

The Effect of Perceived Social Support on Symptoms of Depression Among Individuals with Excessive Internet Use

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Introduction

- Perceived social support (PSS) acts as both a protective factor against depressive symptoms and a moderator of the improvement of such symptoms^{1,2}.
- Lack of in-person PSS is correlated with increased internet use, and those who spent excessive time on the internet report greater levels of online PSS than in-person PSS^{3,4}.
- Individuals who find emotional support primarily through the internet have slightly greater odds of developing depressive symptoms compared to those who rely on in-person support⁵. Excessive internet use may also be associated with increased severity of depression⁶.
- This study evaluated whether excessive internet use affected the level of benefit from PSS on symptoms of depression during treatment.

Methods

Participants (n=1019)

- Participants (642 female, 18 choose not to answer) had an average age of 32.11 years. CBT/DBT-based psychotherapy (M = 5.51 sessions) was conducted in a telehealth and in-person format.

Measures

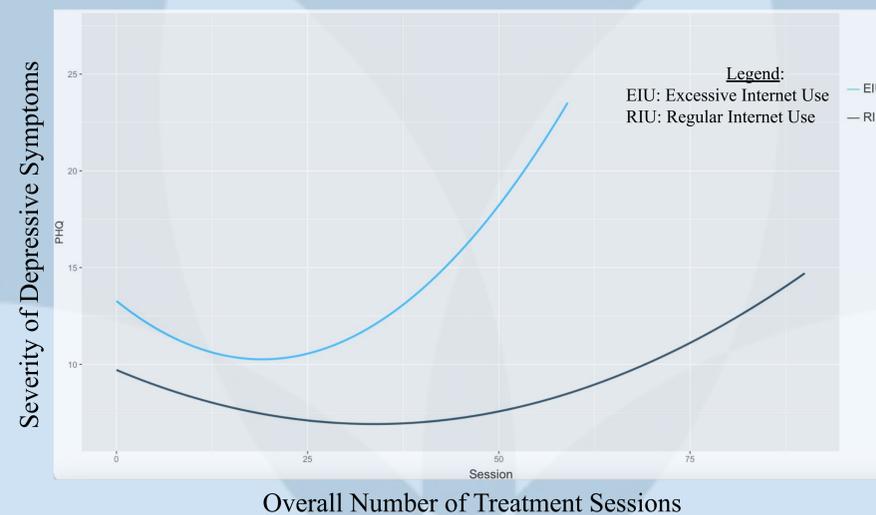
- PSS was assessed at intake with the belonging subscale of the Interpersonal Support Evaluation List (Cohen et al., 1985).
- Excessive internet use was assessed at intake with Young's Diagnostic Questionnaire (Young, 1998).
- A self-report measure of depression (PHQ-9; Kroenke et al., 2001) was completed at intake and each subsequent session.

Statistical Analysis

- Multilevel modeling was used to examine the relationships between social support, excessive internet use, and symptoms of depression.

Figures

Symptoms of Depression vs. Number of Sessions



Population Demographics

Sample Characteristics	Values
Gender	63.0% female
Age	32.11 years
Initial Depressive Symptoms	12.73 (moderate)
Probable Internet Addiction	n = 192

References

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Results

- The intraclass correlation coefficient of the unconditional mean model was 0.69. The quadratic unconditional growth model fit significantly better than the linear model ($\Delta AIC = -124$, $\chi^2(1) = 133.23$, $p < .001$) and included session sequence, total sessions, and the interaction between session sequence and total sessions.
- In the conditional growth model, statistically significant effects were found for (i) the fixed effect of perceived social support ($B = -5.122$, $p < .001$); (ii) the fixed effect of excessive internet use ($B = 3.829$, $p < .001$); and (iii) the interaction between excessive internet use and the quadratic slope ($B = 2.468$, $p < .05$).
- The addition of the interaction between excessive internet use and perceived social support did not increase model fit.

Conclusions

- PSS predicted greater improvements in depressive symptoms over treatment, whereas excessive internet use reduced improvement in depressive symptoms, indicated by a significantly steeper treatment trajectory.
- However, the positive impact of PSS on depression treatment was not affected by levels of internet use.
- An explanation for these results could be that excessive internet use intensifies negative affect and is associated with developing depressive symptoms⁷. PSS may additionally act as a protective factor against the negative effects of excessive internet use.
- These findings suggest the importance of encouraging behavior that increases PSS in patients struggling with depression regardless of their level of internet usage, while also discouraging excessive internet use to maximize treatment effects.
- Future research is needed to determine comparative efficacy of online versus off-line PSS as well as whether online PSS can have similar benefits on its own, or if it only is beneficial alongside in-person PSS.