UNIVERSITY OF CALIFORNIA SAN DIEGO
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Drivers, Facilitators, and Practices of Substance Use Disorder Stigma within the Criminal Legal System: A Mixed Methods Study

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

in

Interdisciplinary Research on Substance Use

by

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The dissertation of Garland E Gerber is approved, and it is acceptable in quality and form for publication on microfilm and electronically.

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DEDICATION

I dedicate this dissertation to everyone who believed and invested in me when I found it difficult to believe in myself.

To my parents, Mark and Gloria Gerber and family- thank you for always keeping the light of love on for me, till I found my way back from the darkness. The pride in your eyes is enough to keep me going for lifetimes. I achieve this degree in Grandpa Tom's honor.

To my son, Collin Guillory- you are my pride, my joy, the soul who brought true meaning to my life. All my endeavors are aimed at being a source of inspiration for you. Dream big my love.

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EPIGRAPH

"There is great need in the field of research, for individuals with pertinent but nonstandard backgrounds to widen the perspective and diversify the literature. It is vital to the evolution of science and justice to examine the roles and methods of those in power, who work so closely with powerless populations who are being studied, adjudicated and often adversely affected. Scholarship plays an important role in giving valid and equal representation, publication, and opportunity to those with a history of being marginalized and silenced…I firmly believe that, in seeking solutions to the issues of substance use disorder, giving a voice to those who have lived experience is the best place to start."

-Garland Gerber

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ABSTRACT OF THE DISSERTATION

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University of California San Diego, 2023
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Purpose: Substance use is prevalent in U.S. criminal legal system (CLS) cases, yet court-ordered treatments rarely recommend effective treatments such as medications for addiction treatment (MAT). The stressful work coupled with lack of preparation among CLS professionals to support various pathways to recovery is theorized to drive and facilitate high rates of burnout, leading to stigma towards defendants with substance use disorder (DWSUD). This study aims to enhance our understanding of the connection between CLS occupational stress, substance use disorder (SUD) stigma, and to evaluate the impact of a tailored training on attitudes and practices concerning DWSUD within the CLS.

Methodology: Using a mixed methods approach, we collected primary data. Qualitative data explored possible drivers, facilitators, and practices of substance use-related stigma among CLS professionals. We utilized various national trainings to collect pre-post-training survey data. Pre-training data assessed the relationship of burnout and attitudes towards DWSUD. Pre-post-training data assessed changes in behavioral intentions to refer to MAT for SUD-related cases, intentions to engage in self-care for managing occupational stress, and attitudes toward DWSUD.

Findings: CLS professionals experience complex and intense occupational stress, leading to manifestations of emotional, mental, and physical symptoms; driving and facilitating SUD stigma. There was a significant relationship between 2 of the 3 occupational burnout dimensions and attitudes towards DWSUD. The adapted SHIELD training significantly improved attitudes and behavioral intentions related to SUD cases and promoting well-being behaviors among CLS professionals.

Implications: These results highlight the urgent need for targeted interventions that provide resources increasing efficacy regarding SUD-related cases and addressing the demanding and stress-inducing nature of CLS professionals' work, as occupational stress contributes to SUD stigma. The adapted SHIELD training demonstrates the positive impact intervention has on attitudes and behavioral intentions, ultimately promoting well-being within the CLS profession. By identifying the nuanced relationships between burnout dimensions and attitudes, as well as the impact of an adapted training intervention, the study contributes valuable insights into improving the well-being of CLS professionals and promoting fair treatment for individuals with SUD. The study's findings advocate for enhanced curriculum, intervention strategies, and more resources to create a more empathetic and effective legal environment.

OVERVIEW

Substance use plays an outsized role in the functioning of the criminal legal system. Nearly 85% of the US incarcerated population has a substance use related issue (1) ranging from crimes committed while intoxicated or in acquiring means/funds for substances, to sales/distribution. This staggering statistic demonstrates the magnitude of interactions between individuals with substance use disorder (SUD) and the criminal legal system (CLS) that result in involvement with the criminal legal system. Furthermore, defendants who need substance use treatment, are never assessed, or given redundant, outdated legal mandates based on poorly evidenced, unsubstantiated notions of risk and benefit (2). After an individual is arrested, they enter a complex system containing a variety of interlocking elements and institutional actors. With funding from federal, state, and local governments, decisions about health care and other structural determinants of defendants' health are shaped by judges, prosecutors, criminal defense attorneys, community supervision, and other stakeholders. Treatment and other intervention recommendations made by courts (criminal and drug courts) customarily favor abstinence-based treatment, rarely involve defendants' input or treatment history and seldomly take barriers to succeed in court ordered treatment into consideration (2). As research on understanding SUD stigma, harm reduction, medications for addiction treatment (MAT) and other evidence-based approaches evolve and are applied in other professions (e.g., physicians, nurses, pharmacists, addiction professionals, mental health, and social work professionals), research on CLS professionals remains sparse.

Our comprehensive review of the literature has not revealed any established SUD education programs tailored for legal professionals within law school curricula or workplace training that can be substantiated by evidence-based research. This poses a problem for both CLS

professionals and defendants with substance use disorder (DWSUD). CLS professionals often enter their roles with limited knowledge and inadequate preparation to handle the growing number of cases related to SUD. This knowledge gap can hinder their capacity to provide informed and effective treatment recommendations, thereby impeding efforts to reduce recidivism, support defendant SUD recovery, and mitigate SUD-related harm. Consequently, these challenges can exacerbate burnout rates among CLS professionals, leading to a range of physical and mental health issues and, in some cases, SUD among these individuals.

