

Hope, Optimism, and Quality of Life in HIV+ Adults
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An area of research that has become increasingly important to social scientists is the ability to measure and improve quality of life (QOL) for society and which psychosocial variables are associated with QOL. For purposes of our study QOL incorporates mental, social and physical health. This study examines how optimism and hope are associated with quality of life in an HIV+ adult population. Hope is conceptualized along two dimensions: 1) an agency component that reflects the energy level and determination required for individuals to reach their goals; and 2) a pathways component based on the number of ways perceived to be available to reach a specific goal. Optimism is conceptualized as our ability to psychologically adjust to our environment based upon our expectancies of generalized outcomes.

The current study examines associations between hope (agency and pathways), optimism, and quality of life in 143 (52% male) participants. Since the participants are from a population of people living with HIV/AIDS (PLH), this gives us a better view of optimism and hope in an environment that could have physical and psychological implications. A diagnosis of AIDS was reported by 48% of our participants while 72% of our participants reported taking HIV-related medications. The length of time since receiving an HIV diagnosis averaged 7 years 8 months ($SD=5.04$), and ranged from 1 month to 21 years and 6 months. The average age of participants was 42 years ($SD=8.65$), and ranged from 19 to 68. Our diverse sample (53% African American, 29% European American, 13% Latino and 5% other) was recruited from both urban and rural settings in a major southern U.S. metropolitan area.

Participants completed measures of quality of life (MOS-HIV Health Survey, Wu et al., 1991), optimism/pessimism (Extended Life Orientation Test (ELOT), Chang et al., 1997), hope (The Hope Scale, Babyak et al., 1993), as well as demographic and health-related questionnaires. Internal consistency for these measures was good (MOS_HIV: alpha = all above .7 except for energy/fatigue with alpha = .55; ELOT: alpha = .85; HOPE: alpha = .74-.86). Significant positive correlations between optimism and the following hope and QOL constructs were found: agency hope ($r=.36, p<.01$), pathways hope ($r=.22, p<.01$), perceptions of health ($r=.31, p<.01$), mental health ($r=.49, p<.01$), energy fatigue ($r=.41, p<.01$), health distress ($r=.44, p<.01$), and cognitive functioning ($r=.42, p<.01$). A significant negative correlation between optimism and symptom load was found ($r=-.17, p<.05$). Agency hope was also significantly positively associated with QOL dimensions of perceptions of health ($r=.30, p<.01$), mental health ($r=.39, p<.01$), energy fatigue ($r=.32, p<.01$), and cognitive functioning ($r=.18, p<.05$). Pathways hope was only significantly positively associated with perceptions of health ($r=.17, p<.05$) and mental health ($r=.17, p<.05$) but was negatively associated with symptom load ($r=-.32, p<.01$).

Exploratory hierarchical regression models were used to examine the relationships between demographic variables, medical variables, each of the eleven quality of life scales, hope (agency and pathway scales), and optimism. Demographic and HIV/AIDS-

related medical factors were included in the stepwise linear regression analysis. Our psychological QOL models explained substantial amounts of the variation in the areas of cognitive function [adjusted $R^2 = .22$, $F(9,133) = 5.32$, $p < .001$] where we see that optimism ($t = 4.692$, $p < .001$), taking HIV meds ($t = 2.761$, $p < .01$), and the absence of HIV related symptoms ($t = -2.456$, $p < .05$) were related to better cognitive functioning. The analysis of mental health [adjusted $R^2 = .30$, $F(11,131) = 6.57$, $p < .001$] suggested that optimism ($t = 4.213$, $p < .001$), agency hope ($t = 4.199$, $p < .001$), absence of HIV related symptoms ($t = -2.561$, $p < .05$), and the lack of pathways hope ($t = -2.298$, $p < .05$) were all significant. These results suggest that even though the knowledge of the presence of HIV was negatively related to mental health, that optimism and the will power to overcome this in moving towards ones goals with agency hope lead to better mental health overall.

Our physical QOL models also explained substantial amounts of variation in energy/fatigue [adjusted $R^2 = .20$, $F(10,132) = 4.63$, $p < .001$] through optimism ($t = 3.610$, $p < .001$), agency hope ($t = 2.376$, $p < .05$), and being African American ($t = 2.575$, $p < .05$). Twenty-three percent of the variance in health distress [adjusted $R^2 = .23$, $F(9,133) = 5.63$, $p < .001$] was explained by optimism ($t = 4.548$, $p < .001$), the absence of HIV symptoms ($t = -2.749$, $p < .01$), and taking HIV meds ($t = 2.449$, $p < .05$) were highly related. Additionally, 24% of variation in perceptions of health was accounted for in one model [adjusted $R^2 = .24$, $F(10,132) = 5.46$, $p < .001$], with the absence of HIV symptoms ($t = -3.685$, $p < .001$), agency hope ($t = 2.742$, $p < .01$), optimism ($t = 2.395$, $p < .05$) and a younger age ($t = -2.353$, $p < .05$) all playing a role.

These findings suggest a consistent relationship between hope, optimism, and quality of life. Interestingly hope and optimism appear to be significantly associated not only with psychological QOL but physical QOL as well. Although this study is limited in that it does not suggest causality due to the cross-sectional correlational design, it does suggest that future studies must examine interventions that focus on increasing optimism and hope as a potential method of increasing both psychological and physical quality of life. Even in the face of a life threatening disease and when the hope of recovery may be limited (through pathways hope) there are some psychological factors that may be manipulated to improve quality of life in adults living with HIV.