

PROTOCOL TITLE:

Improving Employment and Reducing Recidivism among Prison Offenders via Virtual Interview Training Tool

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This protocol is the exact protocol that was approved and used for HUM00155161. There are only a few differences between the current protocol and HUM00155161. First, the current protocol will enroll participants into the randomized controlled trial (RCT) who are 25 years or older (HUM00155161 participants in the randomized controlled trial are 18-24 years old). Second, the current protocol will enroll 60 participants into the RCT (compared to 150 participants in HUM00155161). Third, the current protocol is funded for 12-months by MICHR (via funding from NIH). Lastly, the current protocol is only for the randomized controlled trial (rather than HUM00155161 which includes enrolling staff into an implementation evaluation).

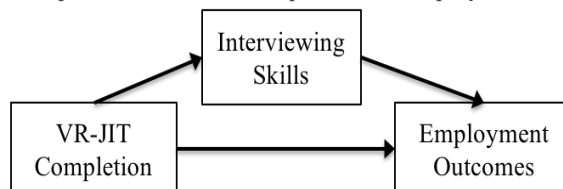
1.0 Purpose of the Study:

Goals and Objectives. Our goal is to conduct a confirmatory effectiveness RCT (and an implementation evaluation [39]) of Virtual Reality Job Interview Training (VR-JIT) by comparing employment and recidivism outcomes of offenders receiving vocational services as usual (SAU) plus VR-JIT (SAU+VR-JIT) with the outcomes of offenders receiving only services as usual (SAU-only). To meet the criteria in the funding announcement, our plan calls for participants to include offenders who are at moderate to high risk for reoffending (with an emphasis on violent-crime reoffending) who are currently enrolled in a Vocational Village. We are well prepared to conduct this study because our team has extensive experience with evaluating VR-JIT in several settings (schools and mental-health service providers) and has previously collaborated with the Michigan Department of Corrections, which administers the Vocational Villages.

Objective 1. Evaluate whether SAU+VR-JIT, compared with SAU-only, enhances employment outcomes and reduces recidivism among this population (i.e., effectiveness). At the individual level, we *hypothesize (H)* that SAU+VR-JIT trainees, compared with SAU-only trainees, will have higher employment rates (*H1*), greater improvement in job-interview skills (*H2*), and reduced recidivism (*H3*) by six-month and twelve-month follow-up. At the system level, we hypothesize that SAU+VR-JIT will be more cost-effective than SAU-only (*H4*).

Subobjective 1. Explore whether use of the computerized VR-JIT system frees up SAU staff time for non-interview-practice-related vocational training, relative to SAU-only (system level).

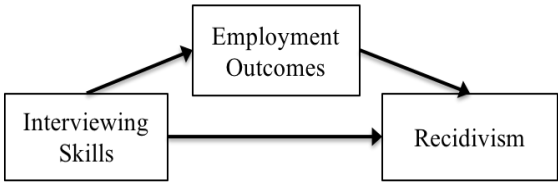
Figure 1. We will test whether interviewing skills mediate the relationship between VR-JIT completion and employment outcomes.



Objective 2. Evaluate the mechanisms of employment outcomes and explore the mechanisms of recidivism.

Based on Corbiere’s model [19], we *hypothesize* that interview-skill improvement and measured role-play interview performance will mediate the effect of interview training on employment outcomes (*H5*; Figure 1). Also, we will explore whether employment and mental health outcomes mediate the relationship between interviewing skills and recidivism at six-month and twelve-month follow-up (Figure 2). We will also explore if mental health and life stress mediate the relationship between employment status and recidivism at six- and twelve-month follow-up.

Figure 2. We will test whether employment outcomes mediate the relationship between interviewing skills and recidivism.



1.1 Virtual Reality Job Interview Training (VR-JIT). This is an immersive simulation that allows trainees to have a virtual conversation with, and influence the behavior of, a simulated character [45–47]. Our previous studies suggest that virtual reality simulation training is engaging, and as a result, trainees will practice willingly for hours [27–30]. The VR-JIT simulation far exceeds typical interview training by combining video, speech recognition, and nonbranching logic (described below) to create an interactive environment in which trainees encounter complex social cues and realistic interpersonal exchanges with a virtual hiring manager.

VR-JIT was designed as part of a collaborative partnership between SIMmersion LLC and our research team to improve interview skills using behavioral-learning principles

Table 1. Learning Principles used in Virtual Reality Job Interview Training
1. Practice interviewing for the same job or different jobs repeatedly until they are prepared for a real interview
2. The use of speech recognition to directly answer questions rather than passively learning concepts (e.g., reading sample answers to questions)
3. Answering questions specific to a job they want based on their own work history and skills
4. Asking an on-screen coach for help and suggestions during practice session
5. Practicing to recover from mistakes in responses to interview question or erase them to try again without penalty (e.g., apologizing or clarifying)
6. Engaging an interviewer who has memory and emotion
7. Trying different approaches to answering questions that get harder as their skill increases (e.g., at a moderate level, the interviewer may ask follow up questions to clarify an answer and at the advanced level, she may ask an illegal question),
8. Didactic electronic learning (e-learning) materials that will help them with interviews and the other steps in finding a job (e.g., creating a resume, researching a position, asking appropriate questions, selecting a job that meets their needs and deciding whether to disclose a disability, etc.)

[48, 49]. These principles help develop sustainable changes in behavior [25, 26]. Table 1 identifies the specific learning principles that our team adapted from behavioral-learning theory to guide the development of VR-JIT using SIMmersion’s proprietary technology. Our team developed the VR-JIT learning objectives, which were characterized using terminology from the literature [20]. The **job-related interview content** objectives target dependability, negotiating skills (e.g., asking for a day off), teamwork, and honesty (e.g., following company policies). The **interviewee performance** objectives target comfort level during the interview, sharing information in a positive way, sounding interested in the position, sounding professional, and establishing a rapport with the interviewer. VR-JIT includes the following components to help the trainee achieve the learning objectives:

2.0 Background / Literature Review / Rationale for the study:

2.1 Recidivism Is a Major Public-Safety Concern. Recidivism and reincarceration among those released from prison are among the most pressing public-safety issues facing many communities today. More than 600,000 state and federal ex-offenders reenter the community

annually [1]. According to the 2018 Bureau of Justice Statistics, 44% of released prisoners were rearrested during the first year after release, 68% within three years, 79% within six years, and 83% within nine years [2]. These data suggest that more work is needed for the prison system to optimally provide rehabilitation and foster deterrence from future crime.

