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Investigating the Viability of Virtual Job Interview Training through Pre-ETS

Elyse Hayes

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Investigating the Viability of Virtual Job Interview Training through Pre-ETS

by

Elyse Hayes

A Thesis
Submitted to the Honors College of
The University of Southern Mississippi
in Partial Fulfillment
of Honors Requirements

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ABSTRACT

This study used a between-subjects repeated measures design to determine the efficacy of virtual reality job interview training (VR-JIT) as an instrument for providing workplace readiness training under pre-ETS when compared to current real-world methods. Of the total participants (N=19), 57.89% were male and 42.11% were female, and autism (36.84%) and cognitive impairment (47.37%) were the most frequently reported diagnoses. The results of a paired samples T-test were non-significant with $t(8) = 0.13$, $p = 0.9029$ with the use of mock interviews and $t(9) = 0.68$, $p = .5156$ with the use of virtual reality. The results of an independent samples T-test of posttest VR-JIT and traditional methods scores were non-significant with $t(17) = -0.13$, $p = 0.9002$. Therefore, we conclude that neither traditional mock-interview methods nor VR-JIT produce significant differences between pre- and post-test evaluations, and there is no significant difference between results of VR-JIT and traditional methods. Despite these findings, student engagement and positive feedback within the VR-JIT group were notably increased compared to traditional methods. Future research of VR-JIT across a longer period and within alternative settings is warranted.

Keywords: Employment, Disability, Virtual Reality, Interview, Transition, Workplace readiness

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LIST OF ABBREVIATIONS

CSSSES	Career Search Self-Efficacy Scale
IDEIA	Individuals with Disabilities Education Improvement Act
IDS	Institute for Disability Studies
IEP	Individualized Education Plan
ITP	Individualized Transition Plan
KSU	Kennesaw State University
MDRS	Mississippi Department of Rehabilitation Services
pre-ETS	Pre-employment Transition Services
RPIS	Role Play Interview Scoring
TAY	Transition Age Youth
ToTAL	Transition of Teens to Adult Life
VLE	Virtual Learning Environment
VR-JIT	Virtual Reality Job Interview Training
VR	Vocational Rehabilitation
VR-Q	Virtual Reality Questionnaire
VRT	Virtual Reality Training
WIOA	Workforce Innovation and Opportunity Act

CHAPTER I : INTRODUCTION

Despite decades of legislative efforts, long standing issues surrounding the under representation of individuals with disabilities within the workforce persist. As of 2022, unemployment rates remain at 19.6% among 16- to 19-year-olds and 14.5% among 20- to 24-year-olds with disabilities, compared to 10.4% and 6.7%, respectively, among same-age peers without disabilities (US Department of Labor Office of Disability Employment Policy [ODEP], n.d.). Under the direction of both the Individuals with Disabilities Education Improvement Act (IDEIA) and the Workforce Innovation and Opportunity Act (WIOA), service providers have sought to reduce this disparity through the provision of Pre-Employment Transition Services (Pre-ETS) for transition-aged youth (TAY) (Workforce Innovation Technical Assistance Center [WINTAC], n.d.a). To that end, individual states have worked to establish plans for implementation of these services. However, improvements in the accessibility and communication of these plans are needed (Carlson et al., 2019).

Today, advancing technologies coupled with the limitations presented by the COVID-19 pandemic have caused many to consider virtual alternatives to previously established curricula in an effort to increase availability and accessibility of services (Dr. Jerry Alliston, personal communication, April 28, 2023). While several studies have found that virtual reality job interview training (VR-JIT) may be an effective tool for providing pre-ETS services, (Smith et al., 2020; Smith et al., 2021) there is a lack of evidence that these methods are more effective than real world training, making it difficult to justify the necessary state funding (Michalski et al., 2021). In light of this, further investigation of viable virtual methods holds both economic and social

significance as evidence of their effectiveness and acceptability could direct future dispersal of state and federal funding, increase accessibility of the delivery of pre-ETS services, and potentially impact unemployment rates for individuals with disabilities. Therefore, the purpose of this study was to determine the efficacy of VR-JIT as an instrument for providing workplace readiness training under pre-ETS when compared to current real-world methods.

CHAPTER II: LITERATURE REVIEW

Disability & Policy

Disability is a generalized term that can be used to describe a variety of conditions and situations. In their 2022 article, Mitra et al. describe the various lenses that disability is seen through, and how this affects the definition used. For the purposes of this study, their combined social-medical definition of “disability as an interaction between a person’s functional impairments or chronic health conditions and the physical and social environment” will be utilized (Mitra et al., 2022). The use of a combined definition such as this limits room for ambiguity in terms of policy. However, such a definition is not the standard. This is highlighted by studies reporting that in United States federal policies, there are *sixty-seven* variations of how the term disability is applied (Mitra et al., 2022). While at first glance this may seem negligible, variations in the wording of policy can greatly impact the provision of services. As Smith et al. note in their 2019 article, there have been several instances of students being denied access to pre-ETS services due to discrepancies in the interpretation of “student with a disability” across statutes. Thus, in many ways, these policies can perpetuate the very inequities they were intended to combat.

That is not to say that the policies in place are wholly ineffectual. In 2013, youth with disabilities were employed at significantly lower rates than their peers without disabilities. As a report by the Bureau of Labor Statistics shows, unemployment rates from 2013 were 42.3% among 16- to 19-year-olds and 27.9% among 20- to 24-year-olds with disabilities, compared to 22.5% and 12.4%, respectively, among same-age peers without disabilities (US Department of Labor: Bureau of Labor Statistics [BLS], 2014).

This discrepancy was alarming, and the WIOA passed just a year later. As of 2022, eight years after the enactment of WIOA, we have seen significant improvement within these rates, which are now reported to be 19.6% among 16- to 19-year-olds and 14.5% among 20- to 24-year-olds with disabilities, compared to 10.4% and 6.7% among same-age peers without disabilities (ODEP, n.d.). This remaining gap highlights that there is still much work to do to improve standing legislation as well as current services being offered under it.

Transition-Age Youth

The transition from adolescence to adulthood is a universal experience and a crucial phase of development (Nguyen et al., 2017). However, for those with disabilities, this leap can come with a unique set of challenges. In an effort to address this, the 1990 reauthorization of what is now known as the Individuals with Disabilities Education Improvement Act (IDEIA) mandated that all students who have an individualized education plan (IEP) must also be provided with an individualized transition plan (ITP) (US Department of Education [UDEP], 2023). From this, the term “transition-age youth” emerged and refers to a student with disabilities who is between the ages of 16 and 25 (Federal Partners in Transition [FTP], n.d.). While this age range may vary by state, the focus on transitioning students towards independence in the areas of post-secondary education, career training, housing, healthcare, finances, and transportation remains (FTP, n.d.).

