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Pepperdine University
Graduate School of Education and Psychology

THE RELATIONSHIP OF LEGAL HISTORY TO MOOD AND SUBSTANCE ABUSE
SYMPTOMS AMONG HOMELESS MEN AND WOMEN IN A RESIDENTIAL RECOVERY
PROGRAM

A dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Psychology in Clinical Psychology

by

Lily A. Mkhitarian

June, 2020

Cary Mitchell, Ph.D. – Dissertation Chairperson

This dissertation, written by

Lily A. Mkhitarian

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF PSYCHOLOGY

Doctoral Committee:

Cary Mitchell, Ph.D., Chairperson

Carolyn Keatinge, Ph.D.

Andrea Bernhard, Psy.D.

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DEDICATION

I would like to dedicate this dissertation to my family, Armenak, Siran,
Teresa, and Freddie Mkhitarian.

I am lucky to be so infinitely loved.

ACKNOWLEDGEMENTS

It is with heartfelt gratitude that I acknowledge those who guided and contributed to the completion of my dissertation and doctoral degree. Firstly, I would like to express sincere appreciation to my chairperson, Dr. Cary Mitchell, for his kindness, patience, and wisdom in formulating and completing this dissertation. Your support and advocacy were steadying forces through the several challenges I faced. I would also like to extend my gratitude to my genuinely exceptional committee, Dr. Carolyn Keatinge and Dr. Andrea Bernhard, who have been tremendously supportive through different stages of my doctorate and dissertation. Dr. Keatinge, your seemingly infinite joyful energy and depth of knowledge have inspired me through many lessons with you, both inside and outside of class. Dr. Bernhard, I saw the professional I wanted to evolve into from the first day I sat in your class. I cannot tell you what your mentorship and fierce support has meant to me. Thank you for believing in me.

I would also like to thank my mother and father, who not only loved and supported me, but kept believing in me and my abilities, even when I faced hardships that made me unable to believe in myself. You felt my pain and shared my joy. To my sister, Teresa, your humor, friendship, and clear-eyed perspective consistently gave me the strength to keep going throughout this program. I am lucky to know love so complete.

Finally, I cannot imagine how I could have gotten through the challenges I faced inside and outside of this program, without my best friend, Joshua. You were my light and love. I will never forget.

VITA

EDUCATION

- September 2016 to
July 2020 **Pepperdine University, Graduate School of Education and Psychology**
Doctor of Psychology (Psy.D.) in Clinical Psychology
Dissertation Chair: Cary Mitchell, Ph.D.
Date of Defense: December 20, 2019
Dissertation Title: *The Relationship of Legal History to Mood and Substance Abuse Symptoms among Homeless Men and Women in a Residential Recovery Program*
- January 2016 **New York University, Graduate School of Arts and Science**
Master of Arts in General Psychology (Clinical-Forensic Focus)
Thesis Sponsor: Barry Winkler, Psy.D, J.D.
Thesis Title: *Art Therapy in Correctional Settings*
- August 2014 **University of Southern California**
Bachelor of Arts in Psychology

ACHIEVEMENT AWARDS, HONORS & GRANTS

- September 2017 to
Present **Colleagues Grant Academic Excellence Award**
Pepperdine University
Los Angeles, CA
- September 2016-
August 2017 **Conrad N. Hilton Foundation, Fellowship Grant**
Union Rescue Mission
Los Angeles, CA
- July 2016 **Professional Associations**
Eastern Psychological Association (EPA)
American Psychology and Law Society (APLS)
- January 2016 **New York University**
Summa Cum Laude
Dean's List
- September 2014 **University of Southern California**
Magna Cum Laude
Dean's List
National Society of Collegiate Scholars
Phi Sigma Theta National Honor Society

LANGUAGES

- Armenian &
English Bilingual
Advanced Oral and Written Fluency
Proficient to provide therapy in Armenian

CLINICAL EXPERIENCE

July 2019 –
July 2020

Veteran Affairs Western New York Healthcare System, Buffalo, NY *Doctoral Intern at APA Accredited Internship*

Clinical Directors: Sheila Donovan, PhD and Denise Mercurio-Riley, PhD

Complete four rotations within VA healthcare system

Attend weekly group supervision

Attend twice per week individual supervision

Attend weekly didactic seminars

Attend four journal club meetings where research articles are discussed

Complete presentation on VA clinical diversity topic of choice open to all mental health staff to attend

Complete brief research project examining a problem or program within the VA

Complete six months of Cognitive Processing Therapy training for certification

Behavioral Health Clinic

Outpatient

Clinical Supervisor: *Brad Brown, PsyD*

Provide mental health treatment services for the general veteran population within an outpatient clinic

Conduct individual weekly psychotherapy with individual and couple adults from diverse cultural and ethnic backgrounds presenting with a broad range of psychological disorders and adjustment issues

Maintain weekly case notes and ongoing treatment planning

Engage in weekly individual supervision

Complete and present on diagnostic and treatment planning training assignments

Substance Abuse Residential Treatment Program

Inpatient

Clinical Supervisor: *Deborah Stringer, PhD*

Provide individual and group substance abuse treatment and mental health treatment services for the veteran population within an inpatient unit

Conduct twice per weekly individual psychotherapy with individual adults with substance abuse disorder or dual diagnosis

Maintain weekly case notes and ongoing treatment planning

Place referrals for domiciliary programs and complete thorough assessment of substance abuse history

Attend treatment team meetings weekly

Engage in weekly individual supervision

Behavioral Medicine

Outpatient

Clinical Supervisor: *Denise Mercurio-Riley, PhD*

Provide individual pain management and mental health treatment services for the veteran population within an outpatient clinic

Complete bariatric presurgical evaluations

Maintain weekly case notes and ongoing treatment planning

Attend treatment team meetings weekly

Engage in weekly individual supervision

Vet Center

Outpatient

Clinical Supervisor: *Laurette Lascu, PsyD*

Provide individual and group mental health treatment services for the veteran population within an outpatient clinic with particular focus on PTSD and combat veterans

Maintain weekly case notes and ongoing treatment planning

Attend treatment team meetings weekly

Engage in weekly individual supervision

September 2018-
June 2019

Metropolitan State Hospital, Norwalk, CA

Doctoral Extern

Licensed Clinical Supervisor: *Alisa Lite, Psy.D.*

Conducted cognitive, personality, malingering and psychodiagnostic assessments within inpatient psychiatric and forensic units

Administered, scored, and interpreted comprehensive assessment reports to answer referral questions put forth by integrated treatment teams including fitness to proceed to trial, diagnostic clarification, malingering, and/or provision of treatment recommendations

Created and facilitated cognitive behavioral art group for Lanterman-Petris-Short (LPS) patients who tend to be long term patients with severe psychopathology. The group addresses coping skills, social skills, relaxation training and creativity.

Managed weekly case notes and treatment recommendations

Engaged in weekly individual and group supervision

Participated in weekly training and didactic seminars covering a range of topics pertaining to the forensic and inpatient hospital setting

The following measures (listed in alphabetical order) were administered, scored and interpreted under a licensed supervisor: Dot-Counting Test (DCT); Historical Clinical Risk Management - 20, Version 3 (HCR-20); Millon Clinical Multiaxial Inventory – Third Edition (MCMI-III); Mini-Mental State Exam (MMSE); Minnesota Multiphasic Personality Inventory – Second Edition (MMPI-2); Personality Assessment Inventory (PAI); *Repeatable Battery for the Assessment of Neuropsychological Status (RBANS)*; Rey-15; The Rorschach Test; Test of Memory Malingering (TOMM); Test of Nonverbal Intelligence – Fourth Edition (TONI-4); Wechsler Adult Intelligence Scale – Fourth Edition (WAIS-IV); Wechsler Abbreviated Scale of Intelligence – Second Edition (WASI-II); Wide Range Achievement Test – Fourth Edition (WRAT-4)

May 2018 - current **Pepperdine University, Graduate School of Education & Psychology**

Los Angeles Psychological & Educational Counseling Clinic, Los Angeles, CA

Clinical Supervisors: *Anat Cohen, Ph.D. and Dity Brunn, Psy.D.*

Provided mental health treatment services and crisis intervention for the general population within an outpatient clinic

Conducted individual weekly psychotherapy with adult, couple, and child clients from diverse cultural and ethnic backgrounds presenting with a broad range of psychological disorders and adjustment issues

Maintained weekly case notes and ongoing treatment planning

Engaged in weekly individual supervision

The following measures (listed in alphabetical order) were administered, scored and interpreted under a licensed supervisor: Beck Anxiety Inventory (BAI); Beck Depression Inventory – Second Edition (BDI-II); General Anxiety Disorder (GAD-7); The Outcome Questionnaire (OQ-45)

September 2017 - **Harbor-UCLA Hospital, Torrance, CA**
February 2018 *Doctoral Extern*

Licensed Clinical Supervisor: Lisa Bolden, Psy.D.

Provided mental health treatment services for adult, low income populations within an outpatient treatment facility

Conducted structured interviews with new patients to determine diagnoses and appropriateness for the welfare to work programs CalWORKs and GROW

Incorporated cognitive behavioral theory (CBT), dialectical behavioral therapy (DBT), Cognitive Behavioral Analysis System of Psychotherapy (CBASP), and Acceptance and Commitment Therapy (ACT) to address a variety of presenting issues such as chronic mental illness, serious mental illness, substance abuse with co-occurring psychiatric diagnoses, and adjustment disorders

Conducted individual psychotherapy with patients experiencing mental health barriers for employment

Completed weekly case notes, presentations, and ongoing treatment planning

Participated in weekly Advanced CBT training class, didactic seminars, and research meetings with focus on evidence-based treatments for mental illness

Engaged in weekly individual supervision

Attended Grand Rounds in the Psychiatric Emergency Room

Collaborated with a multidisciplinary team in weekly meetings to provide comprehensive treatment for mental health barriers to employment and for continuity of care between psychiatrists, social workers, and employment and financial specialists

The following measures (listed in alphabetical order) were administered, scored and interpreted under a licensed supervisor: Beck Anxiety Inventory (BAI); Beck Depression Inventory – Second Edition (BDI-II); General Anxiety Disorder (GAD-7); The Outcome Questionnaire (OQ-45)

August 2016 - **Union Rescue Mission (URM), Los Angeles, CA**
September 2018 *Doctoral Extern*

Licensed Clinical Supervisor: Aaron Aviera, Ph.D.

Provided mental health treatment services and crisis intervention for the homeless community within a residential treatment facility

Facilitated weekly Art Therapy group with residents

Conducted individual weekly psychotherapy with adult clients from diverse cultural and ethnic backgrounds presenting with a broad range of psychiatric disorders and co-occurring substance abuse

Incorporated Cognitive Behavioral Therapy (CBT), Acceptance Commitment Therapy (ACT) and Motivational Interviewing (MI) to address presenting issues such as substance abuse, mood and personality disorders, and posttraumatic stress disorder

Maintained weekly case notes and ongoing treatment planning

Participated in weekly individual and group supervision and ongoing training and didactic seminars pertaining to serious mental illness, homelessness, and multiculturalism

The following measures (listed in alphabetical order) were administered, scored and interpreted under a licensed supervisor: Beck Anxiety Inventory (BAI); Beck Depression Inventory – Second Edition (BDI-II); General Anxiety Disorder (GAD-7); Millon Clinical Multiaxial Inventory – Third Edition (MCMI-III)

March 2015- **Community Education Centers, Talbot Hall, Kearney, NJ**
December 2015 *Masters-Level Clinical Intern*

Licensed Clinical Supervisor: Valrie Fowler, Ph.D.

Art Therapy Coordinator

Created and ran an art therapy program which facility adopted

Group met twice a week in three week cycles to produce individual and group projects

Group discussions were based off art projects addressing identity, goals, and the therapeutic community

Discussions were conducted within a cognitive behavioral framework

Clinical Intern on Unit

Conducted intakes for new residents (interview and complete forms, provide informational and clinical feedback, write/file synoptic reports on compiled medical, criminal, educational, familial, substance use, and employment histories of residents)

Provided residents with individual counseling sessions discussing problem areas and goals of treatment plans (CBT and REBT)

Created treatment plans for residents based on their reported and DOC file histories and problem areas

Provided lectures on applied REBT concepts engaging resident participation to both large groups (~200 residents) and smaller review groups (~50 residents)

RESEARCH EXPERIENCE

September 2017
– January 2020

Pepperdine University, Graduate School of Education & Psychology, Los Angeles, CA

Doctoral Dissertation

Dissertation Title: *The Relationship of Legal History to Mood and Substance Abuse Symptoms among Homeless Men and Women in a Residential Recovery Program*

Chairpersons & Committee Member: *Cary Mitchell, Ph.D., Carolyn Keatinge, Ph.D., and Andrea Bernhard, Psy.D.*

Mixed-methods design using archival data and statistical analysis to examine the differences in severity of symptoms for substance abuse and mood disorders between homeless men and women with incarceration histories to those without
Aim is to clarify whether outcomes for symptoms are worse for those with incarceration histories, potentially resulting in increased care and recommendations for clients at intake

Preliminary Exam Completed: October 9, 2018

Dissertation Defense Completed: December 20, 2019

November 2015-
March 2016

John Jay College of Criminal Justice, City University of New York, Race and Community Effects (RACE) Lab, New York, NY

Research Assistant

Data collection utilizing Westlaw software for interdisciplinary psychology and law research

Research focused on reviewing legal standards for criminal responsibility and compiling state by state plea option developments throughout history

April 2015 –
December 2015

New York University, New York, NY

Master-level, MA Thesis

Thesis Title: *Art Therapy in Correctional Settings*

Thesis Sponsor: Barry Winkler, Psy.D., J.D.