2.2 Employment Is an Important Protective Factor against Recidivism. Unemployment is often recognized as the leading mechanism of recidivism [3]. Moreover, unemployed offenders are approximately twice as likely to recidivate as employed offenders [4], though several other criminogenic risk factors contribute to recidivism (e.g., criminal history, antisocial behavior, poverty, age, race, and limited housing options) [5–7]. Among ex-offenders who recidivate, employed ex-offenders stay in their communities for twice as long as unemployed ex-offenders [8]. Research suggests that employed ex-offenders are less likely to engage in predatory crime and use drugs and alcohol (which are known risk factors for recidivism) [9]. Gainful employment also enables ex-offenders to secure housing, pay their rent and utilities, and network within their communities [10, 11]. And maintaining employment reduces the incentive to commit crimes for monetary gain [12], which in turn helps reduce recidivism [10]. Unfortunately, ex-offenders have a difficult time obtaining employment after release [13], and only 25% of ex-offenders are employed within 12 months of reentry [14]. Therefore, finding ways to increase employment rates during reentry after prison is an urgent public-safety need.

2.3 Vocational Services Are Needed to Facilitate Employment among Offenders. The need to implement vocational services to support ex-offenders has received national attention; only half of all state prisons offer vocational services to support reentry [15]. The U.S. Department of Justice hosted a “National Reentry Week” in 2017 to provide 550 coordinated reentry-training events (e.g., job-interview practice and job fairs) [16]. Recently, a systematic review of the literature evaluated the effectiveness of seven vocational service programs for ex-offenders that met a high standard of scientific rigor (a randomized controlled trial [RCT]) for evaluation. The findings suggested that programs such as the Center for Employment Opportunities, a comprehensive employment program to support ex-offenders in New York City, had promising results in reducing recidivism, whereas the aggregate evidence from across all seven trials did not demonstrate significant improvements in reducing recidivism over the last decade [17]. However, some standalone programs lacked either randomization or control groups, but had more-promising reductions in recidivism. Thus, there is still promise that vocational services can reduce recidivism, but much more effort is needed to evaluate the impact of vocational services on recidivism using scientifically rigorous methods of evaluation [17].

2.4 Job-Interview Training Is Critically Lacking in Vocational Services in General, and Especially in Prisons. In an adaptation of the theory of planned behavior [18], Corbiere et al. found that active job-search behavior (e.g., job interviewing) was the most proximal factor to employment [19]. Nearly all vocational services support practicing job-interview skills because hiring managers ask questions to assess a candidate’s work skills [20] and social effectiveness (e.g., employable skills, ability to work hard) [21, 22]. And the ability to

effectively discuss one's prior conviction is a crucial element of the interview that can determine whether one receives a job offer.

2.5 Critical Gaps in the Evidence Base for Interview Training Remain. Although job-interview training is commonly offered by vocational services, the methods used to train people in job-interview skills in the field of vocational rehabilitation are not evidence-based. The gold standard for programming to support employability among individuals receiving public services is supported employment [23]. But the job-interview training methods delivered by supported employment rely on vocational counselors conducting mock job interviews (i.e., role-play training) with clients. However, the counselors are not trained to ask open-ended interview questions to facilitate thoughtful responses during the mock interviews, give feedback on clients' levels of anxiety or confidence about interviewing, act like hiring managers, or offer feedback on clients' responses to improve their interview skills [24]. Also, counselors offer only one or two mock interviews before each client's real-life job interview.

Given that a job interview is a complicated social process that requires reading social cues, developing articulate responses to questions, and establishing rapport with the interviewer (among other skills) [20], it is not realistic to think that a person can become highly effective at interviewing after practicing only a few times. Behavioral-learning principles suggest that training sustainable changes in behavior requires repeated practice and high-level, rewarding feedback [25, 26]. Thus, a major gap in vocational services is the lack of evidence-based practice used to facilitate job-interview training. All these challenges (minimal job-interview training taking place during vocational services, reliance on non-evidence-based job-training practices, interpersonal challenges that may require additional interviewing practice, and the real barrier that a criminal record poses to obtaining a job) are exacerbated for individuals in the justice system. There are no RCTs evaluating interventions focused on job interviewing for reentering prisoners, which is the primary goal of the proposed study.

2.6 Closing the Job-Interview Training Gap in Vocational Services in General, and Especially in Prisons. The National Institute of Mental Health (NIMH) funded our team to develop and evaluate Virtual Interview Training (VR-JIT) for non-justice-involved individuals with mental illness in a series of lab-based efficacy RCTs (R44 MH080496). Briefly, VR-JIT is a computer-based job-interview simulation in which trainees repeatedly practice interviewing with a virtual hiring manager. Each interaction is facilitated with speech-recognition software and lasts approximately 25 minutes; there are 10 to 15 hours of unique virtual job interviews available. Our efficacy evaluation suggests that VR-JIT improved interview skills in five cohorts of adults with various disorders (depression, schizophrenia, PTSD, autism, addiction) [27–31] and increased their likelihood of getting job offers more than twofold within six months of completing VR-JIT [28, 31–33] (i.e., 14–25% of controls received job offers, compared with 48–54% of VR-JIT trainees).

Based on this work, our team received funding from the NIMH to evaluate the effectiveness, cost-effectiveness, and implementation of delivering VR-JIT to adults with severe mental illness receiving community-based vocational services (R01 MH110524), and funding from the Kessler Foundation to evaluate the effectiveness, cost-effectiveness, and implementation

of delivering VR-JIT to 1,000 high school students with disabilities receiving transition services. Our preliminary data in this recent work showed similar increases in interview skills and a twofold increase in job attainment by the eight-month follow-up [34, 35]. Thus, we have deep expertise at evaluating the effectiveness and implementation of VR-JIT. In addition, we received funding from the NIMH to adapt VR-JIT to meet the needs of transition-age youth (ages 16 to 26) with autism (R34 MH111531), and we are using internal funds to include additional modifications to support justice-involved individuals.

Job interviewing is a social skill that everyone can use, and VR-JIT is a generalizable training through which several groups have improved their skills and achieved greater access to employment. Therefore, we hypothesize that VR-JIT can also assist job-seekers with current or prior involvement with the justice system. Based on the current lack of interview services and of evidence-based practice delivered by prison reentry programming, we propose to evaluate the effectiveness and cost-effectiveness and conduct an initial implementation evaluation of VR-JIT as a tool to enhance the existing services delivered in prison settings.

3.0 Inclusion and exclusion criteria:

To evaluate the feasibility and preliminary effectiveness of VR-JIT in a randomized controlled trial (RCT) comparing vocational-services-as-usual with VR-JIT added on (VSU+VR-JIT) to VSU only. Overall, we will recruit 60 individuals who are enrolled in the Ionia and Jackson Vocational Villages of the Michigan Department of Corrections.

The inclusion criteria for villagers are:

- 25 years or older
- Identified as at moderate to high risk for reoffending with violent crimes (determined at the time of enrollment in the Vocational Village via the COMPAS Risk Assessment Classification Instrument [60])
- Within three months of their earliest release date
- Actively enrolled in a Vocational Village
- Have at least a 4th grade reading comprehension

The exclusion criteria for villagers are:

- Has uncorrected hearing or visual problem that prevents him or her from using the training
- Has a medical illness that compromises their cognition (for example, moderate to severe traumatic brain injury).