Over the years, transition-related research has focused on identifying key factors contributing to positive transition outcomes, barriers to service and success, and methods of bridging services received in schools to those from adult agencies (Trainor et al.,

2019). As legislation evolves and emphasizes a focus on TAY, research must follow suit. With this in mind, there continue to be calls for the development of evidence-based practices and correlational research within the field (Smith et al., 2021; Trainor et al., 2019). However, even as these practices continue to develop, the communication of findings with the target population is severely lacking. This communication gap is highlighted by a 2019 study in which Carlson et al. utilized exhaustive methods to identify pre-ETS service plans for each state but were only able to identify 38 state plans due to a lack of findings. As TAY move out of school-based service programs to those offered by Vocational Rehabilitation (VR), this barrier must be addressed to ensure this population is aware of services available to them and does not get lost between agencies.

Pre-Employment Transition Services

In 2014, the enactment of the WIOA brought about many changes to VR services and the disbursement of funds (WINTAC, n.d.a). Most notably, this legislation mandated that 15% of VR federal funding must go towards providing pre-employment transition services for eligible students (WINTAC, n.d.a). These services, commonly referred to as pre-ETS, are resources which are offered to students with disabilities to aid in their transition from adolescence to adulthood. Specifically, this program focuses on the five following areas: job exploration counseling, work-based learning experiences, counseling on enrollment in comprehensive transition or postsecondary educational programs, workplace readiness training, and self-advocacy training (WINTAC, n.d.a; Mississippi Department of Rehabilitation Services [MDRS], 2023).

While these services are required by federal law, how they are enacted varies by state. Some ways these variations may appear are alterations in what ages are eligible for

services, whether or not additional services are offered, or how information about pre-ETS is communicated to the population (Carlson et al., 2019). Carlson et al. (2019) note that many states, such as Utah and California, have well-established platforms that clearly articulate pre-ETS services offered, as well as eligibility and coordination requirements. On the other hand, service plans of other states such as Mississippi could not be found at the time of their study. Since this time, Mississippi's biannual WIOA statewide plan has been made accessible through federal databases (USDE, n.d.). However, a current search of the Mississippi Department of Rehabilitation Services (MDRS) website will show that minimal information regarding transition services is listed and there is no specific mention of pre-ETS. (MDRS, n.d.). As noted by Dr. Jerry R. Alliston, Associate Director of Institute for Disability Studies at The University of Southern Mississippi, it is now common for pre-ETS to be featured on state vocational rehabilitation websites and/or for the contracted providers to feature it themselves. This allows for more visibility of the services and hopefully the promotion of more services and resources in general (Dr. Jerry Alliston, personal communication, April 28, 2023).

Due to how recently this program was established, research has focused on identifying areas of need and evidence-based practices to which funding should be directed (Test et al., 2018). Several studies have identified the need to address the barrier of supplemental security income (SSI) in obtaining employment, the practice of disability disclosure, development of interview skills, and self-determination training (Frentzel et al., 2021). Others have worked to establish effective methodology, often utilizing technology and virtual environments to address these areas (Smith et al., 2020; Smith et al., 2021). Overall, these studies have shown promising results and indicate that the use

of virtual environments for pre-ETS should be considered further with respect to workplace readiness training. (Smith et al., 2020; Smith et al., 2021)

Workplace Readiness

Workplace readiness is a broad term that may be defined as common traits, skills, and behaviors which are sought out by employers, and are necessary for any job (WINTAC, n.d.b). These abilities include, but are not limited to, interpersonal communication, teamwork, professionalism, independent living skills, understanding expectations, and job-seeking skills (WINTAC, n.d.b). With recent studies reporting that more than 95% of youth with disabilities in high schools expect to have a paying job by the age of 30, the acquisition of these skills is extremely important (Carter et al., 2020). In their 2020 study, Carter et al. found that many special educators share this sentiment. Out of the 596 special education instructors surveyed, over 83% agreed that their students expected to work and 89% agreed that their students need substantial help preparing for the world of work, but only about 40% agreed that their students were receiving workplace readiness training from outside agencies. These statistics are troubling and given that this training is required under pre-ETS, effective tools must be developed, and collaboration must be encouraged.

To that end, much of the research in this area has focused on job interview training, as well as bridging the gap between business owners and those with disabilities seeking employment. In their 2021 study, Sinclair et al. brought together individuals with disabilities, business owners, and other community members to discuss their unique perspectives and ideas concerning employment. In doing so, many business personnel identified the need for further education concerning resources available to support

themselves and employees, as well as a need for improved collaboration between all support agencies. The majority of participants agreed, while also suggesting practical solutions such as “video resumes” to aid youth in the communication of their workplace readiness skills. Studies concerning job interview training have also begun to examine the potential advantages of utilizing technology. While role-playing scenarios and mock interviews are the standard for many pre-ETS programs, proof of their effectiveness and evidence-based practices are lacking (Smith et al., 2020). Due to this, researchers have started to consider alternatives such as virtual learning environments (VLE). While preliminary findings have largely been favorable, further research will be necessary to establish a larger base of evidence (Michalski et al., 2021).

Virtual Reality Training

Virtual learning environments (VLE), as defined by Mueller and Strohemeir (2011), are “a comprehensive main category in the domain of technology enhanced learning”. With this understanding, the term VLE applies to many instruments, including computerized simulations and virtual reality training (VRT) (Smith et al., 2020). As noted by Walker et al. (2019), the use of technology as a transition tool for employment is well founded in both policy and research, with many early studies finding success utilizing VRT in this way. As VRT advances have continued, interest in their use for transition services has been sustained. Smith et al. (2020) report that preliminary use of VR-JIT in a school setting was effective in increasing student employment, and that its implementation was feasible and acceptable to educators. However, concerns about sustained funding for larger implementation of VR-JIT were raised (Smith et al., 2020).

Furthermore, a 2021 study by Michalski et al. reports that in studies analyzing the use of virtual environment vocational training, those with no-training controls found virtual training to be significantly more effective, while those with real-world training controls found no significant difference. The results of these two studies highlight the overarching concern that while VRT has been shown to be an effective transition tool, it is unclear if these outcomes justify a departure from more cost-effective methods already in use. Further evidence is needed in order to establish that virtual-skills attainment translates to real world benefits at a rate that justifies necessary funding (Michalski et al., 2021; Smith et al., 2020).

Current Study

In recent years, studies have struggled to identify plans by the state of Mississippi for the provision of pre-ETS services, and though there have been some improvements, clear communication regarding what services and programs offered under pre-ETS is still lacking (Carter et al., 2020; MDRS, n.d.). While the reasons behind this are unclear, it is hoped that through the use of virtual tools, such as VR-JIT, pre-ETS services will become more accessible within the state. Therefore, this study sought to provide further evidence concerning skills learning in virtual settings and real-world scenarios, specifically observing job interview skills among TAY with disabilities. To do this, three hypotheses were tested:

Q1: Does provision of job interview training impact skills acquisition?