Burnout is a psychological condition, often having emotional and physical symptoms, emerging from excessive and prolonged occupational related stress (3). Burnout can have various causes including feeling of ineffectiveness, lack of job autonomy, and minimal engagement in self-care. For this study, we defined self-care as "active participation in enhancing the quality of your health and well-being. Doing small things every day to help manage your physical, mental, and emotional wellness" (4). As a result of overload, stress and burnout are common among CLS professionals and self-care engagement is low compared to hours worked, due to inability to disconnect from the workload (5). While CLS professionals frequently interact with individuals with SUD and SUD-related cases (often involving vicarious trauma and lack of control over larger systemic policies) they themselves are at elevated risk of SU, and other behavioral and mental health problems (6,7). For this study, we operationalize and measure CLS professionals' occupational health as 1.) burnout constructs of emotional exhaustion (EE), depersonalization (DP), personal accomplishment (PA) and 2.) behavioral intentions to engage in self-care behaviors to reduce the negative effects of occupational burnout.

Unaddressed occupational wellness needs, coupled with lack of relevant, applicable SU education may lead to SUD stigma resulting in negative attitudes towards people with substance use disorder (PWSUD) and discriminatory practices toward DWSUD. This creates dual harms related to occupational related health as well as public health, likely facilitating a negative feedback loop. For this study, we operationalize and measure constructs of SUD stigma as 1.) CLS professionals' attitudes towards DWSUD involved in the CLS and 2.) CLS professionals' behavioral intentions to recommend MAT for SUD related cases.

The legal system confers wide discretion at various points in the sequential intercept model; this includes substantial individual discretions over decisions about whether to arrest, prosecute, allow bail, imprison, allow probation or parole, divert into alternative programs, or provide treatment (8). Given the multiple cascades of health harms that can result from incarceration and other contact with CLS, these decisions can have life-and-death consequences. Discretion results in disproportionate burden of the most punitive response among people of color and those of lower socioeconomic status (9). Much of this discretion can be misused or swayed by the enforcer's political views, agendas, biases, or stigma (10, 11). The existence of these multiple discretion spaces within the system and its disproportionate harms on vulnerable people highlights the urgency to modify the behavior of CLS actors. Their practices can shift in ways that reduce health risk for individuals within the CLS, while also addressing intersecting occupational health and safety burdens to CLS professionals.

Despite the urgency and significance, there is limited literature on the attitudes, perceptions, and stigma towards SUD and people who use substances among legal and other professionals working in the CLS. Existing literature and previous studies about healthcare

professionals' burnout, stigma, and discrimination towards PWSUD is extensive and can be utilized to serve as a basis for implications, relevant measures, and future research among CLS professionals (12). Considering the association between CLS professionals' burnout and stigma towards DWSUD is vital to better understand the role burnout (and its various aspects) may play in barriers for better health outcomes for PWSUD involved in the CLS. Stigma may lead to inequities and disparities of treatment versus incarceration orders, poor quality of services (including improper treatment recommendations) and consequences of anticipated and perceived stigma in defendant engagement, recovery, and reintegration processes.

Occupational wellness/SUD education initiatives have the potential to not only enhance awareness and understanding of DWSUD but also foster more empathetic attitudes and practices among legal professionals, thereby contributing to reduced stigma towards DWSUD and improved occupational wellness practices within the CLS. The SHIELD training was developed by Leo Beletsky J.D., MPH (Dissertation Co-Chair) starting in 2004. SHIELD was designed for law enforcement and utilizes the objectives of educating officers on occupational wellness strategies, preventing needlestick injury on duty, developing a better understanding injection drug use (IDU), Opioid Use Disorder (OUD) and MAT as a strategy to reduce stigma and improving officer behavioral intentions among people who use drugs. Following this bundling of occupational wellness and education on SUD and MAT as a strategy to stigma reduction and improving behavioral intentions, we aimed for similar goals among CLS professionals (SEE TABLE 1 and APPENDIX A. TRAINING OUTLINE for more detail on training the intervention).

BACKGROUND

A recent paper calls for the CLS to adopt more of a public health lens and public safety practices (13). Better understanding CLS professionals' occupational struggles, perspectives, and stigma regarding substance use, SUD treatment and clients with SUD will help to create more impactful research, practices, and interventions. The goal is to improve capacity of CLS professionals to respond to SUD, both in the workplace and among people under the control of the CLS by addressing both occupational health and public health with one intervention. Contact with CLS could serve as an opportunity to provide treatment and other supports to individuals who struggle with substance use. Instead, currently the CLS system is highly iatrogenic, in that its intervention causes far more harm than good (14). Iatrogenesis, often used in the medical field, is the harm brought forth by an intervention, error or negligence creating worsening symptoms or death. This can be applied to the CLS practice of negligence and error by ordering improper SUD treatment (abstinence-based treatment as opposed to medication for addiction-MAT treatment), incarceration (creating barriers to wellness, worse outcomes, or SUD symptoms) or failure to properly identify and treat completely. Approximately 80-85% of the nation's individuals involved in the CLS meet certain medical criteria for SUD, but only 11% received treatment for their addictions (15). Perhaps this is partially due to the discretion of undereducated CLS professionals ordering sentences, that are not beneficial to rehabilitation, combined with a defendant's hesitancy to advocate for themselves due to feeling judged and misunderstood. Given that the vast majority of individuals in the CLS will be improperly treated for their SUD, this poses a major public health concern. Once released from prison, jail, or abstinence-based mandated treatment, people with substance use disorder (PWSUD) are at risk

for a disproportionately higher rates of HIV, Hepatitis B & C, and overdose (16, 17) due to resumed substance use.