The process to be enrolled at the Vocational Village is as follows: prisoners can apply to be in the Vocational Village by submitting an application and answering several short essay questions. The applicants are then screened by education staff for the content of the application and many other factors such as proximity to their release date, misconduct history, and core program needs. The Vocational Village is different from a general population prison and is considered a subpart of the correctional facility.

4.0 Recruitment:

There will be a few recruitment methods utilized to reach out to potential participants from the Vocational Village. First, inclusion and exclusion criteria will be shared with MDOC, Michigan Department of Corrections Leaders and/or Teachers at the Vocational Village. MDOC Vocational Village staff will then identify a list of potential participants. We will then send Leaders and/or teachers a prepared flyer and/or letter to be distributed to those who might be eligible based off of the criteria. MDOC Vocational Village staff will use their own assessments in order to assess age, reading level, COMPAS Risk Assessment, possible impairments, etc. These assessments are for admittance to the Vocational Village as well as inclusion in this research study. After the flyer and/or letter is provided to villagers, study staff will schedule an information session with those identified villagers. The research team will inform villagers about the study during that time.

We will approach everyone who meets these eligibility requirements and will stress to the prison staff that we need to include and approach everyone equally without any “cherry-picking” by administration. We will also stress the voluntary nature of the study and the importance for all prison staff to be impartial. We believe that this method of recruitment will be the most fair in order to reach a wide potential of participants who will be able to utilize the virtual interview tool.

The MDOC administration estimates that we will be able to recruit approximately 60 villagers that meet inclusion criteria within a 12-month recruitment window. Using a 2:1 randomization model, we expect to enroll approximately 40 villagers in the SAU+VR-JIT group and 20 villagers in the SAU-only group. The Vocational Village will have no role in determining which arm participants are enrolled in; that process will be randomized and up to the University of Michigan staff.

5.0 Consent Process

A. Consent Procedures: Villagers will review the consent form in a group setting with research staff and questions will be answered. Then villagers will review the consent individually with a University of Michigan study staff member. Each participating villager will receive a participant identification number (PIN).

B. Consent Team. The consent process will be conducted by the study team staff who have up to date PEERS training for the protection of human subjects’ research.

C. Consent Timeline. The consent process will require approximately 10 minutes to read and up to 15 minutes to discuss to make sure that the participants fully understand the extent of their involvement in the study. Total is estimated 25 minutes.

D. Re-Consenting will occur only if the study protocol involves changes in the data collection process, if there is a change in risk level for participation, or if instructed to for any other reason by the IRB.

6.0 Procedures Involved:

A. Study Settings

This study will collect human subject's data from villagers at the Richard A. Handlon Correctional Facility, a level II, medium security prison in Ionia, Michigan and Parnall Correctional Facility located in Jackson, Michigan. Personal information about locations or districts that participate will not be shared without their expressed consent.

B. Study Design

We will conduct a single-blind randomized controlled trial to evaluate the effectiveness of VR-JIT by comparing a vocational services-as-usual group to a group actively using the intervention. We will then conduct a 6-month and 12-month follow-up interview with the participants to evaluate their community outcomes. Services as usual job-training at the village includes full days of training and classroom instruction intended to mimic a typical workday outside prison walls and to provide villagers marketable skills. They can receive training in areas such as machining, carpentry, and welding.

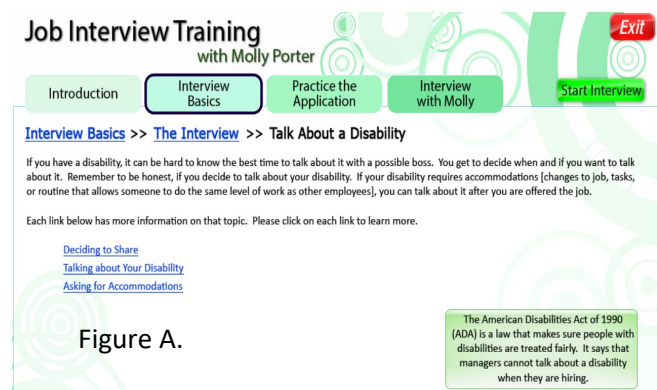


Figure A.

C. Study Intervention

SIMmersion, LLC designed VR-JIT to enhance job interview skills for adults with SMI (severe mental illness). The job-related interview content objectives target: 1) conveying oneself as dependable, 2) negotiating skills (e.g., asking for a day off), 3) team work, and 4) honesty (e.g., following company policy). The Interviewee performance objectives target: 1) comfort level during the interview, 2) sharing information in a positive way, 3) sounding interested in the position, 4) sounding professional, and 5) establishing a rapport with the interviewer. SIMmersion designed VR with the following components to help learning:

C.1.a Electronic Learning (e-learning): Interactive e-learning screens (Figure A.) display critical information needed to prepare for a job interview such as creating a resume, researching a position, types of questions to ask, advice on how to disclose a disability, and an emphasis on effective skills for interacting with the interviewer (e.g., dealing with emotionally provocative questions).

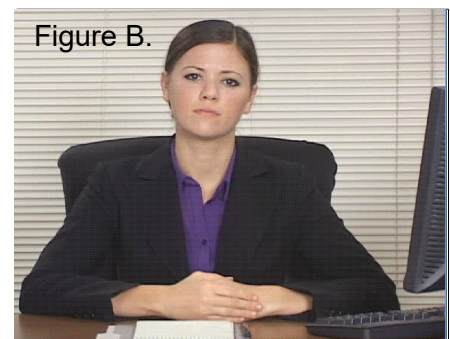
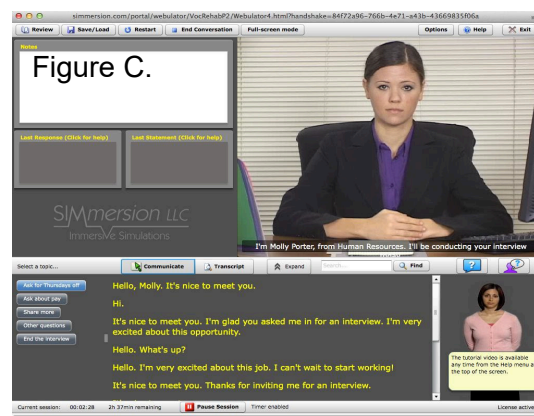


Figure B.

C.1.b VR Interface and “Molly Porter”: After using the e-learning module, trainees will navigate the program to begin the simulated interviews with a virtual human resource staff at a department store named “Molly Porter.” She is sitting in her office and the trainee has joined her for an interview. When “Molly” speaks, the program enters Full Screen mode (Figure B) so that she is speaking directly to the trainee without any distractions on screen. When she finishes asking her question, the program returns to the interface in Figure C where trainees speak a pre-scripted response of their choosing (see C.1.d).