H1: There will be a significant difference between the pre- and post-test evaluations administered for traditional in-person mock interview participants.

H2: There will be a significant difference between the pre- and post-test evaluations administered for VR-JIT participants.

Q2: Does VR-JIT produce results comparable to those of traditional methods?

H3: There will be a significant difference between the results of traditional methods training and VR-JIT.

CHAPTER III: METHOD

Participant Recruitment

School level Recruitment

In association with the Institute for Disability Studies (IDS) at The University of Southern Mississippi, the Lamar County Office of Special Education was selected as the targeted school district, in particular Oak Grove High School employment classrooms. As a pre-ETS provider, IDS interacts with local schools in Lamar County on a weekly basis, implementing the Transition of Teens to Adult Life (ToTAL) Program. Based out of the Hattiesburg and Long Beach campuses of The University of Southern Mississippi, the ToTAL program assists with the pre-employment transition service needs of youth and young adults with disabilities ages 14-21 through counseling, work-based training, and internship experiences. Services are focused on five main pre-ETS areas: (1) Job Exploration Counseling, (2) Workforce Readiness Training, (3) Counseling on Opportunities for Enrollment in Comprehensive Transition or Post-Secondary Educational Programs at Institutions of Higher Education, (4) Instruction in Self-Advocacy, and (5) Work Experiences/Internships (The University of Southern Mississippi, n.d.). This program is funded through the Mississippi Department of Rehabilitation Services (MDRS), which has a memorandum of understanding with Lamar County Schools to provide pre-ETS services, covering IDS as a provider. These established agreements and relationships made Lamar County the optimal participant for this project. After receiving our request, the Lamar County Office of Special Education administration approved the research and implementation of VR-JIT within classrooms involved in the ToTAL program.

Student level Recruitment

Student participants were selected from a Mississippi public high school in Lamar County School District that already received services through IDS. Recruitment information was communicated through teachers and IDS personnel, and study participation was offered to all students enrolled in pre-employment transition classes who met eligibility criteria. Eligibility was defined as being transition-aged under Mississippi regulations (14-21 years old) (MDRS, 2023), receiving special education with a transition plan as the employment classes only serve those with individualized education plans, and having a designation within one of the 13 disability categories set forth by the IDEIA. These categories are as follows: intellectual disability, hearing impairment, speech or language impairment, visual impairment, emotional disturbance, orthopedic impairment, autism, traumatic brain injury, other health impairment, specific learning disability, deaf-blindness, or multiple disabilities (USDE, 2018). In addition, students with a Section 504 accommodation were also eligible for participation. Declining participation had no effect on the provision of services for these students. Based on this criteria, 19 student participants ($N = 19$) were enrolled in the study. Participant demographic information is displayed in Table 1.

Table 1: Sample Characteristics

	VR (n=10)	Traditional (n=9)	Total (n=19)
Gender			
Male	60.00%	55.56%	57.89%
Female	40.00%	44.44%	42.11%
Ethnicity			
Caucasian	50.00%	44.44%	47.37%
Multi-racial	10.00%	11.11%	10.53%
Hispanic	20.00%	11.11%	15.79%
African-American	20.00%	33.33%	26.32%
School Grade			
9	22.22%	22.22%	22.22%
10	44.44%	22.22%	33.33%
11	11.11%	33.33%	22.22%
12	22.22%	22.22%	22.22%
Employment Status			
Unemployed	80.00%	77.78%	78.95%
Part-Time	20.00%	22.22%	21.05%
Diagnosis			
Autism	30.00%	44.44%	36.84%
Cognitive Impairment	40.00%	55.56%	47.37%
Cognitive Impairment - Math	10.00%	0.00%	5.26%
ADHD	10.00%	0.00%	5.26%
Neurodevelopmental	10.00%	0.00%	5.26%

Job Interview Training

The interview simulation curriculum used within this study was developed in collaboration with the Kennesaw State University Avatar Lab and transition personnel at IDS. Eight interview scenarios were created to include a variety of common employment opportunities (e.g., grocery store, fast food, etc.). Each consists of the same 11 general questions, and one question that has been deemed inappropriate. The 11 general questions primarily address skills, work experience, and self-description, while the inappropriate question address topic areas that may lead to discrimination from potential employers

(e.g., religion, medication, specific disability diagnosis). These scenarios are utilized for both traditional-methodology training and VR-JIT.

Students completing VR-JIT participate in mock interviews with a virtual avatar. The avatars are generated with randomized personal characteristics (i.e., gender, race, etc.) and operated by an individual at the KSU Avatar Lab in real time. While using the virtual delivery method, all critical aspects of a real-world, face-to-face interview can be simulated, such as a handshake or exchange of a resume. Furthermore, the system provides real-time feedback by altering the behavior of the virtual interviewer based on both verbal and non-verbal cues from the participant. For example, if a participant exhibits poor eye contact or body language, mumbles, or has long pauses in speech, the avatar may ask “Are you okay?”. Positive responses may also be communicated, such as a smile or nodding of the head. Following the completion of the simulation, the avatar operator completes an evaluation of skills exhibited by the participant. This extensive and personalized feedback makes VR-JIT an appealing training method.

Procedure

All procedures were approved by The University of Southern Mississippi Institutional Review Board (IRB). Approval for study implementation was granted by Lamar County Office of Special Education through a written statement. Prior to any data collection, informed consent was obtained from parents and guardians, followed by assent from students. A demographic survey was also completed by students, with assistance from IDS personnel and school staff as needed. Participants were then divided into two groups: those completing traditional, face-to-face interview training ($n=10$), and those completing VR-JIT ($n=10$). Group assignment was a result of previously

established class schedules. Before training began, both groups completed a shortened version of the Career Self-Efficacy Scale (CSSSES) survey (Solberg et al., 1994). Upon completion, each group participated in a 15-minute pre-interview training facilitated by IDS personnel. Basic information provided during pre-interview training was identical for each group. The VR-JIT group was provided with additional information concerning the avatar system to be used, and an avatar was present on a monitor for the duration of pre-interview training.

Once pre-interview training was complete, three student volunteers were randomly selected from each group to complete a mock interview. Participants were provided with eight interview scenarios, encompassing a wide variety of employment types, to select from. The same interview scenarios were utilized for each group, with the delivery method being the only factor varied. Mock interviews for the group receiving traditional-methodology training were facilitated by IDS personnel, while the VR-JIT group interacted with the VR avatar system on a monitor within the room. Each interview lasted approximately 10 minutes. Students who were not actively completing interviews observed their peers.

