Use of An Interactive & Customizable RITch®-CBT Avatar Platform to Treat Clients in the Healthcare Field

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I. INTERACTIVE VIRTUAL AVATARS FOR SUBSTANCE ABUSE AND VIOLENCE

Substance use disorders (SUDs) and intimate partner violence (IPV) are comorbid and responsive to innovative interventions (Easton et al., 2018; Crane et al., 2014). Technology assisted interventions can improve in-person treatment engagement, homework completion, and understanding of concepts and skills, while reinforcing skill acquisition and practice (Carroll & Kiluk, 2017). Technology can also standardize the dose of cognitive-behavioral therapy, (CBT) while maintaining cost-effectiveness and individualization (Carroll & Kiluk, 2017). Avatars, or digital health coaches, are well-suited to assisting with SUD and IPV and can aid in administering CBT content, practice exercises, and symptom/behavior monitoring (Easton et al., 2018). Customizing avatar features may also garnish personal investment, increase motivation, and deploy skills in a non-confrontational manner. We hypothesized that a novel avatar-assisted CBT intervention (RITch®-CBT) would be acceptable to adult patients and feasible for use in an inpatient treatment setting.

II. THE PRESENT STUDY

This study utilized qualitative and quantitative methods to test acceptability and feasibility of a two-session avatar-assisted, integrated CBT platform for adults with SUD and IPV. The platform includes a customizable avatar, standardized CBT-based session content (i.e., functional analysis, narrated coping skill activities and exercises) and between session monitoring of thoughts, feelings, and behaviors (e.g., mood, cravings, substance use). Ten English-speaking adults receiving inpatient SUD treatment were referred by their primary therapists. This pilot sample was predominantly men (n=8) aged 44 years old on average (Range = 22-61 years). More than half identified as White (n=6), with a fair representation of Black/African-American (n=3) and Latino (n=1) participants. Exclusion criteria included acute withdrawal and active psychosis.

Fig. 1. The RITch interface, showing different sessions

At intake, polysubstance use was common: more than half the sample reported current opioid, (80%) cocaine, (80%) alcohol, (70%) and marijuana (60%) use. About half the sample reported depression (50%), anxiety, (60%) and trauma (60%). All ten participants completed the first session "Identifying Triggers". Six participants completed session two: "Awareness of Anger". The other four participants were discharged successfully prior to session two. All participants reported that they agreed or strongly agreed with positive statements about the platform (i.e., avatar was genuine/relatable, helpful content, rewarding) and 90% were willing to use it with their therapist, enjoyed interacting with the avatar, and thought it was easy to use. Most (60%) thought the platform was personalized. Only 10% preferred paper/pencil activities, speaking to the acceptability of the technology-based monitoring. Half the sample customized the avatar, all of whom enjoyed customizing the avatar, while half preferred to use the default avatar and reported wanting to focus on content.

III. REFERENCES

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