Coach



“Molly” has three difficulty levels: easy (e.g., friendly), medium (e.g., direct), and hard (e.g., stern or asks illegal questions). She uses “memory” and her behavior is driven by an advanced “emotional model.” For example, if a trainee responds inappropriately to several questions, “Molly” may become dismissive and end the interview, but if the trainee continually answers appropriately, “Molly” may become more friendly and encouraging. Based on the trainee’s statement, the software must then choose a reply for “Molly.” Selection is based on three factors: 1) difficulty, 2) the history of the conversation, and 3) “Molly’s” evolving relationship with the trainee, driven by trainee responses. Each factor will be used to compute conditional probabilities associated with each possible reply and one is selected. “Molly” stays true to her character and the emotional state created during the play, and thus, may behave differently each time the system is used.

Figure C displays the layout of the interview interface. Buttons at the top of the screen control the interface. The yellow text displays various statements that can be spoken to respond to “Molly’s” questions. The interview transcript can be accessed through a tab in the middle of the screen. The trainee may change the topic during the conversation using buttons to the left of the yellow text. An on-screen coach appears in the bottom right of the interface. The trainees can take notes and review prior questions (white and gray boxes).

C.1.c Video Clips: A professional actor portrayed “Molly” during the video-recorded sessions. The videos were separated into >1,000 question and response clips that are played during the simulated interview. Trainees talk with “Molly” using a microphone and voice recognition software. This method exposes trainees to an interactive environment and helps them learn to react to an interviewer’s social cues.

C.1.d Pre-scripted Statements and Voice Recognition: A panel of vocational experts supervised hundreds of responses to standard interview questions written by professional scriptwriters during the initial SBIR grant award. The scriptwriters worked with the scientific team to compose realistic dialogue that provides trainees with opportunities to practice the skills identified in the learning objectives. Trainee statements included a wide variety of natural choices with 5-15 potential responses that vary in appropriateness of their content.

This method allows trainees to choose and learn from their responses. VR uses voice recognition technology so trainees can practice speaking the pre-scripted responses to difficult questions in a stress-free environment. Then, trainees can use the rehearsed answers in real interviews.

C.1.e Non-branching Logic: SIMmersion's PeopleSIM™ technology uses non-branching logic; which allows trainees to behave and speak freely within the confines of a safe simulation. Most social simulations, in contrast, use branching logic where trainees select a response from a list of options, which terminate when all options are exhausted. This approach minimizes repeated use to a few trials. SIMmersion's technology integrates the video clips and non-branching logic to enable "Molly" to vary her memory, emotion, and personality. This variation supports hours of unique repeated practice and naturalistic conversations with Molly.

C.1.f Job Coach and Help Buttons: Trainees receive in-the-moment feedback from an on-screen coach (Figure D.) who provides nonverbal cues regarding the trainee's choice of questions and statements. If further clarification is needed, the trainee can click "help" buttons that provide additional detail to clarify the interview question or the trainee's response statement. For example, the coach gives the trainee a "thumbs down" sign if an inappropriate response is selected (Figure D.). If the trainee is unclear about the negative feedback, he or she can click the help button to get a more detailed written and verbal explanation about why the statement was inappropriate (e.g., "This statement focuses on a negative character trait; try focusing on your strengths").

C.1.g Individualized Customization: Prior to starting VR interviews, trainees complete an online job application, which includes questions about employment history and work skills. Trainees will specify one of eight different jobs (cashier, stock clerk, customer service, maintenance/grounds, janitorial, food service, inventory, or security). This "on-line" application procedure is based on applications currently in use by employers such as Target and Home Depot. This practice prepares trainees to accurately complete online applications. Additionally, the application data will populate the list of questions from which "Molly" will draw. For example, a trainee may apply for a customer service position on the application, yet identify previous experience in inventory; Molly may ask, "I see from your resume that you have experience in inventory and are applying for a customer service position. Why are you looking to make that change?" This innovative feature allows trainees to customize their interview experiences to better prepare themselves for future interviews.

C.1.h VR Transcripts: During or after the interview, trainees can view a transcript that replays individual exchanges or the entire conversation. If trainees are using the speech recognition feature, the transcript will also replay his or her recorded voice. This feature lets the trainee hear (and reflect upon) the tone of voice used to ask questions and make statements. The transcripts are color coded to reflect helpful, unhelpful, and neutral responses. Participants can click on the response to receive detailed information about why a response was helpful for hurtful to their job interview and learn how "Molly" understood their responses.

C.1.i Scoring and Summary Feedback: After each virtual interview, trainees receive scores in eight categories (based on the learning objectives). The scores are scaled from 0-100 and are computed via an algorithm, which accounts for the types of responses provided by the trainee throughout the course of the interview. Participants view this scoring feedback and if they score 80 or higher they are informed, “You got the job! You made a great impression on “Molly” and she decided to offer you the job. Congratulations!” (See VR Training Manual in Supporting Documents for Screen Shots). Trainees also receive feedback summaries of what they did well and where they need improvement. This feedback helps trainees understand the subtleties of their interview skills.

D. Study Visit Procedures

Leaders and/or Teachers at the participating locations will review their records to screen which of the villagers meet eligibility criteria in terms of age, reading level, whether or not they are at moderate to high risk for reoffending with violent crimes, within three months of their earliest release date, and actively enrolled in a Vocational Village. Villagers will be excluded if they have an uncorrected hearing or visual problem that prevents him or her from using the training or has a medical illness that compromises their cognition (for example, moderate to severe traumatic brain injury).

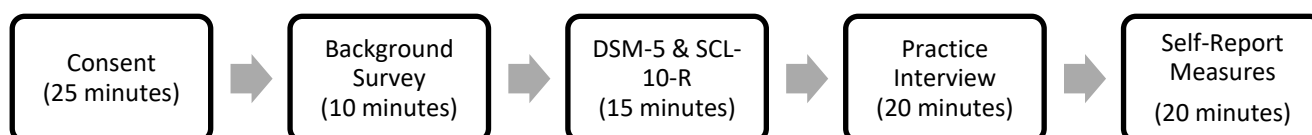
Once villagers are identified, study staff will provide a flyer and/or letter to Leaders and/or Teachers to distribute to villagers. Then, study staff will arrive at the appropriate facility to go over consent form documentation. The consent form will be handed out individually and reviewed in a group format in order to minimize the structure of the vocational village classroom settings. Villagers will be provided time to read over the consent and ask questions. They are allowed to sign at this session if they choose. They can also wait until the first study visit date, where an individual will review the consent form with them individually a second time and answer any questions they may have. If allowed by prison staff, they will be provided a copy of the consent forms for their records.

Leaders and Teachers (staff involved in training) at the Vocational Villages will also be recruited to participate. They will assist with identifying potentially eligible villagers, complete some brief surveys, and help assist with teaching the Virtual Interview Training to the villagers. Leaders and Teachers will also sign consent forms if they choose to participate, and will receive a copy of the consent form for their records.

