



Examining Predictors of Problematic Smartphone Use

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Introduction

Problematic Smartphone Use (PSU) is excessive smartphone use relating to life impairments (Rozgonjuk, Levine, Hall, & Elhai, 2018). PSU has been previously related to anxiety (Demirci, Akgönül, & Akpınar, 2015; Elhai, Dvorak, Levine, & Hall, 2017; Elhai, Levine, Dvorak, & Hall, 2016), attachment anxiety (Parent et al. 2021) depression (Augner & Hacker, 2012; Demirci et al., 2015; Elhai et al., 2018; Elhai et al., 2017; Elhai et al., 2016, Smetaniuk, 2014), self-esteem (Li et al. 2019), rumination thought style (Elhai et al. 2020) and fear of missing out (Elhai et al. 2020).

Compensatory Internet Use Theory (Kardefelt-Winther, 2014) suggests individuals use their smartphones and related technology as a way to enervate negative affectivity. While prior work has shown negative affectivity variables listed above are associated with PSU, more work is needed to understand what factors predict PSU when considering such factors at the same time.

Methods and Materials

There were 451 college students (87.8% Caucasian; 87.1% female) The average age was 19.96 years, $SD = 3.76$, range = 18 - 57

Participants completed the Smartphone Addiction Short-Form (Kwon, Kim, Cho, & Yang, 2013) to examine PSU

Data Analysis

Statistical Package for the Social Sciences (SPSS) created by IBM (USA) was used. A multiple hierarchal regression was used to examine what variables were significant predictors of PSU.

Dependent Variable: PSU Severity

| Model | Predictors | R | R ² | ΔR ² | B | SEB | β |
|-------|-------------|-----|----------------|-----------------|------|-----|---------|
| 1 | | .24 | .06 | | | | |
| | Anxiety | | | | .47 | .15 | .19 ** |
| | Depression | | | | .02 | .14 | .01 |
| | Self-Esteem | | | | -.14 | .10 | -.08 |
| 2 | | .43 | .19 | .18 | | | |
| | Anxiety | | | | .19 | .14 | .08 |
| | Depression | | | | -.14 | .14 | -.07 |
| | Self-Esteem | | | | .10 | .10 | .06 |
| | RTS | | | | .14 | .02 | .32 *** |
| | Attach Anx. | | | | .34 | .09 | .20 *** |
| 3 | | .51 | .26 | .25 | | | |
| | Anxiety | | | | .11 | .14 | .04 |
| | Depression | | | | -.13 | .13 | -.06 |
| | Self-Esteem | | | | .05 | .09 | .03 |
| | RTS | | | | .10 | .02 | .22 *** |
| | Attach Anx. | | | | .19 | .09 | .11 * |
| | FoMO | | | | .36 | .05 | .32 *** |

*** $p < .001$, * $p < 0.05$

Discussion

- FoMO, attachment anxiety and rumination thought style each were significant predictors of Problematic Smartphone Use.
- Anxiety, depression, and self-esteem were not statistically significant after accounting for FoMO, attachment anxiety and rumination thought style
- Our final regression model accounted for 26% of Problematic Smartphone Use.

Limitations:

- Sample is not representative or generalizable (e.g., age, race, and sex)
- Other factors left unexplored
- Cross-sectional research design doesn't allow for measurement of the finding's longevity
- Lack of experimental research design
- More variance left to explain

References Available Upon Request