Substance use and high rates of incarceration greatly affect the economy, taxes, health care, exhaust professionals exposed to individuals with SUD, fracture families and ravage communities. The growing body of research on incarceration in the US shows the evidence of a major public health issue. It is estimated that 45% of Americans have, at some point, had an immediate family member incarcerated in jail or prison (18). Approximately 42% of White Americans, 48% of Hispanic Americans, and 63% of Black Americans are affected by familial incarceration, demonstrating the sociocultural inequities of the CLS (18, 19). High incarceration rates affect population and individual health and create growing difficulties amongst already vulnerable communities. Studies show that areas with high rates of incarceration have higher rates of STDs, HIV, poor mental health, infant mortality, teens engaging in risky behavior and overall worse health outcomes (20). The CLS is often the structural organization that holds the key to the future of vulnerable populations' outcomes. Judges and attorneys are responsible for recommendations and judgements for SUD related cases. Incarceration and improper treatment for PWSUD intensify and reinforce each other brining about worsening outcomes in addiction and social marginalization, affecting the most vulnerable of our population (21).

Burnout literature among medical professionals and other human services occupations consistently suggest that burnout risk is high and particularly among staff who interact with/provide services to people with SUD (22, 23, 24, 25). CLS professionals face mounting SUD caseloads and excessive work demands. This, coupled with making judgments based solely

on personal and situational factors, contributes to burnout, which might be linked to unfavorable attitudes toward DWSUD caught in the net of the CLS. SUD training can help address burnout by providing 1.) education on dimensions of occupational burnout, prevention/intervention strategies, resources, and information that may pertain to CLS professionals' personal lives/struggle with unhealthy coping behaviors (including SUD) as well as 2.) providing information on how to best interface and recommend orders that minimize workload and recidivism. CLS attorneys may feel a sense of profundity in their role and increased effectiveness by recommending orders that facilitate recovery.

Assessing burnout and analyzing how burnout may be associated to the attitudes, beliefs of substance use, SUD and DWSUD has yet to be researched among CLS professionals. Moreover, how burnout and lack of self-care practices relates to possible discriminatory practices in substance use related cases has not been investigated among CLS professionals. There is limited literature on burnout across different occupations and how it impacts practices among clients receiving services. Interestingly, such research is entirely absent among CLS professionals (26). It is reasonable to conclude that the quality of services is impacted, as this is a foundational assumption of burnout (27, 28). Given that the stakes and consequences are high when receiving an SUD related conviction, examining the impacts of burnout on services in the CLS is vital. With this data, we create sufficient data on exploring the role of SUD stigma in the CLS as well as new requirements for legal scholar SUD curriculum. The only study linking attorneys' SUD knowledge to regard for PWSUD showed that beliefs are related to attitudes (29). This study concluded that the importance of educating practitioners on SUD topics would raise awareness and that future studies need to explore the extent of stigma and to how to address

it (29). It is necessary to provide legal offices with an opportunity to learn and explore these modifiable factors (e.g., SUD stigma drivers, facilitators, and practices) creating value to the community by producing wellness minded, well-informed legal professionals, while improving SUD case practices and outcomes for DWSUD involved in the CLS.

This data gives better insight into possible criminal legal education reform and training. This research may create long term implications by instigating more motivation towards the role of legal professionals on SUD laws, policies, advocacy and new drug court/rehabilitation guidelines for prevention, intervention, and better treatment outcomes. Utilizing an employment coordinated, adapted SHEILD intervention for CLS professionals may be an ideal way to engage this population in education on bundled occupational wellness/SUD training. SHIELD training has been utilized to improve officer wellness, knowledge and behaviors related to HIV, IDU, and various laws affiliated with drug use and syringe possession in Mexico and across the United States. Law Enforcement departments who embrace SHIELD's training strategies consistently see improvements in job satisfaction, community health and relations, public safety and reductions in officer stress, burnout, infectious disease risk, and overdose in the community (30). This highlights the benefits of bundling occupational safety/wellness with content intended to shift practices towards PWSUD. Furthermore, many attorneys go on to become politicians, who compose, assess, and vote on the laws we abide by. In 2019 40% of the current Congress attended law school, 54 percent of senators and 37 percent of House members have a law degree (31). With substance use related consequences and laws being closely related to government policy, we must assure that our future politicians are informed. With rising discussion and

interest in decriminalization, it would also be beneficial to educate attorneys on relevant substance use theories and science-driven treatment strategies as alternative solutions.

CONCEPTUAL FRAMEWORK

Stigma is an ancient Greek word that described markings branded on an individual as a sign of disobedience or to identify slaves and criminals (32). Stigma is a long existing human phenomenon that has been documented since Erving Goffman's work in 1963. Goffman writes that stigma facilitates various discrimination that leads to ostracizing an individual or group, minimizes opportunities for individuals to be accepted or advance (33), and exacerbates social disparities (34). Research on stigma across the disciplines of sociology, psychology, medicine, and public health have expanded, creating more understanding on how stigma operates and creates harm among different diseases and identities (35). There is much work on stigma towards individuals with substance use disorders (SUD), mainly discrimination by health professionals and society (35).