The Principal Investigator will be present at the facilities (SMT and MTU) for first-time data collection visits or whenever new procedures are being implemented. Additionally, senior study team members (full-time study staff who hold a bachelor’s or master’s degree will be present on all data collection trips within the prison. These are non-student staff members. Everyone will also carry a letter from the MDOC Offender Success Administrator, Kyle Kaminski, that states video-recorded participant data are not to be reviewed by MDOC staff on site at SMT and MTU.

D.1 Study Visit 1 & 2: Baseline Data Collection with Village Participants

During the first study visit, study staff will administer consent as previously noted. This process should take about 25 minutes. Next, consented villagers will complete a few short surveys, one on their background, a DSM-5 Level 1 symptom measure, and a brief psychological distress survey (SCL-10-R) [93, 94]. The DSM-5 Level 1 symptom measure was created to aid in a comprehensive mental status assessment by measuring mental health symptoms [93]. The SCL-10-R is a 10-item checklist of psychological distress based on the Symptom Checklist-90 (SCL-90) [93]. They will also complete a practice interview with study staff that will be audio and video recorded. The practice interview can last around 20 minutes. Afterwards, they will complete some self-report measures on their anxiety, motivation, and self-efficacy. Each of these surveys will be about five minutes each. The first study visit should be approximately 75 minutes. These tasks will be divided to two days.



D.2 Village Participants will be randomized into the VR-JIT group or the control group.

At a ratio of 2:1(VR-JIT:Control) vocational villagers will be informed whether they are active in the Intervention Group or Control Group. The Control Group will continue their educational services as usual. MDOC will share the consented villager's recruitment information, such as their reading level, COMPAS score, etc., with UM research staff. They will do this via REDCap or MBox, both encrypted and secure websites, or via UM phone, or in person with UM research staff.

D.3 Study Visit 3: Training Orientation with Village Participants

Participants randomized to the VR-JIT group will receive a 45-minute orientation to use the virtual training program. Study staff may be on site to facilitate this training session with Teachers. This session will be audiorecorded in order to monitor fidelity of the training. We will plan to audiorecord the first three sessions, and then randomly select approximately 20% of the following sessions to continue the fidelity monitoring process.

Villagers will train with the educational content.

Villagers will use 1 class period for orientation to learn to navigate and participate in the virtual interview.

D.4 Implementation of Intervention:

Villagers will complete up to 3 virtual job interviews per class period, or approximately 15 interviews over the course of the study.

D.5 Study Visit 3: Post Data Collection with Village Participants

All consented villagers in both groups (intervention and control) will complete a post-test employment survey, a practice interview with study staff that will be audio and video recorded, as well as some self-report measures. The practice interview can last up to 20 minutes. They will also be asked to complete a survey about their intervention and services-as-usual (SAU) use, and a survey assessing their acceptability and usability of the VR-JIT program, which should be around 10 minutes. This study visit should be approximately 60 minutes.



D.6 6-Month and 12-Month Follow-Up with Village Participants

All participants will complete a follow-up survey, and the DSM-5 and SCL-10-R survey again. This should be approximately 15 minutes. Research staff will obtain contact information from MDOC so we can contact participants for their follow-up. The survey will be done via phone, email, or in-person depending on participant preference or their location. Participants will be compensated \$20 for each follow up survey that is completed. Also, the UM research team will request a bimonthly data pull from MDOC to obtain follow up data from participants if they cannot be reached by UM staff.

E. Participant Timelines

Villagers enrolled in the randomized controlled trial will complete all study visits within approximately 5 weeks of enrolling in the study. Their participation will be complete after completing the 12-month follow-up.

F. Vulnerable Population Safeguards

To reduce coercion or undue influence a private and safe place to consent villagers will be provided by The Michigan Department of Corrections (MDOC) at the Vocational Village. There will be no advantages or disadvantages provided to villagers for their participation. Villagers are notified that participation in this research will not have any influence on incarceration status to include in probation and parole decisions. With limited risks present in this research there is no requirement for a follow up examination after the completion of the study. MDOC will provide information on villagers reading level to inform the accessibility and understandability of all research material. It is expected that all villagers will be able to comprehend and understand the study. If we encounter a villager who may lack comprehension, we will not include them in the study.

7.0 Multiple sites

This is a multi-site project funded by discretionary funding where the Principal Investigator is Dr. Matthew Smith located at the University of Michigan.

- A. University of Michigan School of Social Work is the coordinating site where all data will be entered, cleaned, stored, and analyzed.
- B. The Vocational Village located at Richard A. Handlon Correctional Facility, a level II, medium security prison in Ionia, Michigan is research site number 1. This vocational village can have up to 165 vocational trade students, 27 vocational trade tutors and 12 building trade workers. The villagers are housed together to promote a therapeutic, positive, and productive learning environment. At this site, we will recruit research participants to participate in this research study. Although data will be collected at this site, research staff will transfer the collected data in a locked box to the UM research site for processing.
- C. When new research sites become available the IRB will be notified and appropriate IRB documentation will be submitted.

8.0 Risks to Participants:

This study involves villagers completing a battery of clinical, and role-play assessments.

There is minimal risk associated with participation in this study for villagers beyond potential boredom from navigating and using the computer program. All villagers will complete the studying within their vocational village setting. There are some sensitive questions that will be asked of participants (e.g. substance use), and possible emotional distress at some of the questions as well. Participants are allowed to skip over any questions they do not wish to answer.

Breach of confidentiality may be another potential risk. To mitigate this risk, participant files will only be referenced with a personal identification number (PINs). The document linking PINs to identifying information for participants will be password-protected and stored on a secure server protected by firewalls, or in REDCap, an encrypted and secure database website. Moreover, all videos of participant interviewing skills will be stored on a server that is password protected and secured behind firewalls.

There is a small risk that prison staff will attempt to access data. However, all effort will be made to prevent this. All surveys will only have PINs, so even if prison staff somehow sees completed surveys or forms, they will be unable to identify who completed them. Prison staff will not be expected to collect or view any of the survey information collected by study participants during the visits.

Confidentiality and safety procedures will be in full compliance with the University of Michigan policies. However, as with any research study, there is a risk of breach of confidentiality. The

prison staff will not be able to access the data provided by participants. If somehow they are able to access the data due to error, they will not be able to tell who the data belongs to as it will only be identified by a PIN.

When obtaining consent, participants are notified that they may stop participating at any time without repercussion. If consent is revoked in writing, the consent specifies the right to use or share information previously obtained as needed for the purpose of the study.

9.0 Potential Benefits to Participants:

Participants completing the intervention could possibly learn some new strategies to be more successful at Job Interviewing.

Results from this study may lead to a better understanding of helping improve job interview skills for justice involved individuals. It is therefore possible that results of this study may aid in intervention strategies for this population.