Thesis Reader: Adrienne Gans, Ph.D.
Experimental thesis proposal for conducting CBT style art group therapy in
prisons and halfway homes
Presented at 2016 APA Annual Convention (Denver, Colorado)

- September 2013 –
July 2014 **University of Southern California, Clinical Psychology (Huey Lab), Los Angeles, CA**
Research Assistant
Compiled and organized database and contacted programs to recruit participants and gather data for study regarding national gang intervention program
Contacted participants from a previous study via e-mail, phone and mail in order to conduct follow up interviews
Interviewed participants, recorded and transcribed responses
- January 2014 –
May 2014 **University of Southern California, Non Experimental Research Methods Project, Los Angeles, CA**
Independent Research Project
Conducted an independent study on premarital relationship dissolution using archival data and survey method of data collection
Collected participants via spreading a link to a questionnaire created on Qualtrics software
The data was later analyzed on IBM SPSS and R statistics software and reported in a final APA style paper with tables and graphs.

CONFERENCE PRESENTATIONS

- August 2016 **Mkhitarian, L.** Art Therapy in Correctional Settings. Poster session presented at the APA Annual Convention (Division 41), Denver, CO.

TEACHING EXPERIENCE

- September 2017-
current **Pepperdine Graduate School of Education and Psychology, Los Angeles, CA**
Instructors of Record: *Susan Himelstein, Ph.D., Carolyn Keatinge, Ph.D., and Alison Vargas, Psy.D.*
Provide doctoral and master's level students with assistance in assessment courses, including Cognitive Assessment and Personality Assessment
Conduct labs to teach and evaluate students in their ability to administer and score various assessment measures including WAIS-IV, WRAT-4, The Rorschach Test, MMPI-2, and MMSE
Check and correct scoring of practice assessment measures
Grade exams and assignments throughout the course
Assist in management of course related paperwork
- February 2011-
June 2011 **Glendale Community College, Glendale, CA**
Psychology 101 Supplemental Instructor
Tutored students and conducted an online discussion forum in order to prepare them for exams
Responded to student e-mails concerning questions about the course or preparation for the exam

PROFESSIONAL TRAININGS & CERTIFICATIONS

July 2019 – July 2020	VA Western New York Healthcare System, Buffalo, NY Race and psychotherapy Military Culture Primary Care Substance Abuse Assessment and Treatment Suicide Prevention Motivational Interviewing Impact of Deployment on Family Mental Health Problem-Solving Therapy Treating Post-Traumatic Stress Disorder Psychopharmacology End of Life Care Neurocognitive Disorders National Center for Prevention of Healthy Living Rehabilitation Psychology Moral Injury Cognitive Processing Therapy (including six month certification process) Military Sexual Trauma
September 2018- March 2019	Metropolitan State Hospital, Norwalk, CA Cognitive assessments Suicide Risk Assessment & Prevention Landmark Cases: Introduction and Expert Testimony MMPI-2 and MMPI-RF Court competency and the FIT-R HCR-20 Self-Care Therapeutic tools for MSH patients: Internal Family Systems HCR-20 V3 Fundamentals two-day training
September 2017	Harbor-UCLA, Torrance, CA DBT two-day training Treating chronically depressed patients with CBASP Introduction to ACT Advances in CBT
August 2017	Sharper Future, Los Angeles, CA California Sex Offender Management Board Training (CASOMB)
September 2016	Union Rescue Mission, Los Angeles, CA Somatic Psychotherapy Overview of Homelessness in Los Angeles County Drugs and Drug Abuse in Los Angeles' Skid Row Community Drugs and Drug Abuse in Los Angeles' Skid Row Community Motivational Interviewing in Multicultural Settings

Providing Psychological Services to Homeless Persons who are African American and LatinX

March 2015 **Talbot Hall**, Kearny, NJ
HIPAA Policies
Professional Conduct
CEC Treatment Model (CBT and REBT)
Prison Rape Elimination Act Policies
Resident (Inmate) Behavior
Security
Treating Addiction
Suicide Prevention

September 2016 **Additional, Doctoral-level Assessment Training**
–December 2017 Academic training in administration, scoring, interpretation, and reporting of the following:
Cognitive and Neurological tests: MMSE, WRAT-4, WAIS-IV, Bender-II, VMI-6, RAFLT, TRAILS, COWAT
Personality Tests: MMPI-2, MCMI-IV, NEO-PI-R, TAT, Rorschach, RISB

ADDITIONAL EXPERIENCE

September 2009- **Pickwick Ice, Burbank, CA**
June 2010 *Figure Skating Assistant Coach*
Worked individually with remedial students
Assisted head coaches running large classes

Additional Skills

Research IBM SPSS, R (statistical programming), Westlaw, Microsoft Excel
Computer Maya 3D Modeling, Maya Animating, Photoshop, MS Paint, MS Office
Language Fluent in Armenian
Additional Drawing and Painting (All Mediums, 20 years), Classical Piano (10 years), Figure Skating (7 years), Pottery (2 years)

PROFESSIONAL REFERENCES

Brad Brown, Psy.D. **Supervisor, VA Western NY Healthcare System**
Clinical Supervisor
brad.brown@va.gov

Andrea Bernhard, Psy.D. **Professor, Pepperdine University GSEP**
Dissertation Committee Member, Professor, Mentor
lawandpsyche@gmail.com

Anat Cohen, Ph.D. **Clinic Director (Encino), Pepperdine University GSEP**
Clinical Supervisor
anat.cohen@pepperdine.edu

Alisa Lite, Psy.D. **Supervisor, Metropolitan State Hospital**
Clinical Supervisor

Alisa.Lite@dsh.ca.gov

Cary Mitchell, Ph.D.

Professor, Pepperdine University GSEP
Dissertation Chair
cary.mitchell@pepperdine.edu

ABSTRACT

Homelessness is a devastating experience that impacts hundreds of thousands of individuals in the U.S. each day. It has been widely reported that homeless persons experience higher rates of mental disorder, substance abuse, and physical illness than domiciled individuals. Homelessness is also associated with increased risk of exposure to trauma. In addition, about a quarter of homeless individuals in the U.S. report a history of incarceration. Certainly there are multiple pathways to both homelessness and incarceration. More research is needed on the implications and consequences of having a legal history on homeless persons. The purpose of this archival study was to consider the relationship of legal history, i.e., a history of being arrested and/or incarcerated, on mental health-related symptoms and substance abuse in a sample of treatment-seeking homeless persons. It was hoped that research of this kind could lead to more effective assessment and intervention among homeless persons seeking psychological services. The present sample included 121 homeless adult males and females with a mean age of 42 years. The sample was ethnically diverse, predominantly single, and most participants had at least a high school education. All of the participants were residing in a faith-based mission and most were engaged in substance abuse recovery programs at the mission. All of them had voluntarily sought individual psychological services from a university-affiliated mental health clinic located within the shelter. Instruments included the Alcohol Use Disorders Identification Test (AUDIT), Beck Depression Inventory-II (BDI-II), Drug Abuse Screening Test-20 (DAST-20), Global Assessment of Functioning (GAF), and an Intake Application Form (IAF) used at the clinic to obtain background information and presenting complaints. As predicted, individuals with legal histories reported significantly greater drug abuse problems on the DAST-20 ($M = 10.79$) than

those without legal histories ($M = 6.64$). However, legal history was not associated with statistically significant differences in BDI-II, AUDIT, or GAF scores. The difference in BDI-II scores approached statistical significance and was in the predicted direction, suggesting that more research is warranted. Exploratory analyses, clinical implications, limitations, and suggestions for future research are also considered.

Chapter I: Introduction

Homelessness

Homelessness represents a significant nationwide problem that negatively impacts a large and diverse population of individuals. Homelessness is defined as an individual lacking permanent housing, which may include residing in unsheltered locations like city streets, parks, or vehicles or sheltered locations such as shelters, missions, single room occupancy facilities, or abandoned buildings; additionally, some reside in other unstable or non-permanent situations, such as living with relatives or friends temporarily (U.S. Department of Health and Human Services, 2016). Homelessness is influenced by a large variety of systemic and health variables including but not limited to: employment opportunities, incarceration, mental health, substance abuse, property foreclosures, low national wages, escalating housing costs, government benefit programs, physical disability, and domestic violence (Los Angeles Homeless Services Authority, 2018).

National statistics. On a single night from January 2016, there were over half a million (549,928) homeless individuals within the United States (U.S. Department of Housing and Urban Development, 2017). This count was actually found to be an underestimation, due to both outdated and inconsistent methods of counting homelessness as well as a narrow definition of homelessness often capturing more sheltered rather than unsheltered individuals (National Law Center for Homelessness and Poverty, 2017). The national homelessness trend appears to be decreasing slightly across time, as reflected by a decrease of about 3% between 2015 and 2016 (U.S. Department of Housing and Urban Development, 2017). It is important to note that a large percent of this decrease was driven by fewer people experiencing homelessness in unsheltered rather than sheltered locations; the number of non-sheltered homeless has declined by about 31%

between 2007 and 2016 (U.S. Department of Housing and Urban Development, 2017). This decrease was not reflected within all states. For example, California remains the state with the highest total homeless population, exhibiting a 2.1% increase between 2015 and 2016 despite national decreases (U.S. Department of Housing and Urban Development, 2017). Despite having the nation's largest homeless population at 134,278 people on a single night as of January 2017, California does not have the highest per capita rate of homelessness within the United States, as it ranks third in the nation (U.S. Department of Housing and Urban Development, 2017). Hawaii ranks first with the highest rate of homelessness, with 51 in every 10,000 people experiencing homelessness while New York comes in second with 45 homeless people per 10,000 (U.S. Department of Housing and Urban Development, 2017). The per capita rate for California in 2017 was 34 homeless people per 10,000.

Los Angeles statistics. California's large homeless population is, in part, attributable to the high rates of homelessness in Los Angeles, which recently showed 52,765 homeless persons in Los Angeles County on a given night (Los Angeles Homeless Services Authority, 2018). This figure demonstrates a slight decrease (by 4%) since 2017, at which time the Greater Los Angeles Homeless Count was 55,048. Of the 52,765 homeless individuals, only 13,369 (25%) were found to be sheltered, while 39,396 (75%) lived on the streets, in cars, in tents, or in other makeshift shelters (Los Angeles Homeless Services Authority, 2018). Notably, this was the first time in four years that homelessness in Los Angeles County decreased. Veteran housing, employment, and mental health programs contributed to this reduction, as there was an 18% decrease in homeless veterans (Los Angeles Homeless Services Authority, 2018).

While there was an overall decrease in homelessness in Los Angeles County from 2017 to 2018, some demographic changes within the types of individuals may inform potential

emerging trends in homelessness. For example, there were stark increases in transgender homeless individuals from 480 in 2017 to 929 in 2018, suggesting that this population may be particularly vulnerable (Los Angeles Homeless Services Authority, 2018). Simultaneously, there was a note worthy decrease in homelessness due to fleeing domestic or intimate partner violence from 16,797 (34%) to 3,076 (6%). Finally, while there was a 16% reduction in chronically homeless individuals overall, the 2018 count also showed a rise in the number of people entering homelessness for the first time, suggesting that root causes of homelessness continue to persist (Los Angeles Homeless Services Authority, 2018).

Gender. Not unlike national data on homelessness, research findings from the 2018 Greater Los Angeles Homeless Count indicate that males continue to represent the majority of the homeless individuals residing in Los Angeles at 67%. Females represent about 31% of homeless individuals while about 2% identified as transgender (Los Angeles Homeless Services Authority, 2018). As stated above, the transgender homeless population has been steadily increasing for the past ten years, nearly doubling between 2017 and 2018 (Los Angeles Homeless Services Authority, 2018).