Following the completion of the three mock interviews, all participants completed a secondary CSSSES survey. Then, each group participated in a discussion regarding the mock interviews, what was learned, and feelings about the methods that were employed. For both groups, IDS personnel acted as facilitators, using prompts from a ToTAL curriculum handout to guide the discussion (Institute for Disability Studies at The University of Southern Mississippi, 2020). Feedback was monitored to assess student attitudes towards training methods but was not used within data analysis. Additionally,

students within the VR-JIT group completed the Virtual Reality Questionnaire (VR-Q). Interviewers provided feedback on interview skills displayed by participants through the Role Play Interview Scoring scale (RPIS) (Smith et al., 2014). All data collection was completed on March 30, 2023. There was no incentive provided for study participation.

Study Measures

Demographic Questionnaire

A brief demographic questionnaire was used to assess participants' age, gender, race/ethnicity, educational enrollment and level, employment status, work history, and any pertinent diagnoses. Information regarding diagnoses of participants was necessary to inform eligibility status and was verified by school staff using IEP documentation.

Career Search Self Efficacy Scale (CSSES) (Solberg et al., 1994)

The 35-item CSSES generated by Solberg et al. was revised and used to assess participant confidence related to interview skills and job acquisition. An 8-item modification of this scale allowed for all pertinent information to be collected. Additionally, an assistive description was provided with each measure item to avoid miscommunication and facilitate better understanding of technical language. All 8 items had a Likert-style rating scale with 9 options. Participants were asked to select ratings corresponding to levels of confidence in completing the tasks described. For example, an item would say, "Identify and evaluate your career preferences (Knowing what you would like and dislike in a job?). Participants responded on a 9-point scale *0-1 = Very Little*, *2-7 = Some*, *8-9 = Very Much*. The measure was scored by calculating the mean of reported ratings for all items.

Virtual Reality Questionnaire (VR-Q)

The VR-Q served as a supplementary survey and was generated to assess the merits of the system utilized during VR-JIT. This measure consists of 5 Likert-scale questions regarding the usability and enjoyment of use with the VR system. Participants who completed VR-JIT were asked to rate their experience using a scale with 9 options. For example, an item would say “Was it hard to learn how to use the VR system?”. Participants would provide a response according to the 9-point scale $0 = No$, $1-8 = Somewhat$, $9 = Yes$. The measure was scored by calculating the mean of reported ratings for all items.

Role Play Interview Scoring (RPIS; Smith et al., 2014)

The 9-item Role Play Interview Scoring scale generated by Smith et al. was used by interviewers to assess how well participants display particular interview skills. This measure resembles a rubric, with each item including a brief explanation of qualities expected within each rating level. Respondents were asked to rate skills of participants from 1-5 with a 5-point Likert-scale where $1 = poor$, $3 = average$, $5 = excellent$.

Data Analysis

This study focused on transition-aged students focused on obtaining employment following high-school. All data was collected during the month of March 2023 from 19 student volunteers. Participants were screened prior to study induction to ensure all data collected was valid. No data collected was excluded from analysis. A between-subjects repeated measures design was used. Both dependent-samples and independent-samples t-tests were used to analyze results relevant to major research questions and hypotheses. Descriptive statistics were generated for results of the supplemental VR-Q survey. Data collected using the RPIS measure was used for supplementary interpretation

CHAPTER IV: RESULTS

Table 2 provides the results of paired sample t-tests analysis of post-pre scores for both VR-JIT and traditional methods. The first hypothesis predicted that there would be a significant difference between the pre- and post-test evaluations administered for traditional in-person mock interview participants. The second hypothesis predicted that there would be a significant difference between the pre- and post-test evaluations administered for VR-JIT participants. The results of a paired samples T-test were non-significant with $t(8) = 0.13$, $p = 0.9029$ with the use of mock interviews and $t(9) = 0.68$, $p = .5156$ with the use of virtual reality. So, we fail to reject the null hypothesis in each case and conclude that there is no significant difference in the means of the groups based on participation in VR or mock in-person interviews. Table 3 provides the results of an independent samples t-test analysis of post-test results of VR-JIT and traditional methods. The third hypothesis predicted that there would be a significant difference between the results of traditional methods training and VR-JIT. The results of an independent samples T-test were non-significant with $t(17) = -0.13$, $p = 0.9002$, so we fail to reject the null hypothesis and conclude that there is no significant difference in the means of the groups based on participation in VR-JIT or traditional mock in-person interviews. Descriptive statistics of VR questionnaire responses are presented in Table 4. Data collected from interviewers using the RPIS measure was not analyzed for statistical significance but was used as supplementary material for the interpretation of other analyzed values.

Table 2: Paired Sample t-test of post-pre for VR & Traditional

Paired Sample t-tests of post-pre for VR & Traditional

Paired Sample t-test					
Virtual Reality: post - pre					
N	Mean	Std Dev	Std Err	Minimum	Maximum
10	1.3000	6.0745	1.9209	-5.0000	14.0000
Mean	95% CL Mean	Std Dev	95% CL Std Dev		
1.3000	-3.0455	5.6455	6.0745	4.1783	11.0897
DF	t Value	Pr > t			
9	0.68	0.5156			

Paired Sample t-test					
Traditional: post - pre					
N	Mean	Std Dev	Std Err	Minimum	Maximum
9	0.6667	15.8588	5.2863	-23.0000	27.0000
Mean	95% CL Mean	Std Dev	95% CL Std Dev		
0.6667	-11.5234	12.8568	15.8588	10.7119	30.3817
DF	t Value	Pr > t			
8	0.13	0.9028			

Table 3: Independent Sample t-test for post-test results of VR-JIT & Traditional

Independent Sample t-test				
Post Test Scores				
Method	Variances	DF	t Value	Pr > t
Pooled	Equal	17	-0.13	0.9002
Satterthwaite	Unequal	16.901%	-0.13	0.9001

Table 4: Descriptive Statistics of VR-Q Results

		Q1	Q2	Q3	Q4	Q5
N	Valid	10	10	10	10	10
	Missing	0	0	0	0	0
Mean		5.8	5.4	7.9	6.5	4.9
Median		6	4	9	7	4.5
Mode		9	4	9	9	0 ^a
Std. Deviation		3.259	2.675	1.524	2.718	3.51
Variance		10.622	7.156	2.322	7.389	12.322
Skewness		-0.452	0.552	-0.97	-0.207	-0.205
Std. Error of Skewness		0.687	0.687	0.687	0.687	0.687
Kurtosis		-1.076	-1.414	-0.541	-2.162	-1.501
Std. Error of Kurtosis		1.334	1.334	1.334	1.334	1.334
Percentiles	25	3	3.75	6.75	3.75	1.5
	50	6	4	9	7	4.5
	75	9	9	9	9	8.25

a. Multiple modes exist. The smallest value is shown

CHAPTER V: DISCUSSION

The purpose of this study was to determine the efficacy of VR-JIT as an instrument for providing workplace readiness training under pre-ETS when compared to current real-world methods. The first research question sought to investigate whether the provision of job interview training impacted skills acquisition. The results of the current study show that neither traditional mock-interview methods nor VR-JIT produce significant differences between pre- and post-test evaluations. These findings differ from previous studies which have provided early evidence that VR-JIT may lead to improved interview skills and employment outcomes (Smith et al., 2020; Smith et al., 2021; Michalski et al., 2021). However, it should be acknowledged that one of the studies referenced here examined VR-JIT as an additive to traditional methods, and another observed the use of virtual training over six months (Smith et al., 2020; Smith et al., 2021). The current study examined VR-JIT separately from traditional methods and had significantly reduced training exposure, which may provide an explanation for the difference in findings. The second research question sought to examine whether or not VR-JIT produces results comparable to those of traditional methods. The current study found that there was no significant difference between results of traditional mock-interview methods and VR-JIT. This finding aligns with assertions of prior studies which have also shown that the use of virtual methods provides no significant difference with respect to real-world training methods (Michalski et al., 2021).

