

Preliminary Community Effectiveness of Virtual Reality Job Interview Training in Individual Placement and Support (Thresholds Inc.; Chicago, IL): September 2018

PROJECT SUMMARY

After demonstrating efficacy at improving interview skills, self-confidence, and access to employment across 5 randomized controlled trials, the research team sought and was awarded funding from the National Institute of Mental Health (R01 MH110524) to evaluate whether participants randomized to use VR-JIT within an IPS model would demonstrate better employment outcomes within 6 months compared to participants randomized to receive IPS-as-usual. The study is led by Dr. Matthew Smith, Associate Professor at the University of Michigan’s School of Social Work in partnership with Northwestern University and Thresholds, Inc.

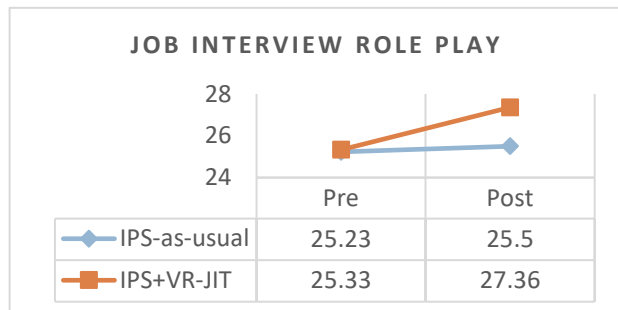
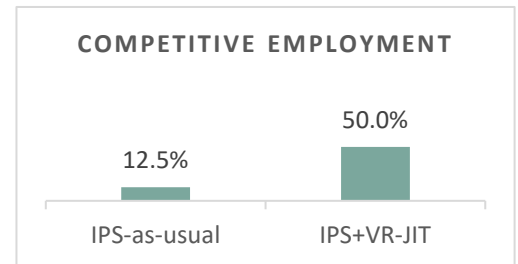
METHODS

The study is a 2-arm randomized control trial in which clients 18 years or older with a history of serious mental illness and enrolled in IPS services will be randomized to receive IPS-as-usual or in combination with VR-JIT. Participants complete study measures, among them mock job interviews and self-report measures on interview anxiety and self-confidence prior to and after the intervention period. Participants also complete a 6-month follow-up visit and receive monthly follow-up phone calls asking about job interview completions and employment status.

PRELIMINARY FINDINGS

1. Higher rates of competitive employment for participants using VR-JIT.

From preliminary six month follow-up visits, we found that 12.5% of IPS-as-usual participants had attained competitive employment, while 50.0% of IPS+VR-JIT participants had found competitive employment. These numbers are lower than expected overall for IPS primarily because most IPS studies report data at a 1-year follow-up, while these data were collected at 6-months.

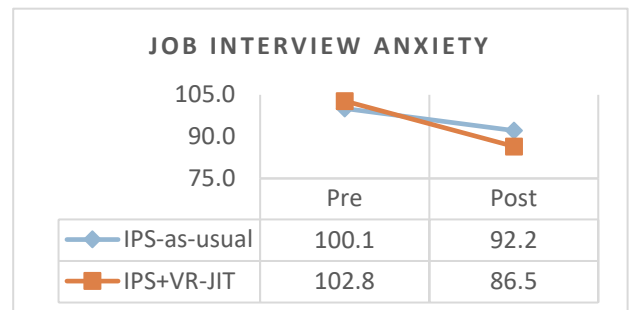


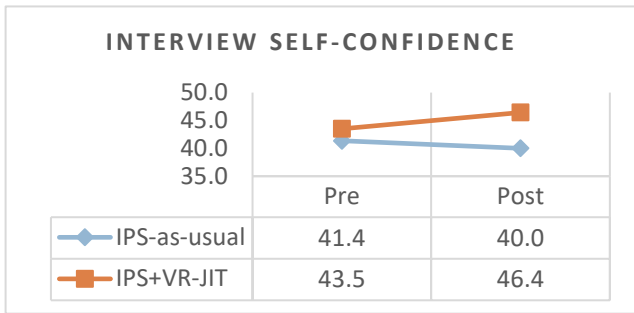
2. Improved job interview skills for participants using VR-JIT.

Participants using VR-JIT (n=14) showed more improvement in job interviewing skills over time than those in IPS-as-usual (n=11). Participants in IPS+VR-JIT showed an 8.0% increase in interview skills (a medium effect size change: Cohen’s D = 0.51) compared to participants in IPS-as-usual who showed a 1.1% increase in interview skills (a negligible effect size change: Cohen’s D = 0.04).

3. Decreased job interview anxiety for participants using VR-JIT.

Participants using VR-JIT had larger decreases in job interviewing anxiety than those in IPS-as-usual. Participants in IPS+VR-JIT had a 16.3% decrease in interviewing anxiety (a medium effect size change: Cohen’s D = 0.63) compared to participants in IPS-as-usual who showed a 7.9% decrease in interviewing anxiety (a small effect size change: Cohen’s D = 0.30).





