STASH, Vol. 21(10) – Factors associated with problematic smartphone use among ketamine users in court-mandated addiction treatment

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Non-substance addictive behaviors, like problematic smartphone use, share similarities to substance use and mental health conditions. This can be explained by the Syndrome Model of Addiction, which posits that addiction can be viewed as a singular syndrome with multiple expressions (i.e., substance or behavioral), rather than unique disorders. This model argues that harmful substance and smartphone use may look different, but they have similar underlying risk factors and consequences. To help determine this relationship, this week, as part of our Special Series in Honor of Dr. Howard Shaffer, STASH reviews a study by Chia-Heng Lin and colleagues that investigated the factors that influence the relationship between problematic smartphone use and mental health conditions among ketamine users.

What was the research question?

What factors are related to problematic smartphone use among ketamine users in court-ordered addiction treatment?

What did the researchers do?

The researchers conducted this retrospective, cross-sectional study in a Taiwanese psychiatric hospital. The study included 233 randomly selected participants diagnosed with a ketamine use disorder in court-mandated outpatient addiction treatment. The participants self-reported their daily smartphone use and their reason for smartphone use. They also responded to questionnaires related to severity of substance dependence, emotional distress, anxiety, ADHD, and problematic smartphone use risk. The researchers used logistic regression analyses to determine whether these factors were related to risk for problematic smartphone use, which they defined as scoring above the cutpoint on the Short

Form of the Smartphone Addiction Inventory.

What did they find?

Across the sample, 93 participants (39.9%) were classified as at-risk for problematic smartphone use. According to a logistic regression that included all possible predictors, those at increased risk for problematic smartphone use had longer daily smartphone use, had more frequent ADHD symptoms, were more likely to use smartphones for online gaming, and were less likely to use smartphones for doing Internet searches, compared to those who were not classified as at-risk (see Figure).

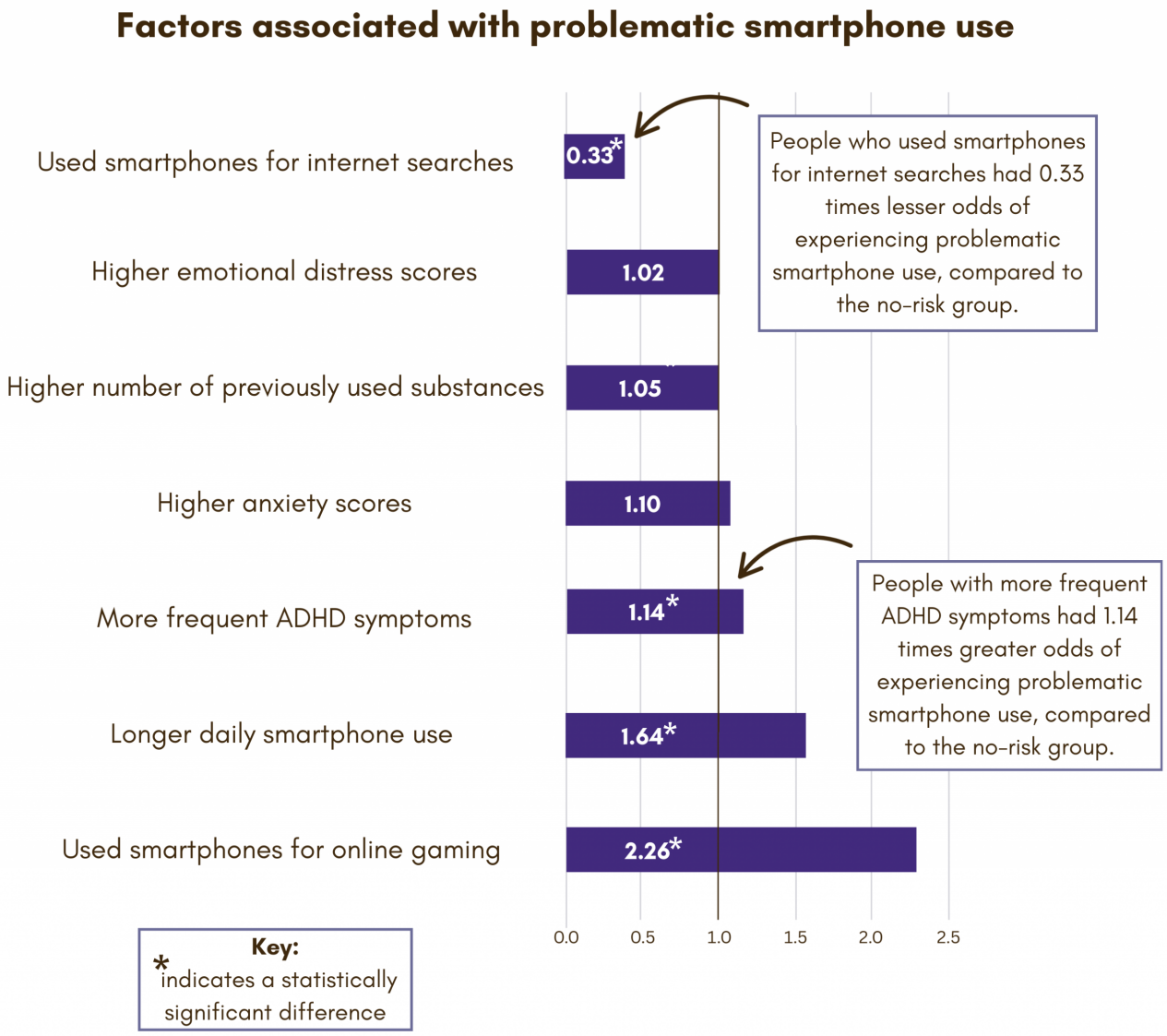

Figure. Displays the odds ratios of the factors associated with problematic smartphone use. Odds ratios can be interpreted as having an X times greater/lesser odds of reporting an outcome. * indicates a statistically significant difference. Click image to enlarge.

Why do these findings matter?

Some study participants experienced comorbid ketamine use, problematic smartphone use, and ADHD symptoms. Neurobiological (e.g., genetics) and psychosocial factors (e.g., mental health conditions) may make people more vulnerable to addiction. For example, symptoms of ADHD, such as poor impulse control, could lead to a desire for immediate gratification and subsequent addiction to fill that desire (e.g., through ketamine use or smartphone online gaming). If we look at this example using the Syndrome Model framework, ketamine and problematic smartphone use make up different expressions of the same underlying addiction syndrome. Unfortunately, the recursive nature of these conditions can make them harder to treat. Using the Syndrome Model can help treatment providers implement person-centered care that focus on treating the relationship between the person and the object of their addiction (e.g., ketamine or smartphones) rather than the object itself.

Every study has limitations. What are the limitations in this study?

The data used in this study are cross-sectional, which means that without more information, we cannot draw causal conclusions. The individuals included in the study were in court-mandated addiction treatment. As such, the findings might not be generalizable to the overall population of people with ketamine use disorder. Additionally, this study only used self-report measures, which are subject to social desirability and recall bias. Lastly, the researchers did not use diagnostic tools to determine instances of comorbidities, which might have skewed the results.

For more information:

Visit the CDC website for more information about addiction, including treatment and recovery resources. If you are worried that you or someone you know is experiencing addiction, the SAMHSA National Helpline is a free treatment and information service available 24/7. For additional self-help tools, visit our Addiction Resources page.

— Nakita Sconsoni, MSW

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