Gender differences also inform pathways to homelessness. While both men and women suffer from poverty, unemployment, and difficulties with housing, research suggests that men and women become homeless for different reasons (Tessler, Rosenheck, & Gamache, 2001). Broadly, findings have suggested that women are more likely to become homeless due to interpersonal reasons, while men often cite mental health and substance abuse as major contributing factors (Tessler et al., 2001). Approximately 63% of homeless people are single individuals while 37% are individuals in families, including children (National Alliance to End Homelessness, 2012). Approximately one fifth (22%) of people experiencing homelessness are

children (U.S. Department of Housing and Urban Development, 2017). This is a shift from five years ago when 83% were homeless individual adults or teenagers and 17 % were in families (National Alliance to End Homelessness, 2012). This is partially attributable to concentrated efforts at providing veterans with housing (National Alliance to End Homelessness, 2012). Although the causes of homelessness for males and females have been found to be different, consistent with historical trends, homelessness has historically been higher in males, and remains so at this time (Burt, 1992; Hagen, 1987; Tessler et al., 2001; Woodhall-Melnik, Dunn, Svenson, Patterson, & Matheson, 2018).

National racial statistics. National data suggests that white and African American individuals experience the highest rates of homelessness at this time (U.S. Department of Housing and Urban Development, 2017). According to the 2016 Annual Homeless Assessment Report, white people represented the greatest proportion of homeless individuals in the United States (48.3%), followed by African Americans (39.1 %), Hispanics (22.1%), Native Americans (2.8%), Pacific Islanders (1.6%), and Asians (1%; U.S. Department of Housing and Urban Development, 2017).

Recent data from Los Angeles County indicated somewhat different trends. African American people represented the greatest proportion of homeless individuals (40%), followed by Hispanic and Latino people (35%), Caucasian people (20%), those who identify as Multi-Racial (2%), Native American individuals (1%), Asian people (1%), and Pacific Islander or Native Hawaiian individuals (0.3%; Los Angeles Homeless Services Authority, 2018). African American individuals are overrepresented among the homeless when compared to the overall demographic characteristics of Los Angeles County.

Purpose of Study

Variables such as mental health, substance abuse, and incarceration have all been documented to contribute to the homelessness crisis in the United States (Greenberg & Rosenheck, 2008; McNiel, Binder, & Robinson, 2005). As such, it is important to provide appropriate, contextually and culturally sensitive therapy to those with histories of incarceration, substance abuse, mental illness, and homelessness. The purpose of this archival study was to examine the relationships among these variables in a sample of homeless men and women who were seeking psychological services. More specifically, the researcher examined whether there were differences between homeless persons with and without histories of arrest or incarceration in the severity of their depressive symptoms, substance abuse problems, and overall impairment in functioning. Before describing the proposed study in detail, relevant literature on homelessness, incarceration, substance abuse, and mental illness is considered and outlined.

Mental illness and homelessness. Nearly half of homeless people endure severe mental illness and/or substance use disorders in the United States (U.S. Department of Housing and Urban Development, 2017). In fact, this statistic may underestimate the actual rates of mental disorders and substance use disorders as many individuals are not formally assessed or diagnosed (Vigo, Thornicroft, & Atun, 2016).

When Hodgson, Shelton, van der Bree, and Los (2013) systematically reviewed studies examining which mental health conditions were most common among homeless individuals, depression and substance abuse symptoms were generally found to be the most common. Depression has been found to be particularly common in homeless mothers, with lifetime rates ranging from 45% to 85% (Bassuk, Buckner, Perloff, & Bassuk, 1998; Weinreb, Buckner, Williams, & Nicholson, 2006). Prevalence of post-traumatic stress disorder is also high in

homeless men and women, with some theorizing the traumatic experiences which often accompany homelessness serve as a mediating variable increasing an individual's chances of both depression and substance abuse disorders (Tischler, Rademeyer, & Vostanis 2007; Min Park, Fertig, & Metraux, 2011). Some studies have also found that schizophrenia and bipolar disorder are occasionally more common than depression among homeless individuals (Folsom et al., 2005). These varied findings may suggest that while the relationship between mental illness and homelessness is well documented, there remains a gap in addressing how particular mental disorders influence homelessness.

The direction of the relationship between mental illness and homelessness remains inconclusive as well. Various studies offer different explanations for the pathways contributing to the relationship. Some studies suggest that the stress and trauma of losing security associated with housing may trigger a depressive episode, substance use, or other mental health symptoms (Goodman, Saxe, & Harvey, 1991). Other findings suggest that poverty and lack of employment or health insurance, alongside the disabling nature of severe depression, often inhibit an individual's ability to seek help and maintain social relationships that would increase opportunities for housing and support (Gory, Ritchey, & Mullis, 1990). A landmark study conducted in Los Angeles County showed that 65% of a sample of mentally ill homeless persons ($N = 334$) became homeless after the onset of mental illness (Sullivan, Burnam, & Koegel, 2000). However, mental illness alone has not been found to be a pathway for homelessness, but rather, a potential risk factor that is made worse by homelessness (Sullivan, Burnam, & Koegel, 2000). Structural and personal vulnerabilities such as childhood poverty, physical abuse, and childhood homelessness have all been found to be linked to homelessness as well, and speak to the need of youth-targeted interventions and preventative measures in tackling homelessness in a

more profound manner (Sullivan, Burnam, & Koegel, 2000). Clearly the relationship of mental illness to homelessness is complex, and it is likely that homelessness may trigger or exacerbate mental health symptoms while mental disorders and symptoms may increase an individual's chances for homelessness.

Mental illness and incarceration. Similarly, approximately 20% of state prisoners and 21% of local jail prisoners have a history of suffering from a mental health condition (U.S. Department of Justice, 2006). For adolescents, the numbers are even more noteworthy as 70% of those in juvenile justice systems have at least one mental health condition while about 20% have a serious mental illness (Skowrya & Coccozza, 2006). An example of the pervasiveness of the problem was seen in Los Angeles, when Los Angeles County had to develop a greatly expanded psychiatric care service program adjacent to the Men's Central Jail, resulting in Twin Towers jail for mentally ill incarcerated men (Cooper, 2013). In fact, homelessness and incarceration have been found to have a bidirectional relationship, suggesting that those experiencing homelessness are more likely to become incarcerated and those who have been incarcerated are more likely to become homeless (Cusack & Montgomery, 2017).

Incarceration and substance abuse. The National Center on Addiction and Substance Abuse found about 85% of the U.S. prison population either met DSM-IV criteria for a substance abuse diagnosis or had a history of substance abuse patterns (2009). Despite this, only about 11% of all inmates with substance abuse disorders received any treatment during incarceration (The National Center on Addiction and Substance Abuse, 2009). Further, the National Center on Addiction and Substance Abuse (2009) has found that relative to those inmates without substance abuse diagnoses, those with substance abuse diagnoses or substance-related problem

behaviors were not only more likely to recidivate, but also less likely to have completed high school or find stable employment.

As compared to the general population, substance use disorders are about seven times more common among inmates (Teitelbaum & Hoffman, 2012). In a study by Fazel, Bains, & Doll (2006), examining variation and prevalence of substance abuse and dependence from four countries by interviewing over 7,500 prisoners, findings suggested multiple revealing patterns in the area of gender and substance-type abuse, suicide risk, and the extent of treatment needs within prisons. With regard to findings on gender, male prisoners were found to have higher rates of alcohol dependence (26% in the U.S.) as compared to female prisoners (20% in the U.S.), while drug abuse and dependence were much higher in female prisoners, averaging at about 25% for male prisoners in the U.S. and 45% for female prisoners in the U.S. (Fazel et al., 2006). This may indicate that extra attention must be afforded to providing more screening and treatment within female prisons. This finding may be better understood when considering that women in prison tend to be less representative of women in the general population as compared to men – a reality which impacts research findings within prisons due to the somewhat differing pathways to incarceration for women and men (DeHart, 2008). In the general population, men are more likely than women to use nearly all types of illicit drugs as compared to women (Center for Behavioral Health Statistics and Quality, 2017).

Although treatment availability and depth vary considerably among prisons across the United States, a majority of prisons only address detoxification by default of prison circumstances (Fazel et al., 2006). Often this is not sufficient given the grave implications of substance abuse on the lives of inmates. Fazel et al. (2006) found that substance misuse was a risk factor for suicide both for prisoners within custody and immediately upon release. Findings

also suggested that cross-sectional studies, which comprise a large percentage of available research illuminating the extent of substance abuse problems for the incarcerated, may underestimate the extent of the problem and subsequently, associated treatment needs (Fazel et al., 2006). Provided the extent of substance abuse problems and associated suicide risk, where there cannot be wide-reaching policy change addressing some of the roots of mass incarceration, there must be an emphasis on thorough screening, treatment, and relapse prevention for substance use and mental disorders (Fazel et al., 2006).

Dual-diagnosis, incarceration, and homelessness. While the relationship between incarceration and substance abuse are closely correlated and multifaceted, both variables also relate to homelessness in complex ways. In fact, some researchers have suggested that informed criminal justice reform must consider mental disorders, substance abuse disorders, and homelessness as all three variables have complex and bidirectional relationships (McNiel et al., 2005). State prisoners with mental health problems have historically been about twice as likely to have been homeless as those without mental disorders (U.S. Department of Justice, 2006). State prisoners with dual diagnoses (i.e., co-occurring substance abuse and mental disorder) are also more likely than those without co-occurring disorders to be homeless and charged with violent crimes (McNiel et al., 2005). This was also demonstrated in a study analyzing more than 61,000 Texan prison inmates, when Baillargeon et al. (2010) found that those with a co-occurring psychiatric and substance abuse disorder exhibited a substantially higher risk of incarceration when compared to inmates without dual diagnoses.

When prisoners were examined for the types of mental health disorders they present with during 2011-2012, nearly a quarter were found to have major depressive disorder (24%), closely followed by bipolar disorder (18%), post-traumatic stress disorder or a personality disorder

(13%), and a range of psychotic disorders (9%) (U.S. Department of Justice, 2017). Similar trends in types of disorders were found in jail inmates (U.S. Department of Justice, 2017). Notably, those prisoners who spend five or more years incarcerated were more likely to present with mental health issues than those with no prior history of incarceration, suggesting that chances of incarceration may not only be increased by mental illness but mental illness may also be exacerbated by incarceration (U.S. Department of Justice, 2017).

Mental health effects of incarceration. A study examining the psychological effect of incarceration by Haney (2012) found that psychological problems escalated gradually, but impacted individuals profoundly. Some results which indicate the processes inherent to incarceration is disconcerting include elevated risk of suicide during confinement, increased health problems after release, and increased psychological problems which become more evident after release – specifically, mortality rates were found to be 12 times that of the general population two weeks after release, and remain three and a half times that of the general population two years after release (Haney, 2012). The problems were found, in part, to be the result of the coping strategies employed to survive in prison, which are subsequently dysfunctional for most of regular society (Haney, 2012). For example, the process of socialization or institutionalization to prison tends to begin with significant discomfort at the chronic and severe degree of control over most daily choices and ultimately transforms into adjusting by internalizing dehumanization (Haney, 2012).

Given that an individual's lack of agency as well as their loss of perceived self-worth are both notable triggers for myriad of mental health disorders including depression and anxiety, it is unsurprising that prison would create a fertile environment for these problems to develop (Bandura, 1989; Wiggins, 1991). Other than losing agency and being viewed in a negative light

by most of the public, feelings of worthlessness are also exacerbated by the issues associated with prison overcrowding. For example, insufficient resources and employees result in less attention to special needs while overcrowding has been documented to increase arousal, stress, and violence (Lawrence & Andrews, 2004). Alternatively, solitary confinement presents even greater psychological and medical risk, by increasing risk for suicide, self-harm, posttraumatic stress, paranoia, sleep disturbances, anxiety, loss of weight, and increases in hallucinations (Haney, 2012). Additionally, the inherent dangers of sexual, physical, and verbal violence and abuse produce a state of consistent hypervigilance and an adaptive degree of defensiveness related to feeling appropriately vulnerable (Haney, 2012). In fact, concerns pertaining to feeling vulnerable have also been hypothesized as impacting treatment seeking behaviors within prisons even when services are available (Haney, 2012).

While suppressing weakness and vulnerability within prison may have protective benefits during incarceration, those qualities tend to induce isolation and loneliness upon release when an individual's families or friends expect emotional closeness (Haney, 2012). Additionally, prison environments tend to be analogous to other impoverished environments; given that many incarcerated individuals tend to come from socially and economically marginalized groups while also having experienced traumatic childhood and adolescent experiences, prison is thought to re-traumatize individuals (Haney, 2012). Traumatic childhood experiences also increase an individual's chance of mental illness. Therefore, it is important to address the role of incarceration in re-traumatization and in relapse, especially for individuals who have histories of mental illness (Haney, 2012).