Upon an extensive search of stigma literature, it has been discovered that there is a gap in the application of stigma theory within the criminal legal system, and particularly regarding SUD-related cases. This study will greatly inform the evolution and broaden the understanding of stigma existing within the CLS and the legal profession overall. The current work that is available on stigma theory and health professionals can be useful to draw inference.

The Health Stigma and Discrimination Framework (36) was the specific theoretical framework informing this research. Developed and published in 2019, this newer adaptation in

stigma work has been utilized in HIV, as well as physical and mental health research (37, 38). The Health Stigma and Discrimination Framework (FIGURE 1) conveys the stigmatization process as it unfolds across the socio-ecological spectrum in the context of health (36).

The Health and Discrimination Framework illustrates how stigma can be separated into a series of domains, including drivers and facilitators (e.g. fear of infection, authoritarianism, cultural norms) stigma 'markings' (e.g. race, obesity, HIV related health condition), and stigma manifestations/practices (e.g. prejudice and discriminatory attitudes) which influence a range of outcomes among affected groups or individuals (e.g. access to justice or health, adherence to treatment, resiliency), as well as organizations and institutions (e.g. laws, policies, media). These various domains both individually and collectively ultimately impact public and individual health and society.

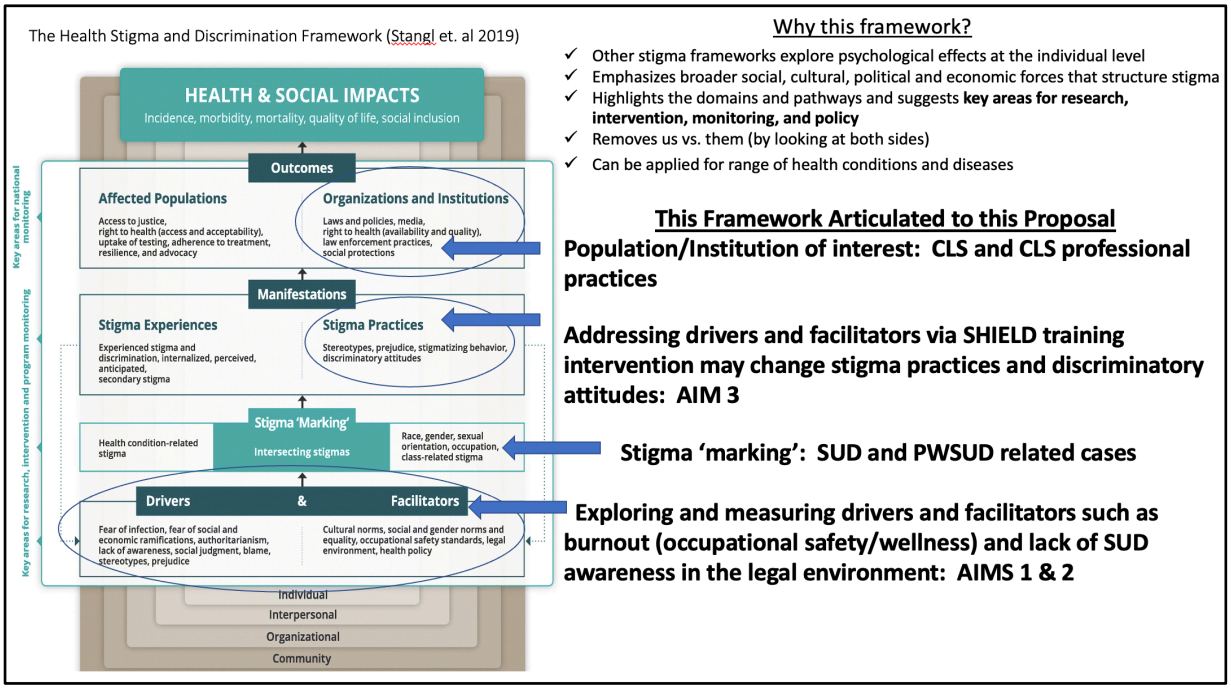

FIGURE 1.1: Health Stigma and Discrimination Framework Articulated to this Study

For the purpose of this study, we looked at the Drivers and Facilitators (burnout, attitudes/regard, lack of awareness, stereotypes, occupational culture norms, issues with working in a legal environment that prevent occupational safety/wellness leading to burnout), Stigma Marking (substance-use "health/medical condition" related), and Manifestations (stereotypes, prejudice and discriminatory attitudes and behavior). This framework helped provide guidance and outline for exploring possible existing stigma within the CLS community towards defendants with substance use disorder (DWSUD), as well as provide evidence that the CLS would greatly benefit from incorporating an adapted SHIELD (occupational wellness/SUD education awareness) training for CLS professionals.

