A Model of Computer-Mediated Social Support Among Older Adults

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Background/Purpose

Internet use has been growing exponentially, and older adults are one of the fastest growing online user groups. Due to the various physiological and psychosocial changes associated with aging, older adults are prone to social isolation. The Internet and e-mail may serve as a new source of support for older adults by connecting them with friends and family members, as well as providing useful information. In this study, based on prior research findings in sociology, communications, and informatics, A Model of Computer-Mediated Social Support Among Older Adults that explains relationships among a computer-mediated social network (CMSN), perceived functional social support from that network, and psychological well-being of community dwelling older adults was proposed. The primary purpose of this study was to test this model using Structural Equation Modeling (SEM).

Design

This was a single group descriptive study employing a Web survey.

Methods

The survey was posted on the SeniorNet Web site from April 5, 2002 to June 9, 2002. Participants were eligible if they were: (1) age 55 years or over; (2) able to use the Internet and e-mail by themselves; and (3) currently residing in a community setting. AMOS 4.0 was used for the SEM analysis employing a two-step approach (measurement model test first, then full model test). Validity of the overall model was examined employing the cross-validation method. The overall model fit, the reliability and validity of measures and the causal relationships between variables were examined.

Findings

A total of 809 SeniorNet users participated in this study. The majority of participants were white (751, 92.8%) with a mean age of 67.8. About two-thirds of participants (511, 64%) were female. The majority (641, 80.3%) reported at least some college education. The average length of experience with the Internet/e-mail use was 4.23 $\pm$ .9 years.

Model testing showed that, overall, the proposed model fit the sample data. The fit indices were: x^2 / df, 2.86 (x^2 = 1358.39, df = 475, p < .001), GFI, .90; RMSEA, .05; CFI, .88; NFI, .82. Findings from testing of the specific relationships between variables showed that: (1) Participants who were spending more time using the Internet and e-mail had a larger CMSN; (2) as computer knowledge increased, the size of the CMSN also increased; (3) with age increased, the size of the CMSN decreased; (4) participants who had a larger CMSN were receiving more support through CMSN; (5) female participants maintained a larger CMSN than their male counterparts; and (6) physical barriers in using computers were related to a smaller CMSN and lower psychological well-being. Findings, however, did not demonstrate significant relationships between the CMSN and psychological well-being or between social support through CMSN and psychological well-being. Traditional face-to-face social support increased sense of psychological well-being.

Conclusion/Implications

Overall the proposed model fit the sample data, and all hypothesized relationships in the computer-mediated social support portion of the model were well supported. These findings suggest the need to develop online communities specific to older adults. Results of this study, however, did not demonstrate a significant relationship between computer-mediated social support and psychological well-being of older adults. These results could have been related to other confounding variables such as life stress or health problems. Therefore, testing of this model employing experimental design is recommended.

Acknowledgements