When a large scale systematic meta-analysis of mental disorders (including 22,790 prisoners from 12 countries around the world) in prisoners was reviewed, results suggested that

about one in seven inmates has psychotic illness or depressive disorder, while about one in two male prisoners and one in five female prisoners met criteria for antisocial personality disorder (Fazel & Danesh, 2002). The results supported previous research in finding that psychiatric disorders are disproportionately higher in prison than the general population, in this case, by about two to four times for psychotic and depressive illnesses and approximately ten times for antisocial personality disorder (Fazel & Danesh, 2002). Notably, the disproportionate incidence of psychotic and depressive disorders in the reviewed American prisons was double what it is in all American psychiatric hospitals combined (Fazel & Danesh, 2002). This finding underscores the importance of briefly addressing the historical and political roots of laws impacting mental illness and incarceration.

This disproportionate representation of mental illness within the American prison system did not always exist so dramatically. The relationship between mental illness and incarceration has been partially rooted in the historical changes related to both criminal laws and psychiatric hospitals. For example, mass closings of psychiatric hospitals in the 1960s without simultaneous follow-through in government-promised openings of community-based outpatient clinics or transitional houses created a deficit of available care for the mentally ill (Lamb & Weinberger, 1998). Subsequently, during the 1980s the “war on drugs” led to an increase in the proportion of incarcerated persons with substance abuse disorders as well as mental illness (Lamb & Weinberger, 1998). Essentially, prisons became a repository for impoverished mentally ill individuals who were often suffering with substance use disorders.

The relationship between mental illness and incarceration is hypothesized to be bidirectional; however, there remains a gap in research examining whether the presence of mental illness increases an individual’s chance of incarceration the first time they become

incarcerated (Ogloff, Talevski, Lemphers, Wood, & Simmons, 2015). Ideally, researchers would be able to access a large portion of the population longitudinally, assess them for mental illness, and then compare the population which ends up in prison with those who did not. However, such a research model would not only be unprecedented but also impractical and nearly impossible to implement as it would involve gaining access to a large, random sample of individuals, assessing them all for mental illness, assuming some will eventually end up in prison, and then reassessing all participants throughout a span of decades to address whether mental illness alone increased an individual's chance for their initial incarceration. Alternatively, addressing the relationship between mental illness and incarceration is not as impractical once individuals have already entered the prison system and recidivate. As such, researchers have examined those inmates who have repeatedly been in and out of the prison system and mental illness has been documented to increase an individual's chance of returning to prison (Baillargeon, Binswager, Penn, Williams, & Murray, 2009).

While there is a gap in research examining the likelihood of psychiatric disorders without comorbid substance use disorders leading to an increase in incarceration, there is research to support that substance abuse disorders often follow or exacerbate psychiatric disorders; simultaneously, having a substance use disorder also increases an individual's chances of arrest due to the laws that followed the "war on drugs," as outlined above (Hartwell, 2004; Swartz, & Lurigio, 2007). As such, it is unsurprising that substance abuse has been found to be a mediating variable significantly contributing to the relationship between serious mental illness and arrest (Hartwell, 2004; Swartz, & Lurigio, 2007).

While substance abuse explains a substantial percentage of the relationship between serious mental illness and arrest or incarceration, findings have also suggested serious mental

illness has an independent relationship with increasing an individual's chances of arrest as well (Swartz, & Lurigio, 2007). Though this area of research remains limited, available data indicates that individuals with more severe functional impairment from their serious mental illness are most likely to be arrested (Swartz, & Lurigio, 2007). The explanation for this is yet to be concretely determined by experimental research, but is hypothesized to be partially connected to homelessness. For example, the functional impairment caused by mental illness induces barriers to employment, increases the risk of poverty, and makes it harder to sustain stable housing (Travis, Solomon, & Waul, 2001). As such, it is important to explore the relationship between homelessness and incarceration or arrest.

Homelessness and incarceration. A Bureau of Justice Statistics (BJS) study by Langan and Levin (2002) of state prisoners found that 12% of state prisoners reported being homeless at the time of their arrest. Another BJS study found that 9% of state prison inmates reported living on the street or in a shelter in the 12 months prior to arrest (U.S. Department of Justice, 1999). U.S. Department of Justice found similar results in 2006 which indicated that about 13% of prison inmates were homeless with a mental problem in the year before arrest and 6% were homeless without a mental problem, while 17% of those in local jails were homeless with a mental problem in the year before arrest and 9% were homeless without a mental problem.

Crimes associated with substance abuse significantly contribute to arrests as drug possession and public intoxication charges are nearly unavoidable for those living on streets while suffering with addiction or substance abuse (Kushel, Hahn, Evans, Bangsberg, & Moss, 2005). Additionally, the relationship between mental health problems and substance abuse has historically been documented with causes ranging from self-medication to mental health stigma to a general lack of affordable mental health services for those experiencing poverty (Wang et

al., 2005; Khantzian, 1997). However, in addition to becoming arrested for crimes associated with substance abuse, some studies document that criminal activities not associated with possession or intoxication charges that homeless individuals become incarcerated for are often minor crimes that stem from efforts to survive on limited resources (e.g., breaking into buildings for shelter, stealing food or hygiene supplies, etc.).

Homelessness is not only a precursor that raises an individual's chance of arrest and incarceration, but also a common outcome after incarceration – even for those who were not homeless prior to serving prison time (Greenberg & Rosenheck, 2008). Two notable ways incarceration has been found to increase the chances of homelessness are by limiting opportunities for employment and access to public housing, as both become harder to obtain with a criminal record (Travis et al., 2001). Both of these problems tend to self-perpetuate as the difficulties associated with housing and employment occur independently and exacerbate one another as it is more difficult to obtain one without the other (Travis et al., 2001).

Access to housing is impacted by a lack of available public resources as well as complex familial problems associated with incarceration. For one, the experience of incarceration tends to weaken community and familial ties by essentially decreasing one's proximity to their family and removing the possibility of community contributions for extended periods of time, ultimately reducing the ties which may have provided financial and residential support (Travis et al., 2001). Despite this, for anywhere from 50% to 85% of exiting prisoners across the United States, the first home after release is with a family member, a close friend, or a significant other, which has been found to reduce the chance of recidivism due to the inherent financial and emotional support most access with their families, friends, or intimates (La Vigne, Mamalian, Travis, & Visher, 2003).

While interpersonal conflict prior to incarceration, reluctance to accept an individual with a violent crime history, or the lack of available family members are commonly cited reasons for limited housing options, conditions of parole also complicate the issue (Roman & Travis, 2006). One direct way this becomes problematic is if a prisoner's family have criminal records themselves and parole prohibitions restrict parolees from associating with anyone who has a criminal record (Rhine, Smith, & Jackson, 1991). This example is one among many highlighting the impact of systemic policies in exacerbating both homelessness and criminal recidivism. Employment difficulties present similar multifaceted social and policy-driven barriers for exiting prisoners. Some policy-related issues for employment include ineligibility for benefits occasionally afforded to veterans or families and processing time related to obtaining benefits – all of which place an individual at higher risk for homelessness (Rhine et al., 1991).

Research Questions

The present study explored the following research questions: What are the demographic characteristics and presenting concerns/features of homeless persons in residential recovery seeking individual psychological services? How does legal history (i.e., past arrest or incarceration) relate to severity of self-reported substance abuse problems among homeless persons in residential recovery? How does legal history relate to severity of self-reported depressive symptoms among such persons? How does legal history relate to the overall impairment and functioning in treatment-seeking homeless persons?

The following hypotheses were addressed. It was hypothesized that (a) homeless men and women with legal histories would report greater severity of presenting complaints at the clinic intake stage than homeless men and women without legal histories. For the purposes of this study, legal history referred to an individual's self-reported history of having ever been arrested

or incarcerated. It was hypothesized that (b) homeless persons in residential recovery with legal histories would report greater drug abuse problems than homeless persons without such legal histories. It was hypothesized that (c) homeless persons in residential recovery with legal histories would report greater alcohol abuse problems than homeless persons without such histories. It was hypothesized that (d) homeless persons in residential recovery with legal histories would report greater depressive symptoms than homeless persons without such legal histories. Additional exploratory analyses were also conducted with selected demographic variables.

Chapter II: Method

Research Design

The present study was an archival study that included both descriptive and correlational features. In addition to describing important demographic and contextual variables on an at-risk and under-studied group of people in the community, the researcher explored the degree of relationships among selected variables within the available database. Descriptive statistics were calculated on variables as legal history, age, gender, ethnicity, level of education, substance use history, and self-reported reasons for seeking psychological services. The database made available to the researcher included variables that were collected from a sample of homeless males and females residing in a homeless shelter and rehabilitation program in inner-city Los Angeles. Data were obtained from men and women at the shelter who sought psychological services at the shelter's mental health clinic. Only when it was unequivocally clear that a client had consented for his or her de-identified data to be utilized for research purposes were those data included in the database. An important goal of the study was to examine the differences between those with arrest and/or incarceration histories and those without such legal histories with regard to severity of substance abuse problems, depressive symptoms, and related concerns. By examining these differences, treatment recommendations and attention could potentially be modified to better meet the needs of a diverse and vulnerable population.

Setting

This study was conducted on data that were collected at the Union Rescue Mission (URM), a non-profit, faith-based, Christian mission in the Skid Row area of central Los Angeles that provides emergency and long-term comprehensive services to homeless men, women, and children (URM, 2018). The average number of men who spent the night at URM each night in

2018 was estimated at 924, including about 62 families (URM, 2018). The types of services provided at URM include food, shelter, clothing, personal hygiene services and products, medical treatment, legal consultation, dental care, mental healthcare, substance-related recovery programs, religious instruction and worship opportunities, transitional housing, education, and job training (URM, 2018).

This study utilized data collected at URM's mental health clinic. The Jerry Butler-URM/Pepperdine University Community Counseling Center was opened in January 2001 (URM, 2018). It is staffed by clinical psychology doctoral students from Pepperdine University's APA-accredited Doctor of Psychology (Psy.D.) program. The doctoral students are supervised by licensed clinical psychologists affiliated with the university. Also known as the mental health clinic, this center provides individual and group therapy as well as psychodiagnostic assessments for residents of the mission (URM, 2018). While URM is a faith-based shelter, mental health services provided at the counseling center are not religiously based and individuals from all faith perspectives and backgrounds are welcome to participate. Each year, more than 1,000 individual psychological treatment sessions are provided to residents of URM (URM, 2018).

The clinic is free of charge for all residents of the mission. Though all residents and guests at URM are eligible to seek services at the mental health clinic, a majority of the clients come from the Christian Life Discipleship Program (CLDP). CLDP is 12-month residential substance abuse recovery program for homeless men designed to help participants understand the causes of addiction and potential solutions (URM, 2018). The program takes on a multifaceted approach by providing religious instruction, 12-step groups, pastoral counseling, mental health services, educational opportunities, anger management groups, vocational training, physical fitness training, financial planning services, and community and family enrichment programs

(URM, 2018). While participating in the CLDP program has several non-voluntary requirements, psychological services are not usually required for men in the program. However, case managers and chaplains often encourage clients to utilize services, and clients decide to attend voluntarily. It is important to note that at URM, CLDP men are those who were able to survive the detoxification process and continued in their commitment to entering a residential treatment program. Women residing at URM are a different population in many ways, as they are fewer in number and often temporarily housed there before moving on to a more permanent women's shelter. Additionally, women at URM often have children with them.

As noted earlier, the data accessed for the present study came only from individuals who provided written consent for their de-identified data to be utilized for research purposes. The present researcher obtained written consent from the mental health clinic directors to have access to the de-identified data base. Such access was only granted after the present researcher obtained approval from Pepperdine University's Institutional Review Board (IRB).

Participants

This study was archival and utilized de-identified data extracted from information collected during intake assessments conducted for treatment-seeking homeless men and women at the URM mental health clinic. Demographic or descriptive information analyzed included: age, gender, ethnicity, marital status, education, military history, and legal history. The database included 121 participants.

Age. All but one participant reported their age ($n = 120$). The mean age of this sample was 42.72 years ($SD = 11.02$), and a majority of participants were between the ages of 32 and 52. This could suggest that this particular study was not representative of adolescent, young adult, or geriatric homeless individuals.

Gender. All participants ($N = 121$) reported their gender. Male participants were overrepresented in this study ($n = 104$; 86%) as compared to female participants ($n = 17$; 14%). This disparity was largely due to the nature of this particular homeless shelter, which serves primarily male residents and temporarily houses female participants before sending them to transitional or permanent housing. However, this disparity also reflects the fact among homeless individual adults there are many more males than females. For example, the 2019 Greater Los Angeles Homeless Count showed that 67% of homeless adults in Los Angeles County were male (Los Angeles Homeless Service Authority, 2019).

