The lasting effects of childhood maltreatment: Validation of a biopsychosocial model

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BACKGROUND

Data collected through the National Child Abuse and Neglect Data System show that an estimated 695,000 children were victims of child abuse and neglect in 2010 (U.S. Department of Health and Human Services, 2011). The scope of this problem has led to a dramatic increase in research aimed at identifying the short and long-term sequelae of maltreatment among children. While many children are resilient in the face of trauma, there is growing indication that the negative consequences are more widespread and lasting than previously imagined.

This study applied a comprehensive Biopsychosocial model of dysfunction to a sample of medical and general community members. In keeping with research using Confirmatory Factor Analysis (CFA), the present study had three objectives. First, translate a body of empirical work into a biopsychosocial model of human function; second, examine the strength of the relationships between childhood maltreatment and the three areas of function; and third, evaluate the compatibility between this model and the data.

Data from the validation study of the Battery for Health Improvement (BHI; Bruns & DiSorbio, 1996) were used and included responses from 725 community members. A CFA was conducted on the variable covariance matrix using SPSS AMOS and evaluation of model fit used Chi-Square and Root Mean Square Error of Approximation (RMSEA; Chen et al., 2008).

HYPOTHESIZED MODEL

A tripartite model of biopsychosocial dysfunction is supported by the literature and was applied to a medical and community dataset. Results suggest that the latent variable, childhood maltreatment, cannot be assumed to account for variance in bio, psycho, and social dysfunction. It could be that particular types of victimization, here all accounted for in Childhood Maltreatment, differentially impact biopsychosocial functioning. Finally, these analyses suggest that the distinction between bio, psycho and social symptomology is arbitrary.

RESULTS

Model fit was estimated using empirically supported parameters (below). Results showed that the model was recursive and minimum was achieved but the overall model fit was poor:

- Chi-square=1619.28
- p=.000
- CFI=.88
- RMSEA=.149

Post-hoc exploratory factor analyses failed to yield a stronger model fit. A correlation matrix confirmed the model fit suggested by covariance data.

REFERENCES