10.0 Provisions to Protect the Privacy Interests of Participants:

To minimize stress and fatigue during testing, participants will be assessed in an encouraging and accepting atmosphere. They can take breaks during the assessment process and may discontinue the assessment if they do not wish to continue. The research team have been trained in the administration of the research measures and have undergone training procedures to help minimize the stress this may cause.

The research assessments and intervention/SAU survey use will be conducted in a private or semi-private computer lab or educational room setting for the villagers. For teachers, the feedback form will be conducted in a setting of the participant's choosing. All methods of correspondence with teachers and leaders will be secure, including telephone, voicemails, text messages, or email. This correspondence will likely include scheduling times for research staff to visit the vocational village, timeline check-ins, as well as survey reminders. All participants will provide informed consent with respect to their preferred method of communication. In addition, we will use a personal identification number (PIN) to protect participant privacy by labeling all study documents with the PIN rather than any identifying information. The use of the PIN will help keep participant enrollment confidential. Teachers, leaders, and villagers will all be assigned this PIN.

Access to protected information will be limited to the PI and research team members. There will be a document located on the UM servers (password protected behind firewalls) that links PINs to study participant names. REDCap may also be used to link this information. The PI and research team will have access to this file in order to coordinate study visits and track participant progress to complete the study. REDCap, a HIPAA compliant and encrypted database may also be used to host protected participant information.

While testing participants at the villages, we will record data on either secure electronic equipment (local computing devices) or paper forms. This will be dependent on vocational village protocols. It is likely that all data will originally be on paper forms and then transferred to REDCap or secure UM server. If collected on a device, data will be uploaded to the server and removed from the device as soon as possible. All precautions will be taken to protect the electronic devices from theft or loss.

All forms and materials will be kept in a locked file in a locked room accessible only to research personnel at University of Michigan, not vocational village staff. Confidentiality procedures will be in full compliance with University of Michigan policies. Any confidential data obtained at the study site will be transferred back to the School of Social Work via a lock box to be secured into a locked file and in a locked room.

11.0 Confidentiality and Data Management:

Due to the funding from this project awarded by MICHR (from funds provided to MICHR by NIH), this research holds a Certificate of Confidentiality from the National Institutes of Health.

Description of Security measure to Protect Data Sources. Paper research records will be created and labeled with the PIN, where participants may provide consent and complete study measures. The document linking the subject PINs to identifiers will be maintained on a secure UM server at the School of Social Work. All study data will be stored in a locked cabinet within a locked office at the school. These records will serve as the source for electronic data entry. Research records will be transferred via a locked box to the UM research team where the data will be cleaned, re-entered into the electronic database, and the paper copies again stored in a locked drawer in a locked room. All records will be de-identified after study completion. No research data or records will be accessible to or shared with MDOC employees.

All participant documents at UM will be labeled with the participant's PIN. Each page of each document will be labeled with the PIN. Documents will be organized into a study binder that is also labeled with the participant PIN. All Binders and Study Documents will be stored in locked file drawers within a locked room.

Quality Assurance Measures. All participants will be recruited using strategies, documents, and text approved by the University of Michigan Institutional Review Board (IRB). The research team will regularly hold meetings to discuss the effectiveness of approved recruitment strategies and if new strategies should be reviewed by the IRB and then implemented. The PI will regularly audit accrual to ensure that participants meet eligibility criteria and that the study enrollment is consistent with the projected enrollment targets agreed upon with MICHR. In addition, the study coordinator will audit all study files to ensure that all required study data is completed on each form, and that there is no missing data. The REDCap system is accessible via a virtual private network that is password protected and

behind firewalls. The data will be transported from the schools to UM in a locked storage box. To protect confidentiality, all data will be numerically coded using a personal identification number (PIN), and information linking the PIN to the subject's name will be kept in a secured file cabinet and office and/or on REDCap. In addition, computer data files will be stored on password-protected computers and communication among the staff will use PINs, not names. No information concerning data will be presented with participant names. The biostatistician and project coordinator will also perform all necessary checks and controls to ensure the reliability and validity of the data, including monitoring data collection and collection procedures, data storage, data management, and data analysis.

12.0 Study Team Training for Data Collection within a Prison Setting

All study team staff members who will be working inside the vocational village prison settings will attend an information session with the PI, co-I's, lab manager, or study coordinator reviewing the protocol in detail, as well as the unique circumstances that may occur within the vocational villages. Staff will also review an additional training document and meeting as a method to support participant confidentiality. Additionally, study staff will also be trained to do the following:

If Any Deviation From Protocol Occurs:

If you are on site at one of the prisons and an incident occurs that deviates from our set protocol, please do the following:

- 1) As soon as you are out of the facility, IMMEDIATELY call the Principal Investigator Matthew Smith and notify him of the situation. Follow given instructions accordingly.
 - a) If PI Matt Smith is not available, call Co-Investigator Jamie Mitchell.
 - b) If co-investigator Jamie Mitchell is not available, call Co-Investigator Shannon Blajeski.
 - c) If co-investigator Shannon Blajeski is not available, call Team Manager Katherine Tucker.
 - d) If Katherine Tucker is not available, call Study Coordinator Brittany Ross.

If MDOC Staff Asks to Review Our Research Data:

Our research data is protected from MDOC review and should NOT be looked at by MDOC staff. However, if you are on site and MDOC staff asks if they can review video footage or tells you that you cannot leave the facilities without the data being reviewed, please do the following:

- 1) Inform MDOC staff that we have a letter from Kyle Kaminski, the MDOC Offender Success Administrator, stating that our research data is protected and is not to be reviewed by any staff at SMT or MTU.
- 2) Show MDOC staff printed letter from Kyle Kaminski and allow them to read it.
- 3) If MDOC staff is unsatisfied with the letter and/or still resisting, ask them to please call an in-house staff member who knows about our research and who can explain to them that our data is NOT to be reviewed and that this has been approved by the director.
 - a) If an in-house staff member is not available, ask them to call a Prison Supervisor.
 - b) If a Prison Supervisor is not available, ask them to call the Village Principal.

- c) If the Village Principal is not available, ask them to call the Warden/Assistant Warden/Deputy Warden.

13.0 Data Analysis

H1: SAU+VR-JIT trainees will have higher employment rates than SAU-only by T3. To test H1, we will use multiple logistic regression and a Wald chi-square test of the coefficient to its standard error, to compare the adjusted employment proportions in the two conditions (attained a job = 1 vs. failed to attain a job or censored with a job = 0, between T1 and T3). Our MICHR-funded pilot trial does not have the resources to be an appropriately powered trial but instead we are using this pilot to estimate an effect size to use in a future adequately powered trial.

H2: SAU+VR-JIT trainees will have greater improvement in job-interview skills than SAU-only by T2. To test H2, we will conduct a repeated-measures analysis of variance (RM-ANOVA) with pretest and post-test interview scores as the repeated measures and treatment group as the fixed factor. Our MICHR-funded pilot trial does not have the resources to be an appropriately powered trial but instead we are using this pilot to estimate an effect size to use in a future adequately powered trial.