Education. Most participants ($n = 119$) reported their education level. The most frequently reported level of education was a high school diploma or equivalent GED (27.3%), followed by some college (22.3%), senior high (18.2%), junior high (14.9%), college degree (8.3%), and elementary (5.8%).

Legal history. A total of 31 participants left blank the section of the intake form that inquires about legal history, leaving a group of 90 participants to examine. Within that number, having a legal history that included arrest and/or incarceration was more common ($n = 61$) than no such legal history ($n = 29$).

Ethnicity. Ethnicity was also examined in order to determine the diversity of the present sample. Nearly all participants ($n = 120$) responded to this section of the intake form. There were 46 African American individuals, which represented the largest percentage of this sample (38.8%). This was followed by 32 Caucasian participants (26.4%), 31 Hispanic persons (25.6%), 6 Native American individuals (5%), and 4 persons who identified as multi-ethnic (3.3%).

Marital status. The next variable examined was marital status, for which all participants ($N = 121$) responded. For this sample, nearly half (46.3%) of participants identified as single,

followed by those who indicated they were divorced (23.1%), separated (14%), or married (9.9%). One individual reported that he or she was widowed (0.8%).

Military status. Finally, participants' military status was also assessed. All participants ($N = 121$) responded to this section. A majority of participants reported no military history ($n = 92$; 76%), while approximately one eighth of the sample identified as veterans ($n = 15$; 12.4%).

Instruments

In addition to relevant demographic, historical, and mental health-related variables from the intake form, several assessment measures were utilized. They included the Alcohol Use Disorders Identification Test (AUDIT), the Beck Depression Inventory- 2nd Edition (BDI-II), the 20-item version of the Drug Abuse Screening Test (DAST-20) will be examined. The researcher also had access to Global Assessment of Functioning (GAF) scores for a subset of the sample. Each measure is described below.

Intake application form. The Pepperdine University Community Counseling Center Intake Application Form (IAF) is a four-page, self-completed measure administered to prospective clients prior to beginning treatment services. All persons seeking services at the clinic are required to complete the intake form, which includes fill-in-the-blank items, Likert-scale items, yes-no/true-false formatting, and a problem checklist. The form takes approximately 30 minutes to complete and is comprised of sections that address: demographic variables and program status; medical history; mental health and substance use history, including prior treatment; legal history; family history and contact; educational and occupational history; and a problem checklist. None of the variables obtained for this study included any personally identifying information.

The IAF assists clinicians in determining a client's salient problems and potential therapeutic goals, while also serving as an outline that clinicians may use to ask follow up questions during intake. The IAF has also been found to have empirical support in assessing for drug and alcohol use severity. Winters (2014) found evidence that supported the validity and reliability of the IAF items in assessing the severity of an individual's alcohol problems, while Pike (2014) found evidence supporting the reliability and validity of IAF items in assessing severity of an individual's drug-related substance abuse problems.

The sections corresponding to Mental Health and Substance Use History prompt each respondent to state whether they believe they have a history of substance abuse problems as well as inquiring about more specific patterns of use during the past 12 months. For example, respondents are asked to rate the severity of their alcohol problems during the past 12 months on a 5-point Likert scale where 1 indicates "No problems at all/not applicable", 3 indicates "Moderate problems", and 5 indicates "Severe problems." The form includes a parallel item for drug abuse problems in the past 12 months. Respondents are also asked to list all substances, including alcohol and prescription medication, that they have used or abused. Next, this section of the intake form asks, "What are the main concerns you are seeking help for in the counseling center?" The form also inquires about prior treatment attempts, psychotropic medication use/history, suicide attempt history, psychiatric hospitalizations, and other health concerns.

A checklist of 38 problems or concerns is also included at the end of the Intake Application Form (IAF). The respondent is directed to place a check mark next to any item that is a relevant to their current concerns, with the option to place two check marks to indicate severity or importance of concerns. Some examples of the checklist items include: feeling lonely, feeling unhappy, interpersonal issues, concerns about staying sober, and suicidal thoughts.

Alcohol Use Disorders Identification Test (AUDIT). The AUDIT is a ten-item self-report screening tool to assess salient information pertaining to alcohol use disorder (AUDIT; Babor, Higgins-Biddle, Saunders, & Monteiro, 2001). It was developed by the World Health Organization to be suitable for international use (WHO). It is used at intake to assess for harmful patterns of alcohol consumption within the year prior to entering the mission. The AUDIT was developed utilizing a very large sample and has been shown to have high test-retest reliability and internal consistency (Reinert & Allen, 2007). The AUDIT has also demonstrated good validity when used among unemployed individuals or those in poverty, making it a good fit for use with homeless populations (Claussen & Aasland, 1993).

The questions on the AUDIT are organized into three domains each containing items that examine hazardous or harmful alcohol consumption and/or dependence. The first domain is labeled “Hazardous Alcohol Use” and assesses for frequency of heavy drinking and typical quantity, the second is “Dependence Symptoms,” which assesses for morning drinking and increased salience of drinking, and the third section is “Harmful Alcohol Use” which gathers information about the individual’s blackouts, alcohol-related injuries, and feelings of guilt after drinking (Babor et al., 2001).

Scores on the Audit can range from 0 to 40. Scores from 0 to 7 indicate that alcohol problems are unlikely; scores from 8 to 15 represent a medium level of alcohol problems and suggest that counseling on the reduction of hazardous drinking may be indicated; scores of 16 or greater suggest a high level of alcohol problems; and scores of 20 or greater call for further evaluation for alcohol dependence (Babor, de la Fuente, Saunders, & Grant, 1989). Generally, a higher score obtained on the AUDIT indicates greater sensitivity towards identifying possible problems with alcohol dependence (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001).

Drug Abuse Screening Test-20 (DAST-20). The Drug Abuse Screening Test (DAST) is a self-report measure with 20 items that was developed to assess problems related to drug (but not alcohol) related misuse and abuse (Skinner, 1982). The DAST was originally modeled after the Michigan Alcoholism Screening Test and had 28 items before 10 and 20-item versions were created (MAST; Yudko, Lozhinka, & Fouts, 2007). The 20-item version of the DAST is the one that was used in this study (DAST-20; Gavin, Ross, & Skinner, 1989).

Overall, the DAST-20 has demonstrated strong internal consistency and test-retest reliability, with particularly strong face validity (Yudko et al., 2006). One risk with measures having strong face validity is that they may facilitate malingering and faking bad or faking good (Yudko et al., 2006). Consequently, the DAST-20, along with other brief, face-valid instruments, may not be the best measure for use within the criminal justice system when intending assess for denial or false endorsement of substance abuse (El-Bassel et al., 1997). With regard to the present study, despite having criminal records, many of the participants did not have motive to malingering as their diagnosis would not determine any changes in placement, sentencing, or care. The DAST-20 was appropriate for use for the current study as research has supported the reliability and validity of the DAST-20 as a measure of problematic substance use among treatment-seeking homeless men (Winters, 2014). The DAST-20 has also been found to be psychometrically sound as a measure for screening severely mentally ill populations with substance abuse problems (Cocco & Carey, 1998).

The DAST-20 consists of “Yes” or “No” questions each of which respectively correspond with 1 or 0 points. The cumulative points provide a scores suggesting an individual’s severity of drug use problems; A score of 0 indicates no problems with drug abuse, 1 to 5 may indicate a low level of problems related to drug abuse, 6 to 10 reflect a moderate level of

problems, 11 to 15 indicate substantial drug problems, and scores of 16 to 20 indicate the severe drug problems (Skinner, 1989). The DAST-20 takes approximately five to ten minutes to complete and is written at a 4th grade reading level (Skinner, 1989).

Beck Depression Inventory-II (BDI-II). The BDI-II is a widely-used, 21-item self-report measure that assesses for the severity of depressive symptoms (Beck, Steer, & Brown, 1996). Participants are asked to respond to questions based on the past two-weeks of experiences. Questions reflect diagnostic criteria for a major depressive episode as defined by the DSM-IV. Each question on the measure has four scaled responses corresponding to a 4-point scale ranging from 0 to 3. The cumulative sum of the responses are added up to produce a total score, which will fall within one of the following ranges of severity: 0 to 13 may indicate minimal depression, 14 to 19 may reflect mild depression, 20 to 28 may indicate moderate depression, and any score between 29 and 63 may be reflective of severe depression.

The BDI-II has been consistently been found to be reliable across a variety of settings and populations (Beck et al., 1996). BDI-II has showed stability when measuring for test-retest reliability in a range of settings from college to medical, averaging at around 0.73 to 0.96 (Wang & Gorenstein, 2013). The internal consistency reliability has typically been measured at around .90 for substance abusing populations (Wang & Gorenstein, 2013). Further, the BDI-II has been examined multiple times at URM, and findings have always suggested .90 or greater internal consistency for the homeless men and women with substance abuse histories residing there (Winters, 2014). The BDI-II has been found to have sound criterion validity, often yielding a sensitivity score above 90% (Sprinkle et al., 2002). Multiple studies have been conducted on the validity of the BDI-II in ethnically diverse populations (Beck et al., 1996; Carmody, 2005).

Additionally, the BDI-II was found to be psychometrically sound for use with treatment-seeking substance abuse disorder populations (Buckley, Parker, Heggie, 2001).

Global Assessment of Functioning (GAF)

The Global Assessment of Functioning (GAF) is a numeric scale which ranges between 0 and 100 to rates social, occupational, and psychological functioning of an individual (DSM-III-R; American Psychiatric Association, 1987). The GAF was based on the Global Assessment Scale originally developed by Endicott, Spitzer, Fleiss, and Cohen (1976). The GAF was included in the revised third edition of the Diagnostic and Statistical Manual (DSM-III-R; American Psychiatric Association, 1987) and was retained within the fourth edition (DSM-IV; American Psychiatric Association, 1994). Higher scores on this measure indicate higher levels of functioning and less symptoms while lower scores indicate more severe impairments in symptoms, ability to do day-to-day tasks, and potential for hurting others or oneself (DSM-III-R; American Psychiatric Association, 1987).

While there remains a gap in research on the use of the GAF with specifically incarcerated or homeless populations, but the GAF has overall been found to have good reliability and validity with seriously mentally ill populations at large (Jones, Thornicroft, Coffey, & Dunn, 1995). It has also been found to have good inter-rater reliability and validity with concurrent ratings of symptoms and social functioning for those diagnosed with schizophrenia (Startup, Jackson, & Bendix, 2002).

Procedure

After successful completion of the preliminary dissertation orals, the researcher sought approval for the present study from Pepperdine University's IRB. Once that approval was obtained, the URM-Pepperdine University mental health clinic directors provided the researcher

with access to the de-identified database to be used for this study. The researcher then conducted the statistical analyses of the data.

Data Analysis

The researcher calculated descriptive statistics on the study variables, including means, standard deviations, and frequencies. Inferential statistics such as *t*-tests and product-moment correlations were used to test the study's hypotheses. The sample size 121 participants was hypothesized to provide sufficient statistical power to identify the presence of significant associations between variables.

Chapter III: Results

Statistical analyses for the present archival study were conducted utilizing the Statistical Package for the Social Sciences (SPSS). Independent sample *t* tests were run for each of the four hypotheses and descriptive statistics were calculated for select demographic variables. The main focus of this study was to examine the relationship of legal history (i.e., arrest and/or incarceration) to mental health symptom severity, impairment in functioning, and substance abuse severity among treatment seeking homeless men and women residing in a Los Angeles homeless shelter. This study utilized the AUDIT, GAF ratings provided by clinicians, DAST-20, and BDI-II scores.

The first hypothesis was that treatment seeking homeless participants with legal histories would display greater impairment in functioning related to the severity of their presenting complaints than those without legal histories as measured by the Global Assessment of Functioning (GAF) ratings. The GAF ratings were assigned by clinic therapists working under the supervision of licensed psychologists. Lower GAF scores are associated with greater impairment and more severe symptoms. Given that the participants with and without legal histories were mutually exclusive groups, an independent samples *t* test was utilized in order to compare their GAF scores. There were more participants with a legal history ($n = 61$) than without ($n = 29$). Differences in sample size may be of importance due to potential corresponding differences in variability, which can cause problems for statistical inferences. However, in this case, the standard deviations were essentially equal ($SD = \sim 24$) for both groups. Levene's test confirmed that equal variances could be assumed ($F = .111, p = .740$). The results of the *t* test revealed that homeless men and women with legal histories (GAF $M = 65.93, SD = 24.77$; indicated mild impairment) did not display significantly greater impairment in functioning

related to their presenting complaints than individuals without legal histories ($M = 70.24$, $SD = 24.56$; indicates mild to slight impairment). The results of the t -test were not statistically significant, $t(88) = .77$, $p = .442$. Therefore, the findings did not support the hypothesis. However, it should be noted that the difference between means was in the predicted direction on the GAF, and with a larger sample would have likely been significant.