While this statistical analysis of this data does not provide immediate evidence of VR-JIT effectiveness, external factors must be considered. Most notably, IDS training personnel found that many study participants lacked job interview experience which

impacted their ability to accurately self-assess skills held prior to training. This is reflected by students highly rating their abilities in pre-test measures, while interviewers noted that many failed to provide examples within conversation, were noticeably nervous, had long pauses in speech, and disclosed their disability. Following interview simulations, it was noted that many students had increased awareness of their skill levels and areas in need of improvement. Therefore, it is likely that changes in awareness for self-assessment impacted pre- and post-test scoring by study participants, skewing the data.

Furthermore, it should be noted that the decrease seen in self-assessed post-test scores does not appear to result from low acceptance of VR-JIT methodology among students. IDS training personnel stated that when asking for volunteers to participate in interviews enthusiasm from the VR-JIT group was overwhelmingly higher than the traditional mock-interview group. Nearly every VR-JIT student volunteered for participation, while there were no student volunteers for the traditional mock-interview training upon initial request. This pattern was of particular interest to staff as one student, who typically declines participation in training activities, was among the VR-JIT volunteers.

Initial enthusiasm for VR-JIT carried over to the group discussion following interview simulations, where all study participants expressed that they enjoyed using and observing the avatar system and that they would be in favor of its continued use. These findings align with those of a 2021 study by Smith et al., which reported that use of virtual training tools was well received by TAY (Smith et al., 2021). Despite such positive responses from students, results of the VR questionnaire are varied. Several

students reported that the VR system was uncomfortable to use, while also providing positive scoring for items concerning enjoyment and helpfulness of the VR system. These disparities may suggest that students did not adequately understand survey questions and the response rating scale, or that they could have been influenced by peers during group discussion. Continued assessment of student feedback regarding training methodologies may be beneficial in promoting student engagement in the future.

Limitations

There are a number of limitations to be acknowledged with this study. The greatest of these is the sample size used was relatively small. Participation within the current study was limited to a single school as it was the only one involved with the ToTAL program located within a reasonable proximity for inclusion. Use of a larger sample size would allow for more extensive analysis of the interactions between training methodologies and other participant-specific variables (i.e., disability diagnosis, employment status and history, etc.). Secondly, assignment of participants across training methodologies was restricted by pre-determined class schedules. Due to this, the distribution of characteristics such as age, disability diagnosis, and prior work experience could not be controlled. Implementation in alternative settings, such as an after school or summer pre-ETS program, would support increased control of group assignment. Finally, this study was limited by the length and timing of implementation. Data collection was completed in the weeks leading up to the end of the school term. As such, completing successive rounds of the training protocol was not possible, limiting the amount of data collected, and long-term employment outcomes could not be assessed. If the study

duration were to be lengthened, it may allow for more extensive analysis and observation of VR-JIT impact on employment acquisition.

Future Directions

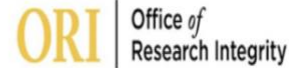
Future studies should seek to examine a larger sample of participants to provide more comprehensive evidence of VR-JIT impact and observation of possible interactions with participant-specific variables. Implementation of several rounds of training should be also considered as this would yield a larger body of data and may mitigate the impact of self-reporting issues. Additionally, researchers should consider adopting a longitudinal approach. This may provide a more complete understanding of how skills acquired in training environments impact real-world employment outcomes. Further research on the use of VR-JIT should be conducted in alternative non-school settings. Doing so may allow for a more controlled experimental environment, as well as the examination of individuals in different age groups and programs outside of pre-ETS. An expansion such as this may provide valuable evidence for the development of comprehensive training methodologies that could be implemented across several agencies.

Conclusions

In summary, the current study found that the provision of job interview training did not result in a significant acquisition of skills for participants receiving traditional in-person training or those receiving VR-JIT. Additionally, there was no significant difference found between results of VR-JIT and traditional methodologies. However, training personnel noted that these results may be impacted by inaccurate pretest self-assessments and that student acceptance of VR-JIT was significantly increased compared to traditional methods. These findings highlight the need for continued research of

innovative training methodologies to increase skills acquisition and promote student engagement. Future studies should seek to assess employment outcomes following training and explore the use of VR-JIT in additional settings and populations.

RECRUITMENT LETTER



Dear Students and Families of the summer Transition of Teens to Adult Life (ToTAL) program,

My name is Elyse Hayes and I am an honor's program student at The University of Southern Mississippi. As part of this program, I need to complete a thesis project. I am writing to invite you to participate in my research study protocol # 22-858 about the use of virtual reality (VR) systems to teach and practice job interviewing skills. You're eligible to be in this study because your participation in the ToTAL program.

If you decide to participate in this study, you will be put into one of two groups, either practicing job interview skills face-to-face or through virtual reality. You will be asked to answer some questions after every interview practice so we can learn whether face-to-face interview practice or virtual reality are better, or if they are equally good. Additionally, a staff member of the Institute for Disability Studies (IDS) will rate your interview skills every time you practice, so we can see how you are improving your interview skills with practice! This research is important because if we find that virtual reality provides an adequate alternative to face-to-face interview practice, we will be able to use virtual reality to help individuals all across the state to practice interviewing and assist them in getting jobs.

Remember, this is completely voluntary. You can choose to be in the study or not. If you'd like to participate please complete the enclosed demographic and consent forms. If you have any questions about the study, please email me at elyse.hayes@usm.edu.

Thank you very much for considering participating in this important research!

