BRANDON SANDS

Curriculum Vitae

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# EDUCATION

**Vanderbilt University**, Nashville, TN August 2013- December 2017

*Bachelor of Arts in Psychology*

Honors: Dean’s List (Fall 2015, 2017)

# PUBLICATIONS

1. Weser, V.U., Duncan, L. R., **Sands, B. E.**, Schartmann, A., Jacobo, S., François, B., & Hieftje, K. D. (2021). Evaluation of a Virtual Reality E-cigarette Prevention Game for Adolescents. *Addictive Behaviors*.
2. Weser, V.U., Opara, I., **Sands, B.E.**, Fernandes, C., & Hieftje, K.D. How Black Teen Girls Navigate Social Media to Form Romantic Relationships. *Social Media and Society*.
3. Opara, I., Weser, V.U., **Sands, B.E.**, Hieftje, K.D.Feeling Invisible & Unheard: A Qualitative Exploration of Gendered-Racist Stereotypes Influence on Sexual Decision Making and Mistreatment of Black Teen Girls. *Youth and Society*
4. Hieftje, K.D., Weser, V.U., **Sands, B.E.**, Fiellin, L.E. (Submitted) Teachers’ Experience of the Implementation of a Videogame Intervention for Tobacco Use Prevention in Classroom Settings. Manuscript in preparation*.*

# WORK EXPERIENCE

## Yale School of Medicine, New Haven, CT

### *Research Assistant (Psychiatry), Buono Lab* August 2021 – Present

*Lab Supervisor***:** Frank Buono, Ph.D. (Yale School of Medicine)

(Remote Position)

* Co-supervise subject recruitment, enrollment, and data collection for a randomized control trial of Soberlink wireless breathalyzers with facial recognition software and AI-based non-compliance monitoring for use in sobriety monitoring for patients with primary and secondary alcohol use disorders receiving in-home addiction treatment in partnership with Aware Recovery Care, a multi-state substance abuse treatment company.
* Co-supervise subject recruitment, enrollment, and data collection for a randomized control trial of iCanCope-Neurofibromatosis, a mobile application behavioral intervention for coping with chronic and neuropathic pain symptoms associated with a diagnosis of NF1, an uncommon congenital neurological disease resulting in tumors on nerve cells
* Develop and evaluate a novel pain assessment tool, with direct NF1 specialist and NF1 patient input, for use by clinicians to better adapt pain management techniques for use with patients suffering from chronic and neuropathic pain associated with a diagnosis of NF1

### *Research Associate (General Internal Medicine), play4REAL XR Lab* September 2019 – August 2021

*Lab Supervisor***:** Kimberly Hieftje, Ph.D. (Yale School of Medicine)

* Co-supervise subject recruitment, enrollment, and data collection for a non-equivalent control groups design trial (NECGD) of “Invite Only VR”, a virtual reality (VR) vaping prevention game for teens
* Co-author content and design “No Time Wasted,” an augmented reality (AR) video game intervention for alcohol harm reduction in teens, and “InvestiDate,” a multiplayer video game to promote regular HIV and STI testing, condom use, and protective sexual health behaviors in Black teen girls
  + Co-author a game playbook, a manual to ensure game design and mechanics align with behavior change learning targets, for “No Time Wasted” and “InvestiDate”
  + Create game algorithms alongside programmers to summarize and score risk factors related to sexual behaviors and STI testing behaviors in “InvestiDate”
  + Co-facilitate and analyze focus groups for intervention development for “No Time Wasted” and “InvestiDate”
* Analyze qualitative data from interviews and focus groups using Dedoose, a mixed-methods and qualitative research platform, to generate reports that reveal major themes, barriers, and facilitators for behavior change interventions implemented by the research team
* Prepare sections of grants submitted to government and private sponsors, including the NIH, NICHD, NIMHD, NIDA and the U.S. Department of Education, to fund intervention development and implementation
* Prepare and edit sections of manuscripts for peer review
* Co-lead professional development workshops for teachers and serve as point person for school staff training on VR device use, troubleshooting, and questions about applying VR programs to school curricula
* Communicate play4REAL research methodology and community impact with public radio reporters, student job fair attendees, and nonprofit conferences through interviews, developer talks, and reports to community stakeholders
* Develop community-based participatory research partnerships, for new projects and the extension of previous projects, with non-profit organization leaders and school administrators

## JourneyPure Tennessee Alcohol & Drug Rehab, Murfreesboro, TN

### *VR Detox Immersion Guide* June 2018 - November 2018

* Guided inpatient substance abuse rehabilitation patients through interactive virtual reality experiences to help regulate their affect and detox symptoms in coordination with pharmacological and cognitive behavioral treatment teams
  + Conducted semi-structured interviews with detox patients to determine their fit and tolerance of virtual reality experiences and its potential benefits for mood regulation
  + Instructed substance abuse recovery patients in how to operate virtual reality equipment and navigate immersive experiences
  + Provided support to ensure patients avoid negative, triggering emotional stimuli and physical disorientation