The next hypothesis was that homeless men and women with legal histories would report more severe drug abuse problems, as measured by the DAST-20, than the homeless individuals in the sample without legal histories. Those without legal histories ($n = 22$, $M = 6.64$, $SD = 4.93$) were compared to those with legal histories ($n = 57$, $M = 10.79$, $SD = 5.22$) for equality of variances by way of Levene's test. It was found that equal variances between groups could be assumed, $F = .043$, $p = 0.836$. An independent samples t test indicated that those with legal histories ($M = 10.79$) reported significantly greater levels of drug abuse problems on the DAST-20 than those without legal histories ($M = 6.64$), $t(77) = -3.217$, $p = 0.002$. This was consistent with the researcher's hypothesis and showed that the homeless persons in the sample who had been incarcerated or arrested did in fact report more severe drug abuse problems than those without such histories.

The third hypothesis stated that those with legal histories would present with a greater severity of alcohol abuse problems as measured by the AUDIT than those without legal histories. Once again there were more participants with legal histories ($n = 61$, $M = 22.26$, $SD = 26.28$) than without ($n = 29$, $M = 24.14$, $SD = 25.66$). While the standard deviations differed slightly, Levene's test was still non-significant at the .05 level ($F = 3.035$, $p = .085$), meaning that variances were essentially the same in both groups. With equal variances assumed, an independent samples t test was conducted. The results showed no significant difference between

groups in their mean AUDIT scores, $t(88) = .281, p = .779$. This indicated that the hypothesis was not supported. In fact, the group without legal histories actually obtained a slightly higher AUDIT mean score (24.14) than the group with legal histories (22.26). Both groups had AUDIT mean scores in the very high range, indicating risk for alcohol dependence.

The fourth hypothesis addressed depressive symptoms as measured by the BDI-II. It was predicted that individual participants with legal histories ($n = 61, M = 30.92, SD = 28.76$) would report greater depressive symptoms on the BDI-II than those without ($n = 29, M = 23.55, SD = 23.92$). Levene's test revealed that the distributions for the two groups had essentially equivalent variability ($F = .914, p = .342$). While the difference in BDI-II means between the two groups appeared substantial in absolute terms, the results of the t -test indicated this difference did not reach the .05 level of statistical significance, $t(88) = -1.196, p = .235$. Therefore, the hypothesis was not supported. Despite the lack of a statistically significant result, the data showed that the obtained difference was in the predicted direction.

Exploratory Analyses

The researcher also explored how selected demographic characteristics related to the primary variables of interest in the present study. When the incidence of legal history across ethnic groups was examined, findings revealed that most Caucasian, African American, and Hispanic individuals in the sample who responded to this item on the IAF reported having been arrested and/or incarcerated. The same was true for Native American and Multiethnic persons in the sample. However, there were so few Native American and Multiethnic persons in the sample that these results must be interpreted with caution. The frequencies and percentages for legal histories across ethnic groups are presented in Table 1.

Table 1
Racial/Ethnic Identity and Legal History

Identification	Legal History	No Legal History	Total (Response)	Missing/No Response
African American	22 (%)	15 (41%)	37 (100%)	10
Caucasian	16 (70%)	7 (30%)	23 (100%)	9
Hispanic	16 (76%)	5 (24%)	21 (100%)	10
Native American	4 (80%)	1 (20%)	5 (100%)	0
Multi-Ethnic	2 (67%)	1 (33%)	3 (100%)	1

Note: Due to the relatively small sample size, this table should be interpreted with caution.

The relationship of age to the four symptom measures utilized in the study (BDI-II, AUDIT, DAST-20, and GAF) was examined via a Pearson's correlation coefficient due to the continuous nature of all of the variables. Age was not found to be significantly correlated with any of these four variables. The correlations and significance levels are listed in Table 2.

Table 2
Age and BDI-II, AUDIT, DAST-20, GAF

Age	BDI-II	AUDIT	DAST-20	GAF
<i>n</i>	120	119	96	120
Pearson Correlation	-.108	.015	.149	-.157
<i>p</i>	.243	.874	.147	.087

Note: The mean age of this sample was 42.72 years ($SD=11.02$), and a majority of participants were between 32 and 52 years old.

This was followed by education, which was tested via a Kendall's Tau due to the ordinal nature of the variable. Education was not found to have a statistically significant relationship to BDI-II, DAST-20, or GAF scores. However, education was significantly associated with AUDIT scores, suggesting a relationship between level of education and severity of alcohol abuse. Specifically, this relationship was negative, indicating that higher AUDIT scores were related to lower education level ($r = -.199, p = .004$).

The next variable examined was gender. Point-biserial correlations were calculated in which gender was coded as “male” or “not male,” to facilitate the comparison of a binary variable to several continuous variables. Being male was not associated with the participants’ AUDIT, BDI-II, or GAF scores; however, it was significantly related to DAST-20 scores. Specifically, the relationship indicated that being male was associated with higher endorsement of drug abuse, $r = .220, p = .031$. This was fairly consistent with the literature review, which suggests that homeless men tend to use alcohol or drugs more than homeless women (Geissler, Bormann, Kwiatkowski, Braucht, & Reichardt, 1995; Stein & Gelberg, 1995; Linn, Brown, & Kendrick, 2005). However, when homeless women do have substance abuse disorders, they tend to have more complex substance abuse problems and a greater likelihood of having polysubstance abuse (Stein & Gelberg, 1995). Accordingly, for this sample, being “not male” or female, was associated with lower DAST-20 scores.

Chapter IV: Discussion

Summary of Research Findings

The purpose of this study was to better understand some of the ramifications of legal history upon the lives of homeless persons residing in a shelter. Toward that end, the researcher explored whether treatment-seeking homeless persons with legal histories differed from homeless persons without legal histories in regard to the severity of their impairment in functioning, drug abuse, alcohol abuse, and depressive symptoms. The study also afforded an opportunity to summarize demographic characteristics and life history variables in a data archive that consisted of men and women seeking psychological services at a Los Angeles homeless shelter. The present chapter will include an overview of the results, discussion of the clinical implications of the results, identification of the study's limitations, and suggestions for future research.

The findings of this study were generally consistent with the broader findings in the literature about those within the cross section of incarceration and homelessness. There appeared to be little to no difference between those with and without legal histories with regard to overall functioning and severity of symptoms as measured by the GAF. Homeless persons in the present sample whose records included GAF scores tended to show moderate symptoms regardless of legal history. A challenge with the data archive was that only about 70% of the sample had GAF scores, which limited both the statistical power to detect differences and the generalizability of the findings.

Similarly, this study did not find a difference in severity of alcohol abuse problems as measured by the AUDIT between those with or without legal histories. For both groups, mean scores on the AUDIT indicated high levels of alcohol problems. Given that persons in the sample

were seeking psychological services and most were enrolled in a residential substance abuse recovery program, the generally high AUDIT scores were not unexpected. Additionally, the legality of alcohol likely also reduced the difference in use. Given that alcohol is a legal substance, it makes it easier to access and carry without the risk of legal problems.

While BDI-II scores measuring depressive symptoms were not found to be statistically significant in their greater severity for those with legal history as compared to those without, findings indicated that the data were trending toward the hypothesized difference. Homeless persons with legal histories obtained a BDI-II mean score of 30.92, which indicated severe depressive symptoms. Those without legal histories had a mean score of 23.55, which indicated moderately severe symptoms. More research with larger samples is needed to determine more definitively whether homeless persons with legal histories show more severe depressive symptoms. The lack of a statistically significant difference on the BDI-II in the present study may have been due in part to relatively weak statistical power, due to the modest sample size.

It is important to consider that this study defined legal history as ever having been arrested or incarcerated. As such, those who had only been arrested, or who had just spent a single night in jail, were coded as part of the “legal history” group without differentiation from those who may have experienced decades of incarceration. Previous data which has found a relationship between incarceration and depression often measures those who have been in prison rather than jail, and often those who have been in prison for several years or decades (Boothby & Durham, 1999; Castellano & Soderstrom, 1997; Mills & Kroner, 2005). As such, it is possible that if this study removed those with minimal exposure to the criminal justice system, the findings might more definitively indicate whether incarceration is associated with greater depressive symptoms among homeless persons. As such, the trending results within this study

suggest that it may be worthwhile to conduct additional research on whether there may be a relationship between depressive symptoms and incarceration history among homeless persons.

The most notable finding within this study considered the relationship between legal history and severity of drug abuse problems as measured by the DAST-20. As predicted, those with legal histories were found to endorse greater levels of drug abuse problems on the DAST-20 ($M = 10.79$) than those without legal histories ($M = 6.64$). Those with legal histories reported moderate to substantial drug problems, while the group without legal histories obtained a mean score that fell at the lower end of the moderate range. Cocaine and methamphetamine were found to be the most commonly used drugs for those with legal histories while over-the-counter medications were the least reported. This relationship is likely to have been statistically significant due to a number of reasons. It is important to consider that while alcohol is an abused substance, it is legal, and therefore both easier to access and would only lead to incarceration via indirect matters such as driving under the influence. Conversely, the substances included in the DAST-20, and more specifically, the substances most reported in this population, are often illicit and may result in charges solely for possession. Further, the potentially dangerous processes or locations involved in obtaining illicit drugs may produce situations in which legal issues would arise. For example, those selling illicit drugs may be doing so in more dangerous areas to remain hidden and may be armed, while individuals selling alcohol do so legally, generally in public, regulated spaces such as stores or restaurants.

There are several clinical implications involved in this finding. First, while the present study did not attempt to identify causation between these variables, correlations were identified. That is to say, it cannot be determined from the present findings whether incarceration does or does not directly lead more severe substance abuse problems. However, the significant

association among self-reported drug abuse severity and legal history underscores the importance of providing substance use treatment to homeless men and women who are incarcerated or who have previously been incarcerated. Moreover, for homeless persons with drug abuse or dependence, any higher incidence of legal problems or incarceration may be associated with greater stigma and increased risk for exposure to trauma and prolonged homelessness.

The demographic variables for the present sample were analyzed and the results were similar to what has been reported in the literature for homeless adults. These findings revealed that participants were on average about 42 years old; as such, the results of this study may not be representative of adolescent, young adult, or geriatric homeless individuals. Similar to other studies and representative of national statistics, male participants were the majority of participants in this study. Also representative of the population, more participants in this study had a legal history than did not.

This study included an ethnically diverse sample, including African American, Caucasian, Hispanic, Native American, and multi-ethnic persons. Nearly half of the sample identified as single, while a third reported divorce or separation, and a small minority reported that they were married. Finally, only about an eighth of participants reported military history.

An interesting follow-up finding revealed that the participants' level of education was significantly associated with AUDIT scores, suggesting that more severe alcohol problems were associated with lower levels of education. This finding supports past research which indicates that increased education may be a protective factor against substance abuse problems (Crum, Helzer, & Anthony, 1993).

When gender was examined, being male was associated with higher endorsement of drug abuse as measured by the DAST-20. This finding was likely impacted by the fact that there were

less female participants in the sample. However, homelessness in the general population is more common in men.

Data revealed that for individuals with legal histories, methamphetamine was reported as the most selected substance of choice while for those without legal histories, results showed that cocaine was the highest endorsed drug of choice. Other findings have also found that methamphetamine users have higher rates of involvement with the criminal justice system; however, causality remains speculative (Booth, Leukefeld, Falck, Wang, & Carlson, 2006). Other findings about the profile of methamphetamine users may provide some information. For example, methamphetamine users have been found to engage in higher risk drug use behavior and tend to have higher rates of mental and physical conditions (Copeland & Sorensen, 2001). Additionally, methamphetamine typically has a longer half-life as compared to cocaine, occasionally lasting over 24 hours and causing symptoms of psychosis (Gawin & Ellinwood, 1988). As such, it is possible that the greater impact on functioning, both mental and physical, as well as the longer half-life, places methamphetamine users, especially those who are more exposed due to homelessness, at greater risk for attracting attention from the legal system due to behaviors which are symptoms of methamphetamine use.