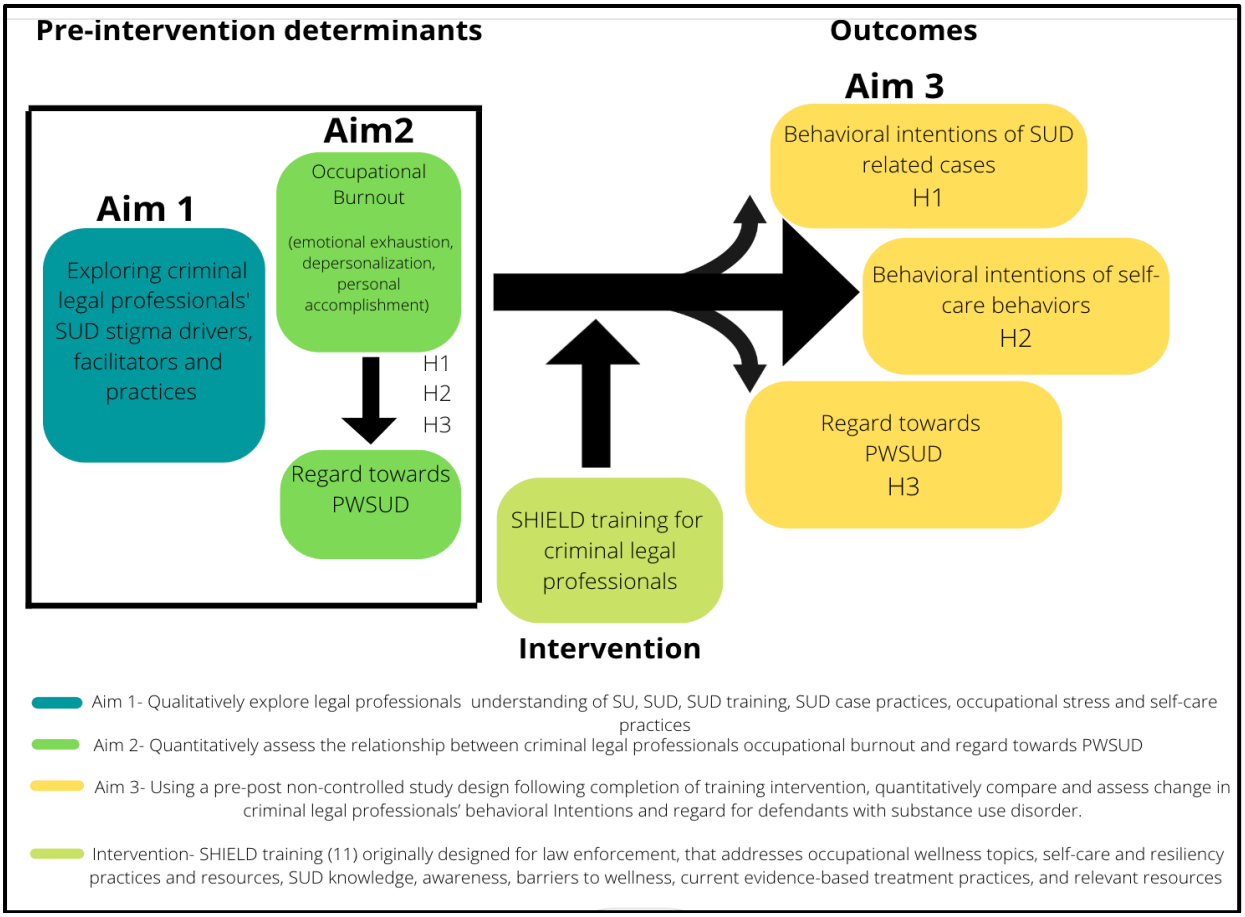

FIGURE 2.1: Overall Dissertation Conceptual Framework

Innovation

In the broader prejudice and discrimination literature, the past two decades have seen a surge in research examining implicit measures of prejudice toward a wide range of social groups, but the explicit, prejudice dynamic between CLS professionals and DWSUD is yet to be researched (39). We contribute to the science and fill the gaps in various ways:

1.) Create foundational literature that explores what is currently known about substance use, substance use disorder, MAT, mental health, and occupational related matters among CLS professionals (Aim 1).
2.) Utilize the Health Stigma and Discrimination Framework (36) as a guide for conceptualizing drivers, facilitators, manifestations of SUD stigma among a new population (CLS professionals).
3.) Utilize scales we have reviewed and assessed from the literature, previously used in healthcare and clinical populations, that have been adapted to the CLS professional demographic (Aim 2 and 3).
4.) Data from this survey creates literature on burnout among CLS professional demographic, SUD stigma and behavioral intentions among CLS professionals (Aim 2 and 3).
5.) Test an occupational health/SUD education awareness training for CLS professionals (adapted from the SHIELD training for law enforcement) assessing for changes in behavioral intentions of SUD related cases (Aim 3-H1), behavioral intentions of self-care practice (Aim 3-H2), and in attitudes toward DWSUD (Aim 3-H3).

AIMS AND HYPOTHESES

We conducted a concurrent triangulation mixed methods study to examine SUD related stigma, burnout, and the preliminary impact of an adapted training for CLS professionals on behavioral intentions and attitudes toward DWSUD. Specifically, in AIM 1, qualitative interviews with CLS professionals gave us an opportunity to ask more in-depth questions on topics of burnout, self-care/coping skills, how these issues may be supported or affect their work, perspectives on working with DWSUD and what may be useful for their educational needs to better serve SUD related cases and practices. Concurrently, for AIM 2 and AIM 3, at SHIELD intervention trainings with various CLS offices, we surveyed a group of CLS professionals' using measures assessing burnout, attitudes towards DWSUD and behavioral intentions of SUD related case practices and self-care activities. AIM 1 was done in parallel with cross-sectional data collection for AIM 2 and AIM 3. Upon analysis, these data were merged to best interpret and validate qualitative and quantitative data to meet the following aims and associated hypothesis (for AIM 2 and AIM 3):

AIM 1 (Paper 1): Conduct 1-hour in-depth interviews with CLS professionals to qualitatively explore occupational pressures, burnout, coping/self-care practices, substance use, SUD and working with defendants with SUD; beliefs, attitudes, knowledge, practices.