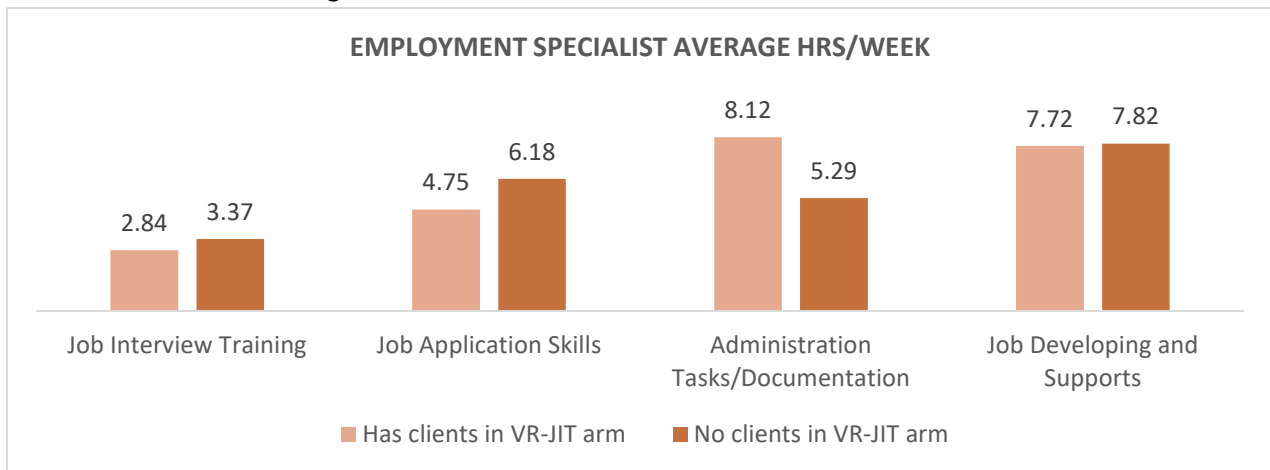
4. Increased interviewing self-confidence for participants using VR-JIT.

Participants using VR-JIT had increases in job interviewing self-confidence while those in IPS-as-usual had a slight decrease. Participants in IPS+VR-JIT had a 6.9% increase in self-confidence (a small effect size change: Cohen’s D = 0.30) compared to participants in IPS-as-usual who displayed a 3.3% decrease in self-confidence with a negligible effect size change: Cohen’s D = 0.13).

5. IPS employees may be able to use their time more efficiently when clients are using VR-JIT.

In order to analyze VR-JIT’s effect on IPS employee effort, Threshold Employment Specialists (ESs) were asked to complete bi-weekly “cost capture surveys.” These surveys asked ESs to estimate the number of hours they spent on various categories of tasks. An average of 34 weeks of data were collected from 13 ESs. The ESs were split into two groups: those who had study participants on their caseload assigned to the VR-JIT intervention and those without any participants on their caseload assigned to the VR-JIT intervention.

Trends were noticed across 4 categories:



- Job Interview Training** –ES staff with clients on their caseload assigned to VR-JIT spent an average of **0.6 hours less per week per staff member** on interview preparation and mock interviewing than ES staff who did not have clients on their caseload using VR-JIT.
- Job Application Skills**– ES staff with clients on their caseload using VR-JIT spent an average of **1.45 hours less per week** working with clients on job application skills than ES staff who did not have clients on their caseloads using VR-JIT.
- Administrative Tasks/Documentation** – ES staff with clients on their caseload using VR-JIT spent an average of **2.8 hours more per week** on administration tasks and documentation, suggesting that clients using VR-JIT may free up more time in an ES staff member’s day to work on other administrative duties.
- Job Developing/Supports** – ES staff with and without clients on their caseload using VR-JIT spent similar hours per week in the community developing jobs and helping clients with other skills to support their employment.

6. Pre-implementation Costs. Data was collected on the time and cost of preparing to implement the intervention, which included creating a computer lab and training employment staff (6 Employment Specialists and 4 Team Leaders) to run it. The process took a total of 261 staff hours from the Thresholds team (15 total research and employment staff) and 305 staff hours from the Northwestern/University of Michigan research team (1 Principal Investigator, 2 staff) which amounted to a total labor cost of \$22,882. The non-labor costs to create a computer lab with 5 work stations amounted to \$2599.

CONCLUSIONS

Preliminary findings are promising and suggest that using VR-JIT as a supplement to IPS services may lead to higher rates of competitive employment, increased interviewing skills, decreased anxiety and increased self-confidence for clients around interviewing. Integrating VR-JIT into IPS services may also lead to a more efficient use of staff time, including less time performing job interview training and application skills and more time completing administrative tasks. The overall cost to plan for and implement the intervention is reasonable.

CONTACT INFORMATION

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