

Positive and Negative Affect: Differential Influence of Coping with HIV/AIDS

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People living with HIV/AIDS (PLH) are at risk for depression. Research shows anywhere between 5 to 50% of PLH struggle with depressive symptoms. Depression is associated with lower quality of life and poorer medication adherence, a critical issue for PLH that may lead to faster disease progression. Depressive symptoms must not be overlooked in PLH, but treated if diagnosed.

Individuals living with HIV/AIDS encounter more stressors than the average individual because they must cope with additional and unusual stressors such as HIV-related symptoms and the stigma associated with HIV/AIDS. When PLH stigmatize themselves or when PLH experience a high degree of stigma from others, they may be more reluctant to disclose their HIV-positive status. This has important implications for risky sexual behaviors. If PLH feel that they cannot be honest with sexual partners about their serostatus, then transmission rates are likely to increase.

Pessimists are characterized by negative outcome expectancies and may incorrectly believe that a controllable stressor is uncontrollable. Because pessimists experience a stressor and believe that this stressor cannot be reduced irrespective of their effort, an entire dimension of active coping strategies may not be considered. Instead, denial and behavioral disengagement may be used. Contrary to pessimists, optimists expect positive outcomes and may perceive a situation as more controllable because they expect good outcomes in light of negative stressors. Optimists have faith in their ability to manipulate a negative event, or stressor, into a positive outcome. Therefore, optimists may engage in more active and less passive coping. Using active coping strategies may not only serve to decrease depression, but to increase positive affect. Predicting the individual components that contribute to overall depression scores (positive affect and negative affect) will help researchers to develop interventions more effectively.

The current cross-sectional, correlational study examined the association between stressors (i.e., HIV-related stigma, HIV-related physical symptoms), appraisal (i.e., pessimism, optimism), coping strategies (i.e., denial, behavioral disengagement, active coping), and three outcome variables (i.e., overall depression, negative affect, positive affect) in 231 (52% male) PLH. Participants self-identified as 54% African American, 31% European American, 12% Latino, and 4% Other and were recruited from the Dallas/Fort Worth Metroplex from community based organizations for PLH. The average age of the sample was 41 years, ranging from 19 to 68 years, with an average education level of 12 years. 70% reported a household income below \$10,000 per year, with 85% unemployed. The average number of years participants reported living with HIV/AIDS was 8, with an average CD4 t-cell count of 401. 76% reported that they were on HIV-related medications.

Participants completed measures of depression (Center for Epidemiological Studies-Depression Scale), stigma (HIV-Related Stigma), optimism/pessimism (Extended Life Orientation Test), coping strategies (Brief Cope), and self-reported demographic and health-related information. A correlation matrix of the variables of interest revealed several significant relationships. The overall cognitive-affective measure of depression was found to be significantly positively related with HIV-related symptoms ($r=.37, p<.01$), HIV-related stigma ($r=.37, p<.01$), optimism ($r=.35, p<.01$), pessimism ($r=.37, p<.01$), denial ($r=.44, p<.01$), and behavioral disengagement ($r=.50, p<.01$) and negatively associated with optimism ($r=-.35, p<.01$). Negative affect was found to be significantly associated with the same variables. Positive affect was found to be positively correlated with one additional variable: active coping ($r=.30, p<.01$). Hence, HIV-related symptoms, HIV-related stigma, optimism, pessimism, active coping, denial, and behavioral disengagement may play a role in positive and/or negative affect when assessing depression.

Three exploratory hierarchical regression analyses were conducted to examine the relationships of demographic variables, medical variables (e.g., symptoms), stigma, optimism, pessimism, active coping, denial, and behavioral disengagement with overall depression, negative affect, and positive affect. HIV-related symptoms, stigma, and optimism consistently accounted for large proportions of the variance in each of the three regressions. In addition to these three variables, pessimism, denial, and behavioral disengagement accounted for a significant portion of the variance in overall depression [adjusted $R^2 = .45, F(12, 217) = 18.78, p < .001$]. In the second regression model, pessimism and denial, in addition to the three stable variables, accounted for a significant portion of the variance in negative affect [adjusted $R^2 = .33, F(11, 218) = 11.43, p < .001$]. In the final regression model, recency of diagnosis, active coping, and behavioral disengagement, in addition to the three stable variables, accounted for a significant proportion of the variance in positive affect [adjusted $R^2 = .29, F(11, 213) = 9.47, p < .001$].

The results of the current study suggest 1) HIV-related stigma, HIV-related physical symptoms, and optimism are consistently associated with positive affect, negative affect, and depression and 2) pessimism and coping strategies have a differential association with negative and positive affect, when attempting to understand depression. Whereas symptoms, stigma, and optimism consistently predict both components of depression (i.e., negative and positive affect) and depression overall, the role of pessimism, denial, behavioral disengagement, and active coping is not as clear cut. Pessimism and denial predict both negative affect and depression. Behavioral disengagement predicts both depression and positive affect. Active coping only predicts positive affect. These results challenge the assumption that constructs like optimism/pessimism and negative/positive affect are unidimensional constructs. Rather, they are likely partially independent constructs and need to be researched as such.

Interventions should focus on increasing optimism, while decreasing HIV-related symptoms and HIV-related stigma in order to increase positive affect and decrease negative affect. In addition, those who experience high levels of negative affect may also need to decrease pessimism and denial. Contrary to this, those with low levels of positive affect may need to place their focus on learning strategies to increase active coping, while decreasing behavioral disengagement. Focusing on positive and negative affect as distinct components that contribute to overall depression scores will help researchers to develop such interventions more effectively.