### *Research Assistant* December 2017 - June 2018

*Lab Supervisors***:** Steven Hollon, Ph.D. (Vanderbilt University), Brian Wind, PhD (JourneyPure at The River)

* Investigated the potential impact of virtual reality (VR) environment exploration on improving patient affect, tolerance of detox processes, and recovery outcomes in conjunction with inpatient drug rehabilitation and psychotherapy at JourneyPure at The River recovery center, collecting positive and negative affect scales of patients before and after each session to monitor effects
* Verbally guided and physically oriented patient exploration of immersive virtual reality environments during varying stages of their addiction recovery
* Coordinated data collection and protocol adjustment with other research assistants, volunteering on weekends and remaining on-call for needs of the lab team and rehab facility until beginning of the Spring term during research assistant turnover

## Professional Psychological and Psychiatric Services, Lansing, MI

### *Administrative Assistant Intern* May 2014 - August 2014

* Aided in coordinating care for private and state-funded addiction recovery program participants alongside an inter-disciplinary team of case managers, psychotherapists, psychiatrists, and certified drug counselors, with patient services covering alcohol, single, and multiple substances of abuse
* Provided non-clinical support for daily operations of a methadone and suboxone recovery treatment program, operating as liaison between patients, the care team, and any external sponsors, correctional system contacts, and legal caretakers
* Trained staff in patient intake and record management procedures to preserve integrity and confidentiality of records, updating protocols to account for the incorporation of new record-keeping software
* Assisted in the setup of a branch office of the practice in Jackson, MI to extend drug recovery healthcare services within the region

# PRESENTATIONS

**Sands, B.E.** (June 2021) “Café Serenity: a Virtual Reality Game Prototype for Panic Attack Self-Mitigation and Bystander Intervention.” Games For Change 2021 Virtual Conference

**Sands, B.E.** (April 2020) “Feasibility Study of a Virtual Reality Game Prototype for Adolescent E-Cigarette Prevention.” UConn mHealth 2020 Virtual Conference

# CLINICAL TRIALS

1. **“Preliminary Effectiveness of Remotely Monitored Blood Alcohol Concentration Device as a Treatment Modality”**

Role: Research Assistant

Sponsor: NIH/NICHD

NIH ID# NCT04380116

Principal Investigator: Frank Buono, Ph.D.

Period: 6/29/2020-Present

Description: The goal of this project is to evaluate the effectiveness of the Soberlink wireless breathalyzer, in conjunction with outpatient recovery care, in increased sobriety in those with alcohol use disorder (AUD)

1. **“Innovation in the Treatment of Persistent Pain in Adults With NF1: Implementation of the iCanCope Mobile Application- Clinical Trial”**

Role: Research Assistant

Sponsor: NIH/NICHD

NIH ID# NCT04561765

Principal Investigator: Frank Buono, Ph.D.

Period: 3/1/2021-Present

Description: The goal of this project is to determine the efficacy of the iCanCope-NF mobile application in decreasing pain severity and interference in daily activities for individuals with Neurofibromatosis (NF) Type 1, a genetic disorder causing tumor growths on nerve cells

1. **“A Digital Intervention for HIV Prevention in Black Adolescent Girls”**

Role: Research Assistant

Sponsor: NIH/NICHD

NIH ID# 1R21HD098031-01

Principal Investigator: Kimberly Hieftje, Ph.D.

Period: 9/1/2019-8/31/2021

Description: The goal of this project is to develop and evaluate a multi-player videogame intervention focused on reducing HIV/STI’s in young black teen girls.

1. **“Development and Pilot-testing of an Augmented Reality Intervention for Alcohol Harm Reduction”**

Role: Research Assistant

Sponsor: Epic Games/Unreal Engine

Principal Investigator: Kimberly Hieftje, Ph.D.

Period: 9/1/2019 - 6/30/2020

Description: The goal of this project is to develop theory- and evidence- based augmented reality games that can increase the player’s ability to identify risks in their environment, increase their self-efficacy to refuse risky situations, and to increase their knowledge and understanding of future consequences related to alcohol and drug use.

1. **“A Virtual Reality Videogame for E-cigarette Prevention in Teens”**

Role: Research Assistant

Sponsor: Oculus Education (Facebook)

NIH ID# NCT04054765

Principal Investigator: Kimberly Hieftje, Ph.D.

Period: 10/1/2017-12/31/2021

Description: The goal of this project is to develop and evaluate a videogame intervention focused on e-cigarette prevention in adolescents using virtual reality technology.

# SKILLS & CERTIFICATIONS

* Clinical trial lifecycle management: OnCore
* Quantitative data collection & analysis platforms: Qualtrics, Dedoose, SPSS, JASP
* Qualitative data collection: focus group/ structured interview facilitation, focus group coding
* Virtual collaboration platforms: Zoom, Skype, Google web suite
* Electronic medical records platforms: Athena, e-MDs, EyeMD
* Yale CITI Good Clinical Practice/ Responsible Conduct of Research (September 2020)
* Connecticut Mandated Reporter Training for School Employees (January 2020)