ( $\beta = -.15, t = -2.07, p < .05$ ) explained 14% of the variance in perceived stress (adjusted  $R^2 = .136, F(10, 182) = 4.02, p < .001$ ).

The results of this study indicate that a significant relationship exists between HIV-related coping and depression, in addition to HIV-related coping and stress for people living with HIV/AIDS. The findings suggest that those who use maladaptive coping strategies, such as anger and self-isolation to deal with the stressors of living with HIV, report a higher level of depression. Further, those who use escape fantasy to cope with living with HIV, report higher levels of stress and depression. Future research should focus on these psychosocial variables in order to provide insight into the role that they play in wellness for people living with HIV/AIDS. The clinical application of these findings is that attention to styles of coping may improve interventions aimed at increasing overall QOL in this population.