



The mediating role of anxiety symptoms in the link between chronic illness and problematic social media use in young adults

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INTRODUCTION

- Social media is a source of information, socialization, and support for people with chronic illness
- Reliance on social media may put individuals with chronic illness at risk of problematic social media use (PSMU)
- Gastrointestinal and neurological chronic illness are associated with anxiety
- The relationship between these chronic illnesses, anxiety, and PSMU remains unknown

HYPOTHESES

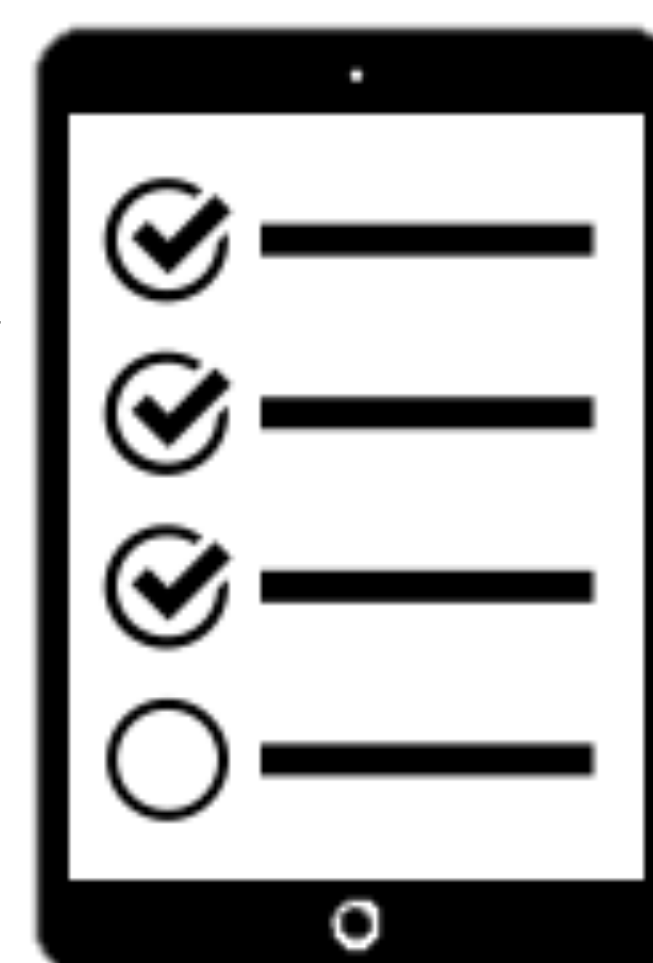
1. Gastrointestinal illness will be associated with PSMU
2. Neurological illness will be associated with PSMU
3. The two hypothesized relationships will be mediated by symptoms of anxiety

METHODS

This cross-sectional online survey took place between April and May 2018. The UW-Madison IRB approved this study.

Recruitment

We used Qualtrics to recruit a racially representative sample of English-speaking young adults from the US between ages 18-25.



Survey Measures

1. **PSMU:** The Bergen Social Media Addiction Scale (BSMAS) measures the problematic use of social media
2. **Chronic Illness:** "Have you ever been told by a doctor or healthcare provider that you have any of the following chronic or ongoing health conditions?" Gastrointestinal and neurological illness were two response options.
3. **Anxiety:** The Generalized Anxiety Disorder Scale 7 (GAD 7) screens for anxiety based on DSM IV criteria.

RESULTS

ANALYSIS

Two linear regressions were run to assess whether gastrointestinal or neurological illness was associated with PSMU. Two mediation models were tested using model 4 of the PROCESS Macro in SPSS. For each model, the illness from the other model was controlled for, as the goal was to isolate the variance uniquely related to each type of illness.

PARTICIPANTS (N=4,939)

- ❖ 50.6% female ($n = 2,496$)
- ❖ 58.1% White ($n = 2,871$)
- ❖ Mean age 21.74 ($SD = 2.3$)
- ❖ 17.9% scored above cutoff for PSMU
- ❖ 67.7% qualified for at least mild anxiety
- ❖ 7.4 % had gastrointestinal illness
- ❖ 11.3 % had neurological illness



MAIN RESULTS

HYPOTHESIS 1:

Reporting gastrointestinal illness was positively associated with increased levels of PSMU, $B = 1.62$, $SE B = .07$, $t(1, 4938) = 5.20$, $p < .001$.