AIM 2 (Paper 2): Use pre-intervention data to quantitatively assess the association between CLS professionals' burnout measured by the Maslach Burnout Inventory (MBI) and attitudes towards DWSUD measured by the Medical Condition Regard Scale (MCRS).

H1: Higher emotional exhaustion (EE) scores (subscale from MBI) are associated with negative attitudes toward defendants with SUD (measured by MCRS scale).

H2: Higher depersonalization (DP) scores (subscale from MBI) are associated with negative attitudes towards defendants with SUD (measured by MCRS scale).

H3: Higher personal accomplishment (PA) scores (subscale from MBI) are associated with positive attitudes towards defendants with SUD (measured by MCRS scale).

AIM 3 (Paper 3): Using a pre-post within-subjects study design, assess the preliminary effect of the SHIELD intervention adapted to CLS professionals on changes in their behavioral intentions and attitudes towards DWSUD.

H1: Compared to pre-test observations, mean scores on CLS professionals' (n=behavioral intentions to regularly recommend MAT for SUD related cases will significantly increase, following the intervention.

H2: Compared to pre-test observations, mean scores on CLS professionals' behavioral intentions to engage in self-care behaviors 10 minutes a day, to manage occupational stress, will significantly increase following the intervention.

H3: Compared to pre-test observations, mean scores on CLS professionals' attitudes towards DWSUD will significantly improve, following the intervention.

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CHAPTER 1: "IT IS VERY FRUSTRATING, WE'RE NOT FIXING PEOPLE, WE'RE JUST LIKE, 'CLEAN UP ON AISLE 4'."- EXPLORING THE INTERSECTIONS OF OCCUPATIONAL STRESS, SUBSTANCE USE AND SUBSTANCE USE RELATED-STIGMA AMONG CRIMINAL LEGAL SYSTEM PROFESSIONALS AND THE NEED FOR NEW CURRICULUM.

Background

There is a scarcity of research investigating occupational stress and its impact on criminal legal system attorneys. Among the few studies conducted, one revealed that 25% of prosecutors experienced high burnout levels, associated with heightened utilization of coping mechanisms, such as consuming alcohol and prescription pills, and alienation from loved ones (1). The prevailing literature on attorneys also highlights a significant prevalence of stress, burnout, compromised mental health, and substance use (2). In one state alone, 77% of attorneys practicing various legal specialties experience elevated stress and burnout levels (3), contrasting with 25.2% of the general population (4). In a diverse group of 3,800 attorneys completing a survey, significant mental health challenges were identified, with 31.2% of respondents reporting dealing with depression, and 64% with anxiety (5). A staggering 7 out of 10 attorneys identified mental health and substance use as significant problems within the profession, with an overwhelming 73% of participants acknowledging the influence of their work environment in exacerbating these issues (5).

Moreover, these challenges can profoundly and extensively affect their practice, resulting in a range of adverse consequences. Consequences may include decreased productivity, compromised decision-making, diminished quality of representation, reduced advocacy efforts, high rates of employee turnover, and detrimental effects on personal and professional well-being. Literature among physicians and other healthcare providers demonstrates that occupational stress

has detrimental effects on patient safety, satisfaction, and treatment adherence and outcomes. Physician stress and burnout are significantly associated with a higher likelihood of medical errors, suboptimal patient care (6) and lower patient satisfaction scores (7). Patients experiencing mental health and substance use issues are frequently subjected to reduced engagement, subpar services, and suboptimal treatment (8). Additionally, they may encounter instances of discrimination and judgment when seeking assistance.

The criminal legal profession is immersed in high-stress scenarios, encompassing emotionally charged interactions, high stakes, and exposure to vicarious trauma (9). Additionally, practitioners often carry heavy caseloads, frequently involving substance use disorder-related criminalized behaviors (10). The combination of these stressors, in conjunction with the existing data among general attorneys, emphasizes the importance of exploring how stress and burnout among criminal legal system professionals can lead to mental health challenges, resorting to maladaptive coping mechanisms (e.g., substance use), and other negative outcomes. These consequences encompass stigmatizing attitudes, beliefs, and practices when dealing with challenging clients (such as those with substance use disorder-related cases), and the ethical dilemmas that arise in such circumstances. The paucity of substantial data investigating the impact of these factors on criminal legal professional practices, potential implications it holds for professional conduct and the limited exploration of potential interventions to address these challenges, is cause for concern.

Methods

Study Design & Sample

In this qualitative study, we explore the experiences of professionals within the criminal legal system by utilizing Zoom as the data collection platform. We conducted the study between October 2022 and March 2023. We recruited participants through convenience sampling by distributing flyers via email to various criminal legal system offices and organizations across the country. Eligible participants were 18 years of age or older and currently practicing as a criminal legal system attorney (i.e., prosecutor or criminal defense attorney[1]). Upon establishing initial contact and verifying the fulfillment of inclusion criteria, we forwarded an informed consent document to each participant for their review before the interview. At the outset of the interview, the researcher ensured that the participant read the informed consent and inquired if they comprehended and consented to the terms outlined. If the participant affirmed their agreement, the interview was initiated. Participants were sent a $50 gift card upon completion of the interview in remuneration for their time. The UC San Diego IRB approved all study procedures.