Limitations

Several limitations are important to consider for this study. Most broadly, the archival nature of this study presented multiple boundaries on the questions this study could address, as it utilized data that has already been collected. Therefore, the researcher was unable to introduce any new measures to the database or have any impact on the data collection procedures. One area this was particularly salient for was the nuances of the legal history variable. Given that legal history was so broadly defined, unfortunately it included both people who served extended

sentences and those who had minor legal issues or had spent a single night in jail. In other words, there was a great deal of within-group variance in the legal history category. Therefore, some findings might not have captured the actual relationship of incarceration to various mental health and substance-related variables in the present sample of homeless persons.

Additionally, it would have been helpful for this researcher to know the age of first use of alcohol and drugs in order to have a better conceptualization of the course of problematic use within this sample. As such, questions pertaining to whether participants were incarcerated first or homeless first or used illicit substances prior to or after incarceration or homelessness remain unanswered. In short, the study had a correlational design rather than a true experimental design. Research based on correlational design does not allow the researcher to infer cause and effect relationships between variables.

Given that all of the data for this study were collected from a single setting, generalizability may be limited. The participants of this study represented only treatment-seeking homeless males and females who resided at one shelter and participated in an abstinence and faith-based residential substance abuse rehabilitation program. Therefore, the unique variables present at this particular program must be considered when taking into account the generalizability of the results to homeless individuals in different communities. In addition, due to the relatively modest sample size, the findings may not be representative of homeless individuals even if they are from similar programs or the same program. Given that all of the participants in this study were adults, findings cannot be assumed to generalize to homeless children and adolescents.

Although the mental health services provided at the clinic where the data were collected were not religiously based, the vast majority of persons seeking services at URM self-identify as

Christian. Due to this, the findings of the present study may not generalize to those with different religious backgrounds, to more religiously diverse settings, or to secular programs and settings.

In addition, though women were included in this study, given that URM is primarily a men's shelter and the sample included more men than women, the results of this study may not represent treatment-seeking homeless women with histories of incarceration as adequately as treatment-seeking homeless men.

Recommendations and Research Suggestions

Given the findings of the study, it is important to consider applications for the clinic and residential treatment programs serving homeless men and women. First, the intake form at the clinic where the data was collected may need to be modified to include more detailed information about legal history. This may include requesting information such as number of arrests, time spent in jail and/or prison, and potentially the role of substance abuse in legal history. While this information could be useful given the findings of this study, it is also important to recognize that details about an individual's legal history are both very sensitive and personal, so if a clinic chose to request such information in writing, they would have to weigh the privacy concerns against potential use for clinical assessment. Ultimately, even if this information was not obtained in writing, the findings of this study suggest the importance of considering the impact on substance abuse and potentially depression for clinicians working with homeless patients with histories of incarceration.

Future research may be interested in incorporating qualitative research that includes in-depth interviews of homeless persons to obtain first person narratives regarding the variables of interest. It could be illuminating to hear homeless persons who have experienced incarceration talk about how it has related to their mental health, their substance use, and their attempts at

coping. This is important because the instruments used to measure these constructs may not be sensitive enough to fully capture the impact of incarceration on a person's well-being and ability to recover from substance abuse or mental illness, even if it indicates a relationship.

Despite the limitations of the present study, it shed light onto the relationships among homelessness, legal history, severity of drug abuse problems, depressive symptoms, and severity of alcohol problems. The study also incorporated a highly diverse sample of homeless men and women in a recovery program, and therefore it contributes to the literature on this under-studied population. As hypothesized, homeless persons with histories of incarceration or arrest reported significantly greater drug abuse problems than homeless persons without legal histories. While speculative commentary may be made regarding the direction of this relationship, causation cannot be clearly identified. At this time, it appears that the relationship between these two variables may be bidirectional. In addition, clinicians working with homeless persons who have been arrested and/or incarcerated may do well to consider all the risks that might conceivably be associated with legal history, including implications for trauma, stigma, and more severe symptoms.

Given the nationally stable or rising rates of incarceration and homelessness, more research is needed to fully understand the challenges and hardships endured by homeless persons, including those with histories of incarceration. There is a particular gap in research completing follow-up on the long-term outcomes of different policy and program efforts on multiple variables such as sustained housing, reduced recidivism, and improved mental health. Such research could allow programs to build on one another and become more effective at sustaining benefits. Finally, the research that exists must be better applied to national and local

policy decisions. There is also much need to advocate for homeless individuals and the reduction of incarceration and recidivism.

REFERENCES

- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., revised). Washington, DC: Author.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Babor, T. F., de la Fuente, J. R., Saunders, J.B., & Grant, M. (1989). *AUDIT: The Alcohol Use Disorders Identification Test: Guidelines for use in primary healthcare*. Geneva, Switzerland: World Health Organization.
- Babor, T. F., Higgins-Biddle, J. C., Saunders, J. B., & Monteiro, M. G. (2001). *The alcohol Use Identification test: Guidelines for use in primary care* (2nd ed.). Geneva, Switzerland: World Health Organization.
- Baillargeon, J., Binswanger, I. A., Penn, J. V., & Williams, B. A. Murray, OJ (2009). Psychiatric disorders and repeat incarcerations: The revolving prison door. *American Journal of Psychiatry*, 166(1), 103-109. doi: 10.1176/appi.ajp.2008.08030416
- Baillargeon, J., Penn, J. V., Knight, K., Harzke, A. J., Baillargeon, G., & Becker, E. A. (2010). Risk of reincarceration among prisoners with co-occurring severe mental illness and substance use disorders. *Administration and Policy in Mental Health and Mental Health Services Research*, 37(4), 367-374. doi: 10.1007/s10488-009-0252-9
- Bandura, A. (1989). Human agency in social cognitive theory. *American psychologist*, 44(9), 1175-1184. doi: 10.1037/0003-066X.44.9.1175
- Bassuk, E. L., Buckner, J. C., Perloff, J. N., & Bassuk, S. S. (1998). Prevalence of mental health and substance use disorders among homeless and low-income housed mothers. *The American Journal of Psychiatry*, 155, 1561–1564. doi: 10.1176/ajp.155.11.1561

- Beck, A.T., Steer, R.A., & Brown, G.K. (1996). Manual for the Beck Depression Inventory-II. San Antonio, TX: Psychological Corporation.
- Booth, B. M., Leukefeld, C., Falck, R., Wang, J., & Carlson, R. (2006). Correlates of rural methamphetamine and cocaine users: Results from a multistate community study. *Journal of Studies on Alcohol*, 67(4), 493-501. doi: 10.15288/jsa.2006.67.493
- Boothby, J. L., & Durham, T. W. (1999). Screening for depression in prisoners using the Beck Depression Inventory. *Criminal Justice and Behavior*, 26(1), 107-124. doi: 10.1177/0093854899026001006
- Buckley, T. C., Parker, J. D., & Heggie, J. (2001). A psychometric evaluation of the BDI-II in treatment-seeking substance abusers. *Journal of Substance Abuse Treatment*, 20(3), 197-204. doi: 10.1016/S0740-5472(00)00169-0
- Burt, M. (1992). *Over the Edge: The Growth of Homelessness in the 1980s*. New York, NY: Russell Sage Foundation. doi: 10.7758/9781610440998
- Carmody, D. P. (2005). Psychometric characteristics of the Beck Depression Inventory-II with college students of diverse ethnicity. *International Journal of Psychiatry in Clinical Practice*, 9(1), 22-28. doi: 10.1080/13651500510014800
- Castellano, T. C., & Soderstrom, I. R. (1997). Self-esteem, depression, and anxiety evidenced by a prison inmate sample: Interrelationships and consequences for prison programming. *The Prison Journal*, 77(3), 259-280. doi: 10.1177/0032855597077003003
- Cocco, K. M., & Carey, K. B. (1998). Psychometric properties of the Drug Abuse Screening Test in psychiatric outpatients. *Psychological Assessment*, 10(4), 408. doi: 10.1037/1040-3590.10.4.408
- Copeland, A. L., & Sorensen, J. L. (2001). Differences between methamphetamine users

and cocaine users in treatment. *Drug and Alcohol Dependence*, 62(1), 91-95. doi: 10.1016/S0376-8716(00)00164-2

Center for Behavioral Health Statistics and Quality. (2017). *Results from the 2016 National Survey on Drug Use and Health: Detailed Tables*. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Claussen, B., & Aasland, O. G. (1993). The Alcohol Use Disorders Identification Test (AUDIT) in a routine health examination of long-term unemployed. *Addiction*, 88(3), 363-368. doi: 10.1111/j.1360-0443.1993.tb00823

Cooper, A. (2013). The ongoing correctional chaos in criminalizing mental illness: the realignment's effects on california jails. *Hastings Women's Law Journal*, 24 (2), 339-362. Retrieved from <https://repository.uchastings.edu/hwlj/>

Crum, R. M., Helzer, J. E., & Anthony, J. C. (1993). Level of education and alcohol abuse and dependence in adulthood: a further inquiry. *American Journal of Public Health*, 83(6), 830-837. doi: 10.2105/AJPH.83.6.830

Cusack, M., & Montgomery, A. E. (2017). Examining the bidirectional association between veteran homelessness and incarceration within the context of permanent supportive housing. *Psychological Services*, 14(2), 250-255. doi: 10.1037/ser0000110

DeHart, D. D. (2008). Pathways to prison: Impact of victimization in the lives of incarcerated women. *Violence Against Women*, 14(12), 1362-1381. doi: 10.1177/1077801208327018

El-Bassel, N., Schilling, R. F., Schinke, S., Orlandi, M., Sun, W., & Back, S. (1997). Assessing the utility of the Drug Abuse Screening Test in the workplace. *Research on Social Work Practice*, 7(1), 99-114. doi: 10.1177/104973159700700106

Endicott, J., Spitzer, R. L., Fleiss, J. L., & Cohen, J. (1976). The Global Assessment Scale: A

- procedure for measuring overall severity of psychiatric disturbance. *Archives of General Psychiatry*, 33(6), 766-771. doi: 10.1001/archpsyc.1976.01770060086012
- Fazel, S., Bains, P., & Doll, H. (2006). Substance abuse and dependence in prisoners: A systematic review. *Addiction*, 101(2), 181-191. doi: 10.1111/j.1360-0443.2006.01316.x
- Fazel, S., & Danesh, J. (2002). Serious mental disorder in 23,000 prisoners: A systematic review of 62 surveys. *The Lancet*, 359(9306), 545-550. doi: 10.1016/S0140-6736(02)07740-1
- Folsom, D. P., Hawthorne, W., Lindamer, L., Gilmer, T., Bailey, A., Golshan, S., Garcia, P., Unützer, J., Hough, R., & Jeste, D. V. (2005). Prevalence and risk factors for homelessness and utilization of mental health services among 10,340 patients with serious mental illness in a large public mental health system. *American Journal of Psychiatry*, 162(2), 370-376. doi: 10.1176/appi.ajp.162.2.370
- Gavin, D. R., Ross, H. E., & Skinner, H. A. (1989). Diagnostic validity of the drug abuse screening test in the assessment of DSM-III drug disorders. *British Journal of Addiction*, 84(3), 301-307. doi: 10.1111/j.1360-0443.1989.tb03463.x
- Gawin, F. H., & Ellinwood Jr, E. H. (1988). Cocaine and other stimulants. *New England Journal of Medicine*, 318(18), 1173-1182. doi: 10.1111/j.1360-0443.1989.tb03463.x
- Geissler, L. J., Bormann, C. A., Kwiatkowski, C. F., Braucht, G. N., & Reichardt, C. S. (1995). Women, homelessness, and substance abuse: Moving beyond the stereotypes. *Psychology of Women Quarterly*, 19(1), 65-83. doi: 10.1111/j.1471-6402.1995.tb00279.x
- Goodman, L. A., Saxe, L., & Harvey, M. (1991). Homelessness as psychological trauma: Broadening perspectives. *American Psychologist*, 46(11), 1219. doi: 10.1037/0003-066X.46.11.1219

- Gory, M., Ritchey, F. J., & Mullis, J. (1990). Depression among the homeless. *Journal of Health and Social Behavior*, 87-102. Retrieved from www.jstor.org/stable/2137047
- Greenberg, G. A., & Rosenheck, R. A. (2008). Jail incarceration, homelessness, and mental health: A national study. *Psychiatric Services*, 59(2), 170-177. doi: 10.1176/ps.2008.59.2.170
- Hagen, J. L. (1987). Gender and homelessness. *Social Work*, 32(4), 312-316. doi: 10.1093/sw/32.4.312
- Haney, C. (2012). Prison effects of in the age of mass incarceration. *The Prison Journal*, 20(10), 1-24. doi: 10.1177/0032885512448604
- Hartwell, S. W. (2004). Comparison of offenders with mental illness only and offenders with dual diagnosis. *Psychiatric Services*, 55(2), 145-150. doi: 10.1176/appi.ps.55.2.145
- Hodgson, K. J., Shelton, K. H., van den Bree, M. B., & Los, F. J. (2013). Psychopathology in young people experiencing homelessness: A systematic review. *American Journal of Public Health*, 103(6), e24-e37. doi: 10.2105/AJPH.2013.301318
- Jones, S. H., Thornicroft, G., Coffey, M., & Dunn, G. (1995). A brief mental health outcome scale: Reliability and validity of the Global Assessment of Functioning (GAF). *The British Journal of Psychiatry*, 166(5), 654-659. doi: 10.1192/bjp.166.5.654
- Khantzian, E. J. (1997). The self-medication hypothesis of substance use disorders: A reconsideration and recent applications. *Harvard Review of Psychiatry*, 4(5), 231-244. doi: 10.3109/10673229709030550
- Kushel, M. B., Hahn, J. A., Evans, J. L., Bangsberg, D. R., & Moss, A. R. (2005). Revolving doors: Imprisonment among the homeless and marginally housed population. *American Journal of Public Health*, 95(10), 1747-1752. doi: 10.2105/AJPH.2005.065094