H3: SAU+VR-JIT trainees will have greater reductions in recidivism than SAU-only between T1 and T3. To test H3, we will compare recidivism percentages between SAU+VR-JIT and SAU-only at T3. Our MICHR-funded pilot trial does not have the resources to be an appropriately powered trial but instead we are using this pilot to estimate an effect size to use in a future adequately powered trial.

2.2.6 Analyses to Test Objective 2 are Based on Corbiere et al.'s [19] Model of Employment

H5: Improved interviewing skills will mediate the relationship between VR-JIT (number of completed virtual interviews) and employment outcomes (i.e., obtaining employment). *To test H5*, we will test first for a significant SAU+VR-JIT impact on interview skills compared with SAU-only, then check for treatment by mediator interaction [81], then evaluate the product of the two coefficients [82] with bootstrapped confidence intervals [83].

Participants, Measures, Procedures, and Analyses.

A mixed-method process evaluation will entail conducting surveys and semi-structured interviews with villagers and teachers.

Surveys will be provided to N = 40 villagers randomized to VR-JIT to assess the acceptability and usability of VR-JIT. We will use items adapted from the Consolidated Framework for Implementation Research (CFIR) [43, 44]. Surveys adapted using CFIR will also be provided to the estimated N = 10 teachers from the Vocational Village (whom we will train to deliver VR-JIT) to assess provider views on VR-JIT acceptability, delivery strategies, and sustainability.

Exploratory Data

We will explore potential mechanisms for VR-JIT effectiveness (i.e., improved interview skills, attain a job), by first analyzing mediators (i.e., interview skills, self-confidence, and anxiety) and moderators using boot strapping (for mediators)⁴⁸ and linear regression (for moderators)⁴⁹. Second, we will explore potential mechanisms for a lack of improvement in interview skills and failure to attain a job) by examining group differences and associations between groups who did or did not have poor outcomes. Third, we will collect exploratory implementation data by interviewing vocational counselors and school administrators (N=10) about: 1) potential barriers and facilitators for VR-JIT implementation and scalability; and 2) how VR-JIT might reduce staff time required to deliver services. We will analyze this exploratory implementation data iteratively using thematic analysis and the constant comparative approach^{43, 44} to identify emergent themes regarding the barriers and facilitators of implementing VR-JIT.

14.0 Data Monitoring Plan to Ensure the Safety of Participants:

Data will be strictly monitored by the PI who regularly reviews testing and data management procedures to ensure protection of human subjects. We follow IRB and University of Michigan guidelines to minimize risk and report problems. We are required by our funding agency to report results annually. All data reported is de-identified prior to entry and analysis. We will initiate protocol revisions with the IRB when necessary. We have established a Data Safety and Monitoring Board to meet annually during the active recruitment phase of the study. The DSMB will review the research protocol and plans for data safety and monitoring, adverse events, risk management policies, and preliminary data analysis. Members of the board include University of Michigan's Daphne Watkins, David Cordova, Yale University's Morris Bell, and Department of Correction's Kyle Kaminski.

All electronic data is stored on a secure server managed by University of Michigan School of Social Work, and access to the server requires a password and netID, and is fire walled, requiring VPN connection if off campus (per IT security protocols). An additional password is needed to access identifiable data stored on this secure server. Further, all data collected in the field is stored on encrypted drives and also identified only by ID number. All paper data is stored in locked filing cabinets in our lab at UM. Data analysis is completed by approved project personnel.

15.0 Qualifications to Conduct Research and Resources Available:

Overview and anticipated contribution to success of the proposed work

The University of Michigan (UM) is one of the most resource intensive universities in the world, with state-of-the-art computing, statistical, library, and research consultation resources readily available to faculty researchers. The facilities and resources necessary for the proposed work are all currently available to Dr. Smith and his team. Below, the key units and facilities are described in detail to provide information about the specific contribution of each.

University of Michigan

Office:

The facilities and resources necessary for the proposed work are all currently available to Dr. Smith and his team. Dr. Smith and the study staff have offices at the School of Social Work. The study staff and Dr. Smith have meeting and office space within the Curtis Research Center where Dr. Smith is the contributing faculty.

Computer:

The P.I. and the research staff have computer resources for data analysis and word processing for manuscript preparation.

Scientific Environment:

School of Social Work: The UM is a leader in social work education and research and is ranked first in the *U.S. News and World Report* rankings of social work programs. The interdisciplinary *Joint Doctoral Program in Social Work and Social Science* stands alone in the nation. This distinctive program trains academics, researchers, and practitioners to meet the challenges of society by utilizing theories and research from anthropology, economics, political science, psychology and sociology. There are approximately 600 MSW and approximately 75 Ph.D. students enrolled each term in the School of Social Work programs. For this project, Dr. Smith will regularly involve graduate students as work-study research assistants and they will facilitate data cleaning and double data entry in addition to other project supports.

The Vivian A. and James L. Curtis Research and Training Center: Through the generous contribution of the Curtis family, *The Vivian A. and James L. Curtis Research and Training Center* is funded to foster interdisciplinary externally funded research and UM-community evaluation research partnerships to advance knowledge in the areas of mental health, substance abuse, and health. The Curtis Center's research agenda focuses in studying health and mental health disparities and on the conduct of translational research to ameliorate these disparities. Center support includes study design consultation, advanced statistical consultation, grant and manuscript writing assistance, research space, and several other services. Expert consultation is provided by a multidisciplinary group of experienced, federally funded researchers. For this project, the Curtis Center will serve as the hub for the project staff and Dr. Smith. We will utilize its research consultation and research support resources to increase chances of success in completing the proposed project.

CTSA – (Clinical Translational Science Awards) and Michigan Institute for Clinical and Health Research (MICHHR): The University of Michigan is the recipient of an NIH CTSA award, which has its home in MICHHR (<http://www.michr.umich.edu>). MICHHR provides a comprehensive institutional source of support and infrastructure for clinical and translational researchers at the University of Michigan. It is designed to serve any investigator, in any school of the University, performing clinical or translational research. It serves to connect and

integrate education, career development, infrastructure, and to catalyze research that spans the laboratory, the clinic, and the community. MICHHR is organized in fourteen unique resource programs, focusing on the following domains: novel methods, technical core, Clinical Research Unit (MCRU), education/career development, biomedical informatics, regulatory support, pilot grants, biostatistics, research ethics, pediatric research, community engagement, clinical translation sciences, and health disparities research. Research Support Services include research development, data management and project management and monitoring (PMM) of federally funded, multi-center trials. MICHHR offers all investigators expert consultation, budgeting and administrative support for project development, funding for pilot studies, the *Engage* participant recruitment portal, and support for clinical research management system, among other research development services. For this project, MICHHR will provide assistance in data management, based on the REDCap platforms. REDCap is an electronic data capture (EDC) system that is secure, HIPAA compliant, and web-based. This easy-to-use, no-cost tool for the University of Michigan Clinical Researchers is intended to replace Microsoft Excel and Access. Using REDCap's stream-lined process for rapidly developing databases, an investigator may create, design, and manage clinical research data online. Further, REDCap provides automated export procedures for seamless data downloads to common statistical packages (SPSS, SAS, Stata, R), as well as a built-in scheduling calendar, ad hoc reporting tools, and advanced electronic data capture form features, such as branching logic, file uploading, and calculated fields.

