

Coping Mediates the Effects of Optimism on Health Status and Quality of Life

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A LIFE OF SCIENCE

Introduction

Dispositional Optimism

- general and stable personality disposition defined by positive expectations
- predicts general well-being, psychological adjustment, physical health, higher quality of life (QoL)

Coping

- strategies used in response to stress
- important mediator of optimism's effects
- optimists cope differently than pessimists
- benefits of optimism operate through differences in coping with stressor
 - active: attempt to change
 - avoidant: do not directly address

Measures

- Optimism: LOT-R Life Orientation Test-Revised (LOT-R)
- Active and avoidant strategies: Brief COPE
- QoL: rate QoL and satisfaction with QoL (scale of 1-10)
- Physical and mental health status: RAND-36

Data

- community-based sample, n=640

Analysis

- tested for the mediation effects of coping
- used factor analysis to construct latent variables
- optimized measurement model (confirmatory factor analysis) using Lagrange Multiplier
- performed structural equation modeling
 - model testing with split-half design
- good fitting model if:
 - Root Mean Squared Error (RMSE) < 0.05
 - Chi² p-value > 0.05
 - fit indices > 0.9
 - Comparative Fit Index (CFI), Normed Fit Index (NFI), Non-normed Fit Index (NNFI)

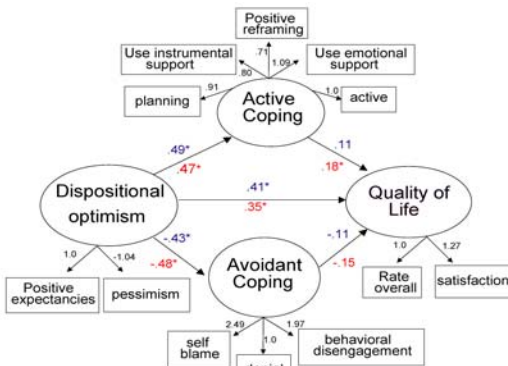


Figure 1: quality of life optimization/test

Indirect effect = .10*/.15*, R² = 28/29%
 chi² = 74.70/69.00, p < .001/.01, RMSE = .05/.05,
 CFI = .97/.98, NFI = .94/.94, NNFI = .95/.96

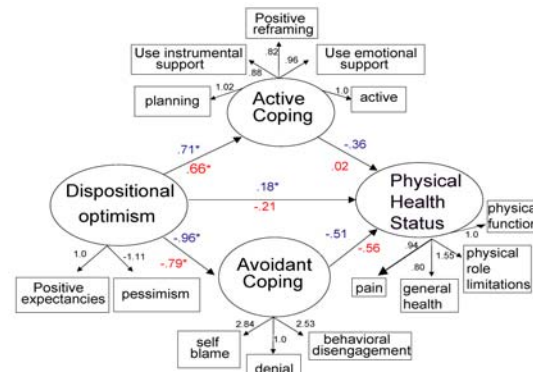


Figure 3: physical health status optimization/test

Indirect effect = .24/.46, R² = 26/18%
 chi² = 80.36/89.21, p = .02/.01, RMSE = .04/.04,
 CFI = .98/.98, NFI = .94/.93, NNFI = .97/.96

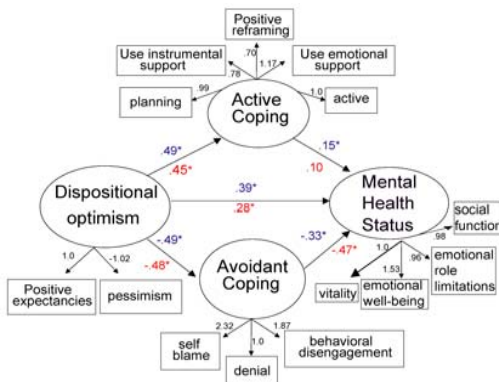


Figure 2: mental health status optimization/test

Indirect effect = .23*/.27*, R² = 48/47%
 chi² = 82.98/84.80, p = .03/.02, RMSE = .04/.04,
 CFI = .99/.98, NFI = .95/.94, NNFI = .98/.97

Conclusions

- good fitting models, reasonably explain data
- coping mediates optimism's effect on QoL and health status
- higher optimism leads to more active and less avoidant coping
- QoL and health status ratings increase with active and decrease with avoidant coping

Implications

- dispositional optimism may be difficult to change
- identifying coping mechanisms provides a target for behavioral intervention and change to reduce stress and improve health