Sincerely,

Elyse Hayes
The University of Southern Mississippi
Honor's College Program

PARENTAL CONSENT FORM



INSTITUTIONAL REVIEW BOARD PARENTAL CONSENT FORM

PARENTAL CONSENT PROCEDURES
<p>This document must be completed by the Principal Investigator and signed by the parent or guardian of each potential research participant.</p> <ul style="list-style-type: none"> The Project Information and Research Description sections of this form should be completed by the Principal Investigator before submitting this form for IRB approval. Signed copies of the long form consent should be provided to a parent or guardian of every participant. <p style="text-align: right; font-size: small;">Last Edited March 5th, 2019</p>

Today's date: May 16, 2022		
PROJECT INFORMATION		
Project Title: Job Interview Training Skills for Individuals with Disabilities Protocol # 22-858		
Principal Investigator: Elyse Hayes	Phone: 65163	Email: elyse.hayes@usm.edu
College: Arts and Sciences	School and Program: Biological, Environmental and Earth Sciences	
RESEARCH DESCRIPTION		
<p>1. Purpose:</p> <p>In the 2019 - 2020 school year, public schools in the United States reported providing seven and one-half million children, ages 3 - 21 with disability services (National Center for Education Statistics, 2021). Of those diagnosed with an Intellectual or Developmental Disability (IDD), only 39% will have obtained employment within eight years of transitioning out of the school setting (Newman et al., 2011). The Mississippi Department of Vocational Rehabilitation notes that they assist individuals with disabilities gain employment through numerous services such as job training and career counseling (MDVR, 2020). A recent newcomer to the world of career services and vocational rehabilitation is the use of virtual reality (VR) systems to provide job preparation and training to job seeking individuals. Some advantages of utilizing VR systems include being able to customize scenarios to fit specific jobs, providing multiple practice opportunities, giving real time feedback to trainees, and being able to offer job skills training via long distance (Bozgeyikli et al., 2017).</p> <p>The purpose of this study will be to continue investigating the benefits of utilizing VR as an interview training skill with young adults diagnosed with disabilities.</p>		
<p>2. Description of Study:</p> <p>Participants will be recruited through the Transition of Teens to Adult Life (ToTAL) summer program run through the USM Institute of Disability Studies (IDS) at the University of Southern Mississippi. Between twenty and thirty individuals are expected to attend ToTAL. All participants will attend a training on interview skills. Participants will then be divided into three groups, those completing mock interviews in person, those completed them via VR and those completing them in-person via Zoom. Participants will partake in two mock interviews; measures will be administered at every mock interview; participants will complete a measure regarding their confidence in their interview skills and the interviewers will also complete measures of how well participants display particular interview skills. Following the two mock interviews, participants will engage in a real interview with a job or internship site that they will work at the remainder of the summer. Measures will be completed by the interviewer at these interviews as well. This will allow researchers to investigate not</p>		

only the difference in mock interview skill attainment in real life versus VR, but will also look at the applicability of these different training styles in a real interview setting. In addition to the two aforementioned measures, demographics will be gathered, as well as Likert scale questions given to VR participants regarding the usability and enjoyment of use with the VR system.

3. Benefits:

The benefit of participating in this study is the opportunity to be part of improving interview training skills for individuals with disabilities. Of particular use to the local community, this research will allow us to understand if VR interview training is as good, or better, than face to face mock interviews. If it is found that VR is a suitable replacement, then it will allow the Insitute for Disability Studies to offer interview training to individuals throughout the state, including those that live in rural areas and do not have easy access to job training resources.

4. Risks:

Overall, the risk is minimal. Some individuals may experience anxiety during mock interviews, but this will not be greater than the usual amount of anxiety experienced by anyone doing interview practice.

5. Confidentiality:

All participants will be given an identifying number to be used on all documents related to the study in order to keep participants anonymous as possible. No identifying information will be used in the study. All research documents will be kept in a locked filing cabinet either at the Insitute for Disabilities Studies office.

6. Alternative Procedures:

Those that choose to not participate in the study will have the same opportunities to complete mock interviews as any participant of the summer ToTAL program normally would, the only difference will be that those that do not participate will not complete measures to show progress or regression in interview skill attainment.

7. Participant's Assurance:

This project has been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations.

Any questions or concerns about rights as a research participant should be directed to the Manager of the IRB at 601-266-5997. Participation in this project is completely voluntary, and participants may withdraw from this study at any time without penalty, prejudice, or loss of benefits.

Any questions about the research should be directed to the Principal Investigator using the contact information provided in Project Information Section above.

PARENTAL CONSENT INFORMATION

Participant's Name:	Participant's Age:
Parent or Guardian's Name:	
Person Soliciting Parental Consent:	

AGREEMENT TO ALLOW PARTICIPATION IN RESEARCH

Consent is hereby given to participate in this research project. All procedures and/or investigations to be followed and their purpose, including any experimental procedures, were explained. Information was given about all benefits, risks, inconveniences, or discomforts that might be expected.

The opportunity to ask questions regarding the research and procedures was given. Participation in the project is completely voluntary, and participants may withdraw at any time without penalty, prejudice, or loss of benefits. All personal information is strictly confidential, and no names will be disclosed. Any new information

that develops during the project will be provided if that information may affect the willingness to continue participation in the project.

Questions concerning the research, at any time during or after the project, should be directed to the Principal Investigator with the contact information provided above. This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5125, Hattiesburg, MS 39406-0001, 601-266-5997.

The University of Southern Mississippi has no mechanism to provide compensation for participants who may incur injuries as a result of participation in research projects. However, efforts will be made to make available the facilities and professional skills at the University. Participants may incur charges as a result of treatment related to research injuries. Information regarding treatment or the absence of treatment has been given above.

Parent or Guardian of Research Participant

Person Explaining the Study

Date

Date

MINOR PARTICIPANT ASSENT FORM



INSTITUTIONAL REVIEW BOARD MINOR ASSENT FORM

MINOR ASSENT PROCEDURES
<p>This document must be completed by the Principal Investigator and signed by each assenting minor.</p> <ul style="list-style-type: none"> The Project Information and Research Description sections of this form should be completed by the Principal Investigator before submitting this form for IRB approval. Parental consent must be obtained before soliciting the assent of any minor participating in the study. Signed copies of the IRB approved assent form should be provided to a parent or guardian of every assenting minor.
Last Edited March 5 th , 2019

Today's date:		
PROJECT INFORMATION		
Project Title: Job Interview Training Skills for Individuals with Disabilities Protocol Number 22-858		
Principal Investigator: Elyse Hayes	Phone: 65163	Email: elyse.hayes@usm.edu
College: Arts and Sciences	School and Program: Biological, Environmental and Earth Sciences	
RESEARCH DESCRIPTION		
<p>1. Why am I being asked to participate?</p> <p>You are being asked to be a part of this study to help us learn better ways to teach job interviewing skills, particularly for people who have disabilities. Our hope is that this research will help us to be able to offer more job training to people who live far away from cities and towns and may not have any other help to learn how to get a job.</p>		
<p>2. What will I have to do?</p> <p>If you agree to be part of the study, you will be asked to answer some questions about your feelings during practice interviews that help you to get ready for a real job interview. You may do your pretend interviews face to face with another person, or you may do your pretend interviews using virtual reality. If you are in the virtual reality group, you will wear a headset and there will be a character on the screen that asks you interview questions. If you are in this group, you will also be asked some questions about what you liked or didn't like about using virtual reality. For every practice interview that you do, someone will record what interview skills you did well on, and which you still need to practice more. This will help us see how much you are improving!</p>		
<p>3. What do I get if I agree to participate?</p> <p>If you agree to be part of this study, you will be helping us better understand how to help other young adults like yourself have the best job training experience possible.</p>		
<p>4. Can anything bad happen if I participate?</p> <p>If you are in the virtual reality group, some people may find wearing the headset to be annoying. If this happens to you, please tell whoever you are working with so you will not have to continue. Some people get</p>		

headaches or feel a little dizzy after using virtual reality, again if this happens to you, please tell someone so we can move you to a different group. We want this to be a positive learning experience for you! You may feel a little nervous during the practice interviews, but no more than you would feel if you weren't participating in the study.

