Leveraging Mobile Technology: A systematic review of mHealth with Cannabis Users
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Introduction
Cannabis is commonly used by teens and young adults, including the college population. Current survey data suggests that 25% of university students use cannabis monthly or greater and that 6% use daily (Schulenberg et al., 2019). These rates are even higher (38-39%) in college students who reside in states with legal recreational cannabis use (i.e., Colorado and Washington; Pearson et al., 2017).

Transitional years can be crucial as young adults (18-25 years old) tend to have the highest rates (5%; 1.8 million in the U.S.) of Cannabis Use Disorder (CUD; SAMHSA, 2016). When considering problem use, Caldeira and colleagues (2008) found that sizeable numbers (25%) of first-year college students who used cannabis in the past year met criteria for a cannabis disorder.

Burgeoning research has shown chronic, heavy cannabis use to be associated with a host of negative consequences, including symptoms/diagnosis of CUD, as well as anxiety, depression, and psychosis, cognitive functioning (e.g., working memory, executive function), among other health issues (Arseneault et al., 2002; Buckner et al., 2010; Degenhardt et al., 2003; Midanik & Weisner, 2007; Simons et al., 2010; Solowij & Pesa, 2010).

With the number of young adults diagnosed with CUD at 5% annually and also a growing number with frequent-heavy cannabis use without a CUD diagnoses, there is an increased need for intervention strategies. Yet, rates of individuals seeking formal treatment for cannabis use has been low (Prince et al., 2020).

With widespread access, it has become easier to employ mobile technology for health interventions and growing opportunities to deliver innovative interventions for substance use and chronic diseases has ensued (Kumar et al., 2013).

Methods
A search of PsycInfo and PubMed was conducted for relevant peer-reviewed articles published between 2000 and 2020 focused on mobile health interventions.

Eligibility Criteria:
- Peer-reviewed original research in English
- Location: Global
- Published between 2000-2020
- Qualitative, quantitative, and mixed methods studies were all included
- Included a Mobile (mHealth) intervention

Utilized in daily life (or the goal once developed)
- Targeted cannabis use: could be part of poly-substance use
- Study provided data on at least one outcome (e.g., reduced craving, frequency of cannabis use, increased strategy use)
- OR Feasibility/usability/acceptability of intervention

Table 1. Systematic Review Search Terms

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Conclusions
There is a need for the development of more mobile intervention for cannabis users and further research, most of the studies were feasibility or pilot-oriented in nature.

Some of the targets for the mHealth interventions included: increasing protective behavioral strategy use, physical activity, identifying triggers for use, craving, reduction of use within a day, over the intervention, and at follow-ups, increasing % of days of abstinence.

More detail is needed when publishing mHealth studies for the outline of the intervention and methods section.

References in Review

Cannabis and substance use and chronic diseases has ensued (Kumar et al., 2013).

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