17 participants engaged in this qualitative research study, consisting of 7 females and 10 males. Their ages encompass a range of 25 to 63 years. Majority of participants self-identify as Caucasian. These participants originate from a variety of geographical locations across the

[1] Under the umbrella term criminal defense attorney, the terms "criminal defense attorney" and "public defenders" are often used interchangeably. Both are legal professionals, who specialize in providing defense representation for individuals accused of criminal offenses. Public defenders are government employed public attorneys and are appointed to represent indigent individuals who cannot afford private legal counsel. Criminal defense attorneys include private and government-contracted defense lawyers representing criminal defendants.

country, representing diverse criminal legal offices. Their years of legal experience span a wide spectrum, from 1 to 25 years (see TABLE 1).

Data Collection:

Semi-structured, one-time 90-minute interviews via zoom were conducted by PhD candidate trained by qualitative coursework and senior qualitative investigators on the team. We designed the interview questions based on a pre-existing theoretical framework that focuses on drivers, facilitators, and practices of health stigma and discrimination (11). The Health Stigma and Discrimination Framework (11), published in 2019, has been utilized in HIV, as well as physical and mental health research (12, 13). This framework illustrates how stigma can be separated into a series of domains, including drivers and facilitators (e.g., occupational stress, burnout, authoritarianism, occupational cultural norms) stigma 'markings' (e.g. substance use and mental health), and stigma manifestations/practices (e.g. prejudice and discriminatory attitudes) which influence a range of outcomes among affected groups or individuals (e.g. access to justice or health, adherence to treatment), as well as organizations and institutions (e.g. laws, policies, media). These various domains both individually and collectively ultimately impact public and individual health and society.

Open-ended questions were designed to explore the following key domains: 1) occupational stressors and burnout as possible drivers and facilitators of stigma, 2) coping mechanisms, self-care literacy and occupational support/resources to reduce substance use and mental health stigma, and 3) substance use disorder stigma manifestations/practices and knowledge, training needs as possible intervention for increasing occupational wellness and reducing substance use stigma. Interviews were audio-recorded and transcribed using zoom

platform. Transcripts were reviewed after every interview for accuracy and maintaining confidentiality by removing any identifying information prior to analysis.

Data Analysis:

We analyzed data using a deductive thematic analysis approach (14). We scheduled weekly team meetings for discussing data collation progress, saturation, coding, and analysis/interpretation of data. The analysis was guided by extant literature on behavioral and healthcare professionals as well as our theoretical framework (11). The transcripts were read and re-read several times to identify potential themes that aligned with the pre-existing theoretical framework and key domains.

A coding scheme was developed based on the framework, key domains involving high-pressure and emotionally demanding environment of the criminal legal occupation on professionals' stress levels, how this stress might be linked to cases involving substance use, as well as its potential role in driving and facilitating substance use-related stigma and the feasibility of implementing a curriculum-based intervention to address these challenges. We applied the codes to the transcripts, and the data was organized into themes and subthemes. The themes were reviewed and refined based on the relevance to the key concepts and theoretical framework.

Finally, the demographic data (see TABLE 1), relevant codes, themes, and quotes were organized into an excel document. This excel document was used to monitor data collection to determine when saturation began to occur. Methodological guides to conducting qualitative research do not endorse specific sample sizes, emphasizing instead the need to continue until

'saturation' is reached, meaning additional interviews cease revealing fundamentally new material (15, 16). The few guidelines that exist suggest that saturation is usually achieved within 15-40 interviews, lending confidence that a sample of 17 participants is sufficient to achieve saturation (15). We observed saturation among occupational stressors and affiliated subthemes by the 13th interview. Themes related to substance use and substance use related stigma reached saturation by the 12th interview. Themes related to curriculum and training issues reached saturation by the 15th interview. By the 17th interview all themes reached consistent saturation and the decision to conclude data collection was made. Themes and memos were discussed during multiple team meetings to develop a coherent narrative that addressed the research questions of occupational stressors, associated factors and the drivers, facilitators, and practices of substance use disorder stigma. Quotes from participants are provided below to illustrate key themes.

Results

We conducted 8 interviews with criminal defense attorneys and 9 interviews with prosecutors. Key findings are outlined numerically (1-5), while subthemes are delineated using alphabetical markers (a-f).

Key Qualitative Findings

1. **The criminal legal profession is a high-pressure, high-stress profession with various factors contributing to occupational stress and burnout.**

Every participant confirmed that individuals within the criminal legal system frequently encounter emotionally charged and demanding situations, resulting in physical, emotional, and

psychological symptoms. Several factors as subthemes (identified with letters) contribute to the stress experienced by individuals in this profession:

a. **High Stakes:** The criminal legal system deals with overseeing serious issues, such as crimes, allegations of wrongdoing, and potential severe consequences for those involved. The authoritarian, punitive characteristics of the CLS can foster a climate of judgement and pressure to pursue or protect against the most severe legal penalties. The weight of responsibility in handling cases with significant impact on individuals' lives and the lives of their families can be overwhelming.

"These are real people...as the lawyer you're responsible. There's so much additional pressure, because if you mess up, someone can go free who's very dangerous…or someone could experience consequences not fitting for the charge."

- Deputy Prosecutor, practicing 10 years

"We are a part of people's stories, in people's lives, navigating people's families and dynamics, coordinating, and trying to help, translating the law and what is happening. Because I'm the type of person that if somebody's mom calls me, and I can try and help ease her mind or give her information, I'm going to do it because I have kids…If it was my kid, I would want to know."