5. Who will get to see information about me?

Staff at the Institute for Disability Studies and the employer for your job interview will be the only ones who will see direct information about you. All of your answers will have a number on them so we will know that your answers go together, but we won't know who those answers belong to. We will have some basic information about everyone who is in the study, such as their name and age. However, none of that information will be connected to you, so no one will know if you chose to be a part of the study or not. All of your information will be kept in locked filing cabinets that only myself, my supervisors, and the staff at the Institute for Disability Studies will be able to get into.

6. What if I do not want to participate?

It is you and your guardian's choice if you are a part of the study. If you choose not to be, you will still be able to participate in face-to-face practice interviews, as any other member of the ToTAL program would.

7. Who may I contact if I have other questions or concerns about my participation?

This project has been approved by the Institutional Review Board. Its job is to protect research participants. Questions or concerns about your participation should be directed to the Manager of the IRB at 601-266-5997.

ASSENT TO PARTICIPATE IN RESEARCH

Participant's Name:	Participant's Age:
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Person Soliciting Assent:

Check one of the following (to be completed by the person soliciting assent):

- In my opinion this minor is able to provide informed assent (proceed to Agreement to Participate).
- In my opinion this minor is unable to provide informed assent for the following reason(s) (do not proceed):

AGREEMENT TO PARTICIPATE

I agree to participate in this research project. The project has been fully explained to me and I was given the chance to ask any questions I have about it. I understand that I can stop participating at any time.

Research Participant

Person Soliciting Assent

Date

Date

PARTICIPANT DEMOGRAPHIC FORM



Job Interview Skills Training Research Participant Demographic Form

Participant Information:

Name: _____ Age: _____ Gender: _____

Race/Ethnicity: _____

Family's Annual Income: _____

Are you currently in school? yes no If so, what grade are you in? _____

Do you currently have a job?

- Yes, full-time
- Yes, part-time
- Yes, as a volunteer
- No

Please list all the jobs you have had, including your current job if you have one now.

Please list any current diagnoses that you have received from your doctor or that you receive services for at school (This information may be located on your IEP or 504 Plan from school if you have either of these for school-based services).

PRE-INTERVIEW TRAINING: TOTAL CURRICULUM

Lesson Title: What Does it Take for a Successful Interview? (Workplace Readiness)
Goal of the Lesson: Participants will develop the skills to help them succeed in preparing for an interview, performing an interview, and what to do after an interview.
Skills: Preparing for an interview, developing interview skills, following up after an interview
Time: 1 hour
Materials Needed: Pre-Interview, Interview, and Post-Interview handout; marker board; markers
<p>Directions:</p> <p>Step 1: Trainer will open up by asking the participants why they believe the interview process is used in the job world. (Refer to Step 1 discussion)</p> <p>Step 2: Trainer will go through the Pre-Interview, Interview, and Post-Interview handout with participants. While going through each phase of the interview, the trainer will open it up for discussion on tips not included on the handout (Refer to Step 2 discussion).</p> <p>Step 3: Trainer will ask participants what reasons they believe people are not hired for a job after an interview (Refer to Step 3 discussion).</p> <p>Open Discussion:</p> <p>Step 1 discussion: Why is the interview process used in the job world?</p> <ul style="list-style-type: none"> • They want to get to know you. • They want to hear about work experience. • They want to see if you will fit in with their other employees. • People might appear to be great on paper, but might be completely different in person. • Every person that applies is not interviewed. <p>Step 2 discussion: Tips not included on handout</p> <ul style="list-style-type: none"> • Pre-Interview <ul style="list-style-type: none"> -Research the company's mission statement and values. -Know where you are going and where company is located beforehand. -Prepare questions you may be able to ask them. • Interview <ul style="list-style-type: none"> - Inform an employee at the front that you have an interview, whom it is with and the time of the interview -Watch your posture and body language -Don't chew gum -Know your resume well and be prepared to answer questions based off your resume. -Express your willingness to learn -If you do not understand a question being asked, ask the interviewer to explain what they meant. -Relate answers to questions back to the company's mission statement and values -It's okay to organize your thoughts when asked a difficult question. -Don't discuss personal issues -If questions come up about age, gender, race, religion, ethnicity, marital status, etc., make sure to answer by saying, "I don't feel comfortable answering that question." -Ask the interviewer job related questions. -If you are told after the interview you will be contacted, ask how long it will be. <p>Step 3 discussion: Reasons people are not hired after a job interview:</p>

<ul style="list-style-type: none"> • Poor appearance • Impolite • Lack of enthusiasm and confidence • No questions • Lack of knowledge about the company or position • Negative talk about past jobs • Poor eye contact and body language • Late to the interview

CAREER SEARCH SELF EFFICACY SCALE (CSSES)-REVISED

Rate how well you think you do with:

1. Knowing what you would like and dislike in a job?

I don't know how to do this.			I know a little about about this.				I know how to do this.		
0	1	2	3	4	5	6	7	8	9

2. Telling a worksite what your skills are?

I don't know how to do this.			I know a little about about this.				I know how to do this.		
0	1	2	3	4	5	6	7	8	9

3. Finding job opportunities?

I don't know how to do this.			I know a little about about this.				I know how to do this.		
0	1	2	3	4	5	6	7	8	9

4. Picking out a proper outfit for an interview?

I don't know how to do this.			I know a little about about this.				I know how to do this.		
0	1	2	3	4	5	6	7	8	9

5. Understanding the requirements for the job that you want.

I don't know how to do this.			I know a little about about this.				I know how to do this.		
0	1	2	3	4	5	6	7	8	9

6. Knowing how to learn about places you may want to work.

I don't know how to do this.			I know a little about about this.				I know how to do this.		
0	1	2	3	4	5	6	7	8	9

7. Getting ready for an interview.

I don't know how to do this.			I know a little about about this.				I know how to do this.		
0	1	2	3	4	5	6	7	8	9