HYPOTHESIS 2:

Reporting neurological illness was positively associated with increased levels of PSMU, $B = 1.82$, $SE B = .10$, $t(1, 4938) = 7.08$, $p < .001$.

HYPOTHESIS 3:

The indirect effect from gastrointestinal illness to problematic social media use, through anxiety symptoms, was significant, $B = .87$, $SE B = .13$, $CI [.621, 1.12]$, as was the indirect effect from neurological chronic illness to problematic social media use through anxiety, $B = 1.47$, $SE B = .12$, $CI [1.24, 1.70]$.

After controlling for the effects of anxiety, the direct relationships between gastrointestinal illness and PSMU ($B = .47$, $SE B = .29$, $p = .11$) as well as neurological illness and PSMU ($B = .19$, $SE B = .24$, $p = .44$) were no longer significant.

CONCLUSIONS

- People with gastrointestinal or neurological chronic illness were more at risk for PSMU. This effect was strongly mediated by anxiety
- Because social media use is sedentary and involves looking at a screen, it may actually exacerbate symptoms of both chronic illness and anxiety
- Clinicians should empower patients to monitor their own social media use, while acknowledging its vital role in managing symptoms and gaining support

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Figure 2: Mediation Model with unstandardized coefficients, controlling for effect of gastrointestinal illness

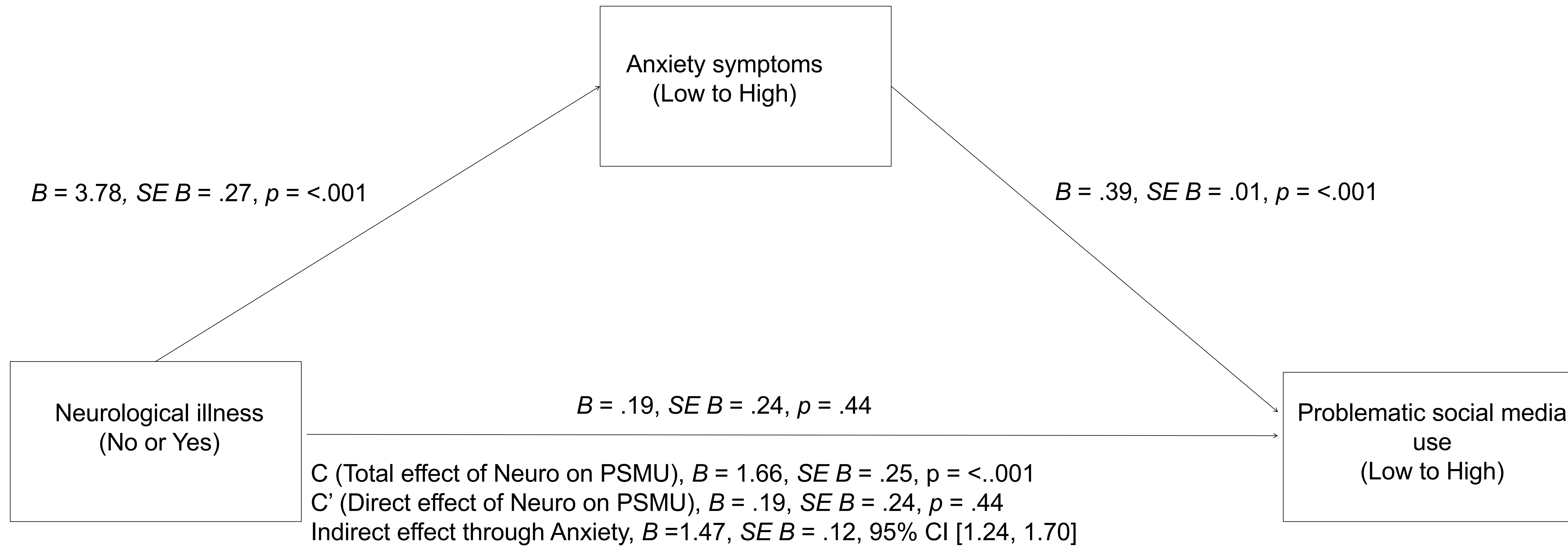


Figure 1: Mediation Model with unstandardized coefficients, controlling for effect of neurological illness