- Langan, P. A., & Levin, D. J. (2002). Recidivism of prisoners released in 1994. *Federal Sentencing Reporter*, 15(1), 58-65. doi: 10.1525/fsr.2002.15.1.58
- Lamb, H. R., & Weinberger, L. E. (1998). Persons with severe mental illness in jails and prisons: A review. *Psychiatric Services*, 49(4), 483-492. doi: 10.1176/ps.49.4.483
- La Vigne, N., Mamalian, C., Travis, J. and Visher, C. (2003). *A portrait of prisoner reentry in Illinois*. Washington, DC: Urban Institute.
http://webarchive.urban.org/UploadedPDF/410662_ILPortraitReentry.pdf
- Lawrence, C., & Andrews, K. (2004). The influence of perceived prison crowding on male inmates' perception of aggressive events. *Aggressive Behavior*, 30(4), 273-283. doi: 10.1002/ab.20024
- Los Angeles Homeless Services Authority. (2018). *2018 Greater Los Angeles Homeless Count Report* (pp. 1–21). Retrieved from <http://www.vchcorp.org/wpcontent/uploads/2018/06/2018-Homeless-Count-Results.pdf>
- Los Angeles Homeless Services Authority. (2019). Homeless count results.
Retrieved from <https://www.lahsa.org/news?article=557-2019-greaterlos-angeles-homeless-count-results>
- Linn, J. G., Brown, M., & Kendrick, L. (2005). Injection drug use among homeless adults in the southeast with severe mental illness. *Journal of Health Care for the Poor and Underserved*, 16(4), 83-90. doi: 10.1353/hpu.2005.0126.
- McNiel, D. E., Binder, R. L., & Robinson, J. C. (2005). Incarceration associated with homelessness, mental disorder, and co-occurring substance abuse. *Psychiatric Services*, 56(7), 840-846. doi: 10.1176/appi.ps.56.7.840
- Mills, J. F., & Kroner, D. G. (2005). Screening for suicide risk factors in prison inmates:

- Evaluating the efficiency of the Depression, Hopelessness and Suicide Screening Form (DHS). *Legal and Criminological Psychology*, 10(1), 1-12. doi: 10.1348/135532504X15295
- Min Park, J., Fertig, A. R., & Metraux, S. (2011). Changes in maternal health and health behaviors as a function of homelessness. *Social Service Review*, 85(4), 565-585. doi: 10.1086/663636
- National Alliance to End Homelessness. (2012). *The state of homelessness in America 2012*. Retrieved from [http://b3cdn.net/National Alliance to End Homelessness](http://b3cdn.net/National%20Alliance%20to%20End%20Homelessness)
- National Center on Addiction and Substance Abuse. (2009). *Shoveling up II: The impact of substance abuse on federal state and local budgets*. Retrieved from <https://www.centeronaddiction.org/addiction-research/reports/shoveling-ii-impact-substance-abuse-federal-state-and-local-budgets>
- National Law Center for Homelessness and Poverty. (2017). *Don't count on it: How the HUD point-in-time count underestimates the homelessness crisis in America*. Retrieved from <https://nlchp.org/wp-content/uploads/2018/10/HUD-PIT-report2017.pdf>
- Ogloff, J. R., Talevski, D., Lemphers, A., Wood, M., & Simmons, M. (2015). Co-occurring mental illness, substance use disorders, and antisocial personality disorder among clients of forensic mental health services. *Psychiatric Rehabilitation Journal*, 38(1), 16-23. doi: 10.1037/prj0000088
- Pike, S. L., (2014). *The assessment of alcohol use disorders among homeless men in residential treatment* (Publication No. 490.) [Doctoral Dissertation, Pepperdine University]. Pepperdine University. Retrieved from <https://digitalcommons.pepperdine.edu/etd/490>
- Reinert, D. F., & Allen, J. P. (2007). The alcohol use disorders identification test: an update of

- research findings. *Alcoholism: Clinical and Experimental Research*, 31(2), 185-199. doi: 10.1111/j.1530-0277.2006.00295.x
- Rhine, E. E., Smith, W. R., Jackson, R. W., Burke, P. B., & LaBelle, R. (1991). *Paroling authorities: Recent history and current practice*. Laurel, MD: American Correctional Association.
- Roman, C. G., & Travis, J. (2006). Where will I sleep tomorrow? Housing, homelessness, and the returning prisoner. *Housing Policy Debate*, 17(2), 389-418. doi: 10.1080/10511482.2006.9521574
- Skinner, H. A. (1982). The drug abuse screening test. *Addictive Behaviors*, 7(4), 363-371.
- Skowrya, K. R., & Coccozza, J. J. (2006). *Blueprint for change: A comprehensive model for the identification and treatment of youth with mental health needs in contact with the juvenile justice system*. Delmar, NY: National Center for Mental Health and Juvenile Justice and Policy Research Associates. Retrieved from <https://www.ncmhjj.com/wp-content/uploads/2013/12/Blueprint.pdf>
- Sprinkle, S. D., Lurie, D., Insko, S. L., Atkinson, G., Jones, G. L., Logan, A. R., & Bissada, N. N. (2002). Criterion validity, severity cut scores, and test-retest reliability of the Beck Depression Inventory-II in a university counseling center sample. *Journal of Counseling Psychology*, 49(3), 381. doi: 10.1037/0022-0167.49.3.381
- Startup, M., Jackson, M. C., & Bendix, S. (2002). The concurrent validity of the Global Assessment of Functioning (GAF). *British Journal of Clinical Psychology*, 41(4), 417-422. doi: 10.1348/014466502760387533
- Stein, J. A., & Gelberg, L. (1995). Homeless men and women: Differential associations among substance abuse, psychosocial factors, and severity of

- homelessness. *Experimental and Clinical Psychopharmacology*, 3(1), 75-86. doi:
10.1037/1064-1297.3.1.75
- Sullivan, G., Burnam, A., & Koegel, P. (2000). Pathways to homelessness among the
mentally ill. *Social Psychiatry and Psychiatric Epidemiology*, 35(10), 444-450. doi:
10.1007/s001270050262
- Swartz, J. A., & Lurigio, A. J. (2007). Serious mental illness and arrest: The generalized
mediating effect of substance use. *Crime & Delinquency*, 53(4), 581-604. doi:
10.1177/0011128706288054
- Teitelbaum, J. B., & Hoffman, L. G. (2012). Health reform and correctional health care: How the
Affordable Care Act can improve the health of ex-offenders and their
communities. *Fordham Urban Law Journal*, 40(4), 1323-1356.
<https://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=2499&context=ulj>
- Tessler, R., Rosenheck, R., & Gamache, G. (2001). Gender differences in self-reported reasons
for homelessness. *Journal of Social Distress and the Homeless*, 10(3), 243-254. doi:
10.1023/A:1016688707698
- Tischler, V., Rademeyer, A., & Vostanis, P. (2007). Mothers experiencing homelessness: Mental
health, support and social care needs. *Health & social care in the community*, 15(3), 246-
253. doi: 10.1111/j.1365-2524.2006.00678.x
- Travis, J., Solomon, A. L., & Waul, M. (2001). *From prison to home: The dimensions and
consequences of prisoner reentry*. Washington D.C.: Urban Institute Press. doi:
10.1.1.212.6235
- Union Rescue Mission. (2018). *About us*. Retrieved from <http://www.urm.org/about/>

- U.S. Department of Health and Human Services (2016). *2016 Public health service act* (Section 330). Retrieved from <https://www.nhchc.org/faq/official-definition-homelessness/>
- U.S. Department of Housing and Urban Development. (2017). *The 2017 annual homeless assessment report to congress*. Retrieved from <https://www.hudexchange.info/resources/documents/2017-AHAR-Part-1.pdf>
- U.S. Department of Justice. (2017). *Indicators of mental health problems reported by prisoners and jail inmates* (Report No. 250612). Retrieved from <https://www.bjs.gov/content/pub/pdf/imhrpji1112.pdf>
- U.S. Department of Justice. (1999). *Mental health and treatment of inmates and probationers* (Report No. 174463). Retrieved from https://www.prisonlegalnews.org/media/publications/bojs_mental_health_and_treatment_of_inmates_and_probationers_1999.pdf
- U.S. Department of Justice. (2006). *Mental health problems of prison and jail inmates* (Report No. 210600). Retrieved from <http://bjs.ojp.usdoj.gov/content/pub/pdf/mhppji.pdf>
- Vigo, D., Thornicroft, G., & Atun, R. (2016). Estimating the true global burden of mental illness. *The Lancet Psychiatry*, 3(2), 171-178. doi: 10.1016/S2215-0366(15)00505-2
- Wang, Y. P., & Gorenstein, C. (2013). Psychometric properties of the Beck Depression Inventory-II: A comprehensive review. *Brazilian Journal of Psychiatry*, 35(4), 416-431. doi: 10.1590/1516-4446-2012-1048
- Wang, P. S., Lane, M., Olfson, M., Pincus, H. A., Wells, K. B., & Kessler, R. C. (2005). Twelve-month use of mental health services in the United States: Results from the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62(6), 629-640. doi: 10.1001/archpsyc.62.6.629
- Weinreb, L. F., Buckner, J. C., Williams, V., & Nicholson, J. (2006). A comparison of the health

and mental health status of homeless mothers in Worcester, MA: 1993 and 2003.

American Journal of Public Health, 96(8), 1444 –1448. doi:10.2105/AJPH.2005.069310

Wiggins, J. S. (1991). Agency and communion as conceptual coordinates for the understanding and measurement of interpersonal behavior. In W. Grove & D. Cicchetti (Eds.), *Thinking clearly about psychology: Essays in honor of Paul E. Meehl* (Vol. 2, pp. 89–113). Minneapolis, MN: University of Minnesota Press.

Winters, Brittany N. (2014). *The psychometric utility of the drug abuse screening test among treatment-seeking, homeless men*. (Publication no. 433). [Doctoral Dissertation, Pepperdine University]. Pepperdine University. Retrieved from <https://digitalcommons.pepperdine.edu/etd/433>

Woodhall-Melnik, J., Dunn, J. R., Svenson, S., Patterson, C., & Matheson, F. I. (2018). Men's experiences of early life trauma and pathways into long-term homelessness. *Child Abuse & Neglect*, 80, 216-225. doi: 10.1016/j.chiabu.2018.03.027

Yudko, E., Lozhkina, O., & Fouts, A. (2007). A comprehensive review of the psychometric properties of the Drug Abuse Screening Test. *Journal of Substance Abuse Treatment*, 32(2), 189-198. doi: 10.1016/j.jsat.2006.08.002

APPENDIX A
IRB Approval Notice



Pepperdine University
24255 Pacific Coast Highway
Malibu, CA 90263
TEL: 310-506-4000

NOTICE OF APPROVAL FOR HUMAN RESEARCH

Date: December 11, 2018

Protocol Investigator Name: Lily Mkhitarian

Protocol #: 18-11-905

Project Title: The Relationship of Legal History to Mood and Substance Abuse Symptoms among Homeless Men and Women in a Residential Recovery Program.

School: Graduate School of Education and Psychology

Dear Lily Mkhitarian:

Thank you for submitting your application for exempt review to Pepperdine University's Institutional Review Board (IRB). We appreciate the work you have done on your proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations 45 CFR 46.101 that govern the protections of human subjects.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit an amendment to the IRB. Since your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite the best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the IRB as soon as possible. We will ask for a complete written explanation of the event and your written response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the IRB and documenting the adverse event can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* at community.pepperdine.edu/irb.

Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval. Should you have additional questions or require clarification of the contents of this letter, please contact the IRB Office. On behalf of the IRB, I wish you success in this scholarly pursuit.

Sincerely,

Judy Ho, Ph.D., IRB Chair