8. Knowing what your work skills are.

I don't know how to do this.			I know a little about about this.				I know how to do this.		
0	1	2	3	4	5	6	7	8	9

VIRTUAL REALITY QUESTIONNAIRE (VR-Q)

Virtual Reality Questionnaire

Rate how you felt about using the VR system:

1. Was the VR System uncomfortable to use?

No	Somewhat								Yes
0	1	2	3	4	5	6	7	8	9

2. Did you like using the VR system?

No	Somewhat								Yes
0	1	2	3	4	5	6	7	8	9

3. Did using VR help you learn how to interview for a job?

No	Somewhat								Yes
0	1	2	3	4	5	6	7	8	9

4. Do you think VR would help others learn how to interview?

No	Somewhat.								Yes
0	1	2	3	4	5	6	7	8	9

5. Was it hard to learn how to use the VR system?

No	Somewhat								Yes
0	1	2	3	4	5	6	7	8	9

ROLE PLAY INTERVIEW SCORING (RPIS)

Role-Play Interview Scoring

Smith et al., 2014

Item 1 – Comfort level during interview –

Excellent (score 5)	Average (score 3)	Poor (score 1)		
<ul style="list-style-type: none"> • Excellent interview skills • Enjoying the interview • Displays behavioral comfort 	<ul style="list-style-type: none"> • Minor discomfort • A few signs of anxiety 	<ul style="list-style-type: none"> • Highly anxious • Physical signs of discomfort • Loses train of thought • Taking a long time to respond 		
<i>Comments:</i>				
5	4	3	2	1

Item 2 – Negotiation skills (asking for Thursdays off) –

Excellent	Average	Poor		
<ul style="list-style-type: none"> • Clearly addresses negotiation • Confident, straightforward • Not “thrown” by negotiation 	<ul style="list-style-type: none"> • Interrupts the interviewer (not waiting for the right time) to ask for Thurs off • Well-timed but sounds demanding 	<ul style="list-style-type: none"> • Does not address work availability (needs Thursday off) • Uncomfortable response • Completely backs off: “I guess it’s not that important” 		
<i>Comments:</i>				
5	4	3	2	1

Item 3 – Hard worker –

Excellent	Average	Poor		
Comes across dependable. Makes statements about: <ul style="list-style-type: none"> • Working hard • Paying attention • Asking for more tasks • Doing well working • Making work a priority 	Reports behaviors related to both hard work, and unreliability. Or Says they work hard but does not provide examples.	Comes across lazy or unreliable. Makes statements about: <ul style="list-style-type: none"> • Showing up late • Missing work frequently • Calling in sick, avoiding responsibilities 		
<i>Comments:</i>				
5	4	3	2	1

Role-Play Interview Scoring

Smith et al., 2014

Item 4 – Sounding easy to work with –

Excellent	Average	Poor		
Seems flexible and likely easy to work with. Makes comments such as: <ul style="list-style-type: none"> • Gets along with teammates • Helps customers • Takes direction well • Willing to go through training and follow rules/policies 	Generally sounds easy to work with, but shares some signs of difficulty. Says they are easy to work with but does not provide examples.	Sounds difficult to work with. Makes statements about: <ul style="list-style-type: none"> • bad-mouthing coworkers/boss • talks about having conflicts or issues with others • complaining 		
Comments:				
5	4	3	2	1

Item 5 – Sharing things in a positive way –

Excellent	Average	Poor		
<ul style="list-style-type: none"> • If sharing a story in which they did not perform optimally, lessons learned are emphasized • handles illegal questions well • Shares past conviction, disability, or other life event in a positive way: <p>“I didn’t graduate, but I did learn a lot” “It didn’t relate to this job, but I learned a lot about how to work hard.”</p>	<ul style="list-style-type: none"> • Shared positive attributes, but without examples 	<ul style="list-style-type: none"> • handles illegal questions poorly • shares past conviction, disability, or life event in a negative way: <p>“I’m a really slow learner” “Yeah, I took a course, but I didn’t learn anything”</p>		
Comments:				
5	4	3	2	1

Item 6 – Sounding honest –

Excellent	Average	Poor		
<ul style="list-style-type: none"> • Believable • No inconsistencies (usually regarding why they left the last job, how long they usually work at places) 	Mostly provide clear honest answers, but provides some answers that seem ambiguous.	<ul style="list-style-type: none"> • Says something that sounds dishonest • Mentions working under the table, saying they would not report it if they caught someone stealing, saying they’d work off the clock, etc. <p>“I did a training program that told me to say that”</p>		
Comments:				
5	4	3	2	1

Role-Play Interview Scoring

Smith et al., 2014

Item 7 – Sounding interested –

Excellent	Average	Poor			
<ul style="list-style-type: none"> • Several thoughtful, appropriate questions were asked • Checked next steps for employer and decision date, verified follow-up details • Affirmed interest in the position • Cites job description and personal strengths related to job description 	<ul style="list-style-type: none"> • At least one question was asked • Cites job description 	<ul style="list-style-type: none"> • No questions were asked • “any job will do” attitude • Talking about short-term work • Questions were inappropriate • Emphasizes personal preferences like benefits, convenient locale, etc. • Sounds desperate • Sounding as though this job would merely be a stepping-stone 	<i>Comments:</i>		
5	4	3	2	1	

Item 8 – Sounding professional –

Excellent	Average	Poor			
<ul style="list-style-type: none"> • Polite responses (please/thank you) • Respectful • Treats interviewer like a supervisor, not a friend. 	<p>Comes across as professional for most of interview, but has a few instances that could be interpreted as unprofessional.</p>	<ul style="list-style-type: none"> • Oversharing • Too casual • Discussing politics, religion, partying, drinking and other inappropriate topics 	<i>Comments:</i>		
5	4	3	2	1	

Item 9 – Overall rapport –

Excellent	Average	Poor			
<ul style="list-style-type: none"> • Smooth interaction • Casual and relaxed demeanor • Engaged in casual conversation with me during the interview • nodded his/her head while listening to my responses/questions • smiled frequently, made eye contact • Enthusiastic without taking over interview 	<ul style="list-style-type: none"> • Friendly, but lost job-focus • Small talk was hesitant 	<ul style="list-style-type: none"> • Awkward pauses • Little eye contact • Short, brief responses 	<i>Comments:</i>		
5	4	3	2	1	

IRB APPROVAL LETTER

Office of Research Integrity



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NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident submission on InfoEd IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER: 22-858
PROJECT TITLE: Virtual Job Interviewing
SCHOOL/PROGRAM: Institute for Disability Studies
RESEARCHERS: PI: Jerry Alliston
Investigators: Alliston, Jerry~
IRB COMMITTEE ACTION: Approved
CATEGORY: Expedited Category
PERIOD OF APPROVAL: 27-Jun-2022 to 26-Jun-2023

Donald Sacco

Donald Sacco, Ph.D.
Institutional Review Board Chairperson

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