Center for Statistical Consultation and Research (CSCAR): CSCAR is a service and research unit under the administrative oversight of the VPR that provides integrated, comprehensive statistical consulting services covering all aspects of research design and analysis from initial study design through presentation of research findings. CSCAR provides free statistical support to UM faculty and research staff and is located approximately three blocks from the School of Social Work. Among the CSCAR services provided are those related to proposal presentation and study design (e.g., power and sample size calculations), dataset consulting (e.g., database design, transferring datasets across platforms and different software packages), choice of statistical methods, use of statistical software (e.g., SAS, SPSS, SYSTAT, S-Plus, BMDP, JMP, LISREL, and AMOS on Windows, UNIX, and Macintosh platforms), interpretation of and presentation of results, collaborative research, workshops, remote consultation using “whiteboard” software, and geographic information systems consultation. With regard to computing resources, CSCAR provides PCs and Mac computers with the latest versions of a large number of software programs such as STATA, MPLUS, AMOS, MATLAB, R, SAS, SPSS, ArcGIS, and ArcView GIS, among others. The CSCAR Library PC also has a variety of statistical software packages available for use including a sample size and power analysis package. For this project, CSCAR will provide any statistical consultation needed to increase the chances of success of this project.

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AMENDMENTS:

Ame00098947

This protocol is the exact protocol that was approved and used for HUM00155161. There are only a few differences between the current protocol and HUM00155161. First, the current protocol will enroll participants into the randomized controlled trial (RCT) who are 30 years or older (HUM00155161 participants in the randomized controlled trial are 18-29 years old). Second, the current protocol will enroll 60 participants into the RCT (compared to 150 participants in HUM00155161). Third, the current protocol is funded for 12-months by MICHR (via funding from NIH). Lastly, the current protocol is only for the randomized controlled trial (rather than HUM00155161 which includes enrolling staff into an implementation evaluation).

The inclusion criteria for villagers are:

- 30 years or older
- Identified as at moderate to high risk for reoffending with violent crimes (determined at the time of enrollment in the Vocational Village via the COMPAS Risk Assessment Classification Instrument [60])
- Within three months of their earliest release date
- Actively enrolled in a Vocational Village

We revised our inclusion criteria to drop the 4th grade reading level requirement for participants. This requirement is already met by the participants' enrollment in the Vocational Village as the program requires that all villagers have a high school diploma or GED before entering the program.

The Acceptability and Usability and Villager Status surveys have been revised and updated. No sensitive questions have been added to these surveys.

Ame00100075

For post-test study procedures, an option to conduct the visit remotely over the phone (using BlueJeans) will be added to the additional protocol. University of Michigan research staff will set up an encrypted BlueJeans conference line and provide the number to the Vocational Village. An MDOC Vocational Village employee, who is aware of the that the villager is participating in research, will escort villager participants to an area within the facility that has a phone. The number will be dialed in and research staff will conduct the post-test visit as previously approved. The mock job interview will be the only part that will be actively recorded. The villagers have already been consented and have agreed to participate in the study.

Ame00100925

In response to COVID-19, we decided to revise our recruitment and study visit protocols.

Post-visits have already been approved to be done remotely. However, as some villagers may be released early without notice to research staff, we are revising the protocol to conduct the post-test visit over a one-on-one BlueJeans call directly with the vocational villager after they are released. We already have contact information from MDOC and hope to reach out to them

if this occurs. As previously mentioned, the mock job interview will be recorded, but the survey collection will not be recorded. For these visits, the research staff will email copies of the surveys to participants ahead of time and then ask the villagers to read and respond to the survey items over the phone. In case email is not a reliable option, research staff will read each item and record their responses on a paper copy and then enter them directly into REDCap after the visit is complete, or, if able, research staff will enter their responses directly into REDCap. We propose to provide a one-time payment of \$20 for these participants to compensate them for their time completing the post-test visits outside of the vocational village after their release from MDOC custody.

We will also add the option for payments other than gift cards (for example, a check) to be sent to participants.

Ame00101332

In response to COVID-19, we decided to revise our recruitment and study visit protocols. We are doing so in order to continue enrolling participants as well as conduct study visits over the phone or remotely if study staff are unable to visit the vocational village sites.

First, recruitment will be the same except that the informational session with the study staff will be either audio recorded and then played for the selected villagers, or it will be conducted live via BlueJeans phone call for the group of villagers. The BlueJeans call will likely be audio-only as the facilities do not typically have web cam access or internet access to receive web-based phone calls. If web cams are available to use, we will do so, but it is expected that phone audio will be the primary method. The consent form will be reviewed over the BlueJeans phone call with the villager if they choose to participate in the study. Village staff will print two copies of the consent form and provide them to the villager. Research staff will review the consent with the villager over BlueJeans phone call. The villager will then give oral consent to participate. The villager will keep one copy in his file.

After the oral consent, the villager will attend Study Visits 1 and 2 one-on-one with study staff over a BlueJeans conference call in a semi-private room with a Vocational Village staff member to set up the phone call. Next, Village staff will provide the villagers with a copy of each survey. The villager will read the items and research staff will record them on an internal paper copy that they will later enter into the study's REDCap data base. There will be no survey data left in the Village as the participant will not be marking their answers down. Next, the mock job interview will be recorded via BlueJeans phone call, as originally agreed to on the consent form and from a previous amendment (of note, the collection of survey data will not be recorded on audio).

Randomization and intervention delivery will occur as previously approved.

Ame00102494

We have revised our inclusion criteria to expand recruitment to 36 years or older in order to meet our recruitment goals. We would also like to note that the corresponding study to this (HUM00155161) will be revising their recruitment age to 18-35 years old so the two study populations do not overlap.

We are also adding an additional contact plan for participants awaiting the 6-month and 12-month follow ups in order to keep open communication and remind them of their upcoming calls. We will be sending a postcard in an envelope in the mail approximately 4 times between their follow up time points. For intervention participants, it will contain their intervention username and password as a reminder that they can log into the intervention if they so choose. While they were also given this information during their release, we think it would be best to send reminders whenever possible. Control participants will not receive their log in information until their 12 month follow up has been completed, however, they will still receive a postcard in an envelope. The postcard will be enclosed within an envelope so that username information is not displayed. However, if another person were to obtain the username/password, they will not have any access to any participant data or information as nothing is linked via the Simmersion website. All they will be able to do is access and use the virtual interview training.