- Criminal Defense Attorney, practicing 15 years

b. **Emotional Impact:** Dealing with victims, witnesses, and defendants who may be going through traumatic experiences can take an emotional toll on criminal legal professionals. This emotional impact seems to be compounded by the initial desire to "help people" when being called to a legal position of public service. Exposure to distressing situations

can lead to compassion fatigue or secondary trauma (physical and emotional exhaustion often experienced by helping professionals, due to their continuous exposure to others' suffering, distress or engaging with traumatic experiences). Participants felt underprepared for this aspect of the work, lacking training on how to support themselves, peers, victims, or defendants.

"Recently we had a mass shooting here in our county, and I had to watch the body cam footage all night, and I was just sitting there watching it. I felt like my body was dissociating a little bit to protect myself because I didn't feel anything about it. I just felt like I was watching TV. But then, I see my staff that are dealing with it, and they're in the room, they're shaking, and some of them were having some really bad symptoms afterwards, so just seeing how it affected people in real life…"
- Elected District Attorney, practicing 16 years

"Often times I am taking on responsibilities that are like a social worker or a therapist, talking to moms or children about the struggle of someone they love…I was trained in aspects of the law not as a counselor for people's lives. The Criminal Justice System does not recognize that part of the job."

- Criminal Defense Attorney, practicing 23 years

c. Media and Public Scrutiny: High-profile cases, rising crime rates, public safety and social-political issues may attract media attention, leading to public scrutiny of the legal professionals involved. This additional pressure can be stressful for those seeking to maintain professionalism and privacy.

"There is a lack of perception on what the reality is surrounding a case, why a plea bargain that sounds terrible was made, or charges were dropped. There is stress, knowing that

everything that you do also reflects on your elected prosecutor. So, you're almost double burdened by it. And then there's always a human factor of fear of failing in front of the world."

- Deputy Prosecutor, practicing 10 years

The issue of how legal proceedings are portrayed in TV and film create a public perception of speed and simplicity, when many cases require months of investigation and preparation:

"You know, with all these various shows on TV, people think they understand how the criminal justice system functions. They don't get to see the amount of work that goes in to one single case or trial."

- Deputy Prosecutor, practicing 7 years

Many criminal legal defense attorneys feel as though they are misunderstood and underappreciated by the public and their clients.

"A lot of my clients in this experience have no faith in their public defender… or as they call us- 'public pretenders' …or even just the criminal justice system in general. I get it because the system fails them a lot of the time. But most of us get into this job to truly fight for them."

- Criminal Defense Attorney, practicing 13 years

d. High Caseloads (with substance related cases as the bulk) creating futility, stereotypes, and blame.

Criminal defense attorneys and prosecutors (in particular) face heavy caseloads, leaving them with limited time to thoroughly prepare for each case and feeling professionally inefficacious. Participants described managing 80-600 cases at a time depending on where they are assigned (juvenile, child support, misdemeanor, or felony) and if they are

a county or contracted attorney. These heavy caseloads are due to lack of funding for resources and inconsistencies in mandatory caseload caps. The bulk of the caseloads primarily involve substance use related cases. Participants reported that 60-90% of their cases involve substances or substance use disorder related criminalized behavior, creating stressors they are not prepared or properly resourced for:

"You may have to decipher if a psychological evaluation is necessary…which have waitlists, [and] coordinate with the program for transportation (and other logistics). You're basically an attorney and a social worker for a lot of these cases (due to lack of funding for staff and resources)."

- Criminal Defense Attorney, practicing 7 years

Lack of resources and ineffective court judgements often lead to a sense of futility and cynicism for substance use-related cases. As one Criminal Prosecutor (practicing 24 years) stated *[Referring to substance use cases] "...it is very frustrating, we're not fixing people, we're just like, 'clean up on aisle 4'."*

This sense of futility leads to stereotypes and blaming of defendants with substance use disorder or substance use-related cases, particularly those who recidivate or use certain substances. Majority of participants endorsed hearing or using labels for these defendants or cases such as *"frequent flyer, meth head, junkie, tweaker, druggie, addict, drunk, alchy, lizard, repeat offender…"*

Blaming often comes with implications of withholding lifesaving treatment and needing severe consequences. As one Criminal Defense Attorney (practicing 14 years) shared; *"I had a prosecutor once tell me, if I had Narcan, and someone was overdosing in front of*

me, I'm not sure I'd give it to them because they kind of brought it on themselves. It's a punishment, you know. Overdosing is a punishment for your decision to do drugs."

e. Lack of work-life balance creates occupational culture void of empathy and self-care.

There was a consistent finding within the interviews that there is a culture of intense work driven, work focused, long hours within both law school and as a practicing criminal legal attorney. There were also reports of a "pay your dues" attitude many seasoned attorneys and judges have within the field. Participants in this study reported that any empathy or discussion of self-care is virtually non-existent within the practice. Any training or discussion on self-care management is often presented as the responsibility among the individual as opposed to an organizational responsibility to offer employees opportunities for increased health and wellness. Many professionals are given resources for the American Bar Association (ABA), Judges and lawyers assistance (JLAP) or their employee assistance program (EAP), but this is viewed more as a practicality rather than discussed, required, or encouraged.

"I've seen so many colleagues who put in so much overtime and effort… I worry about the young ones because they will think it's normal. It's broken so many down… there was one person in our office…we knew she had relapsed, and none of us knew what to do, we all just felt so helpless because we knew what was happening, but there was no protocol, the office doesn't have one. I try to refer people to our employee programs, but they don't do anything helpful."

- Criminal Defense Attorney, practicing 13 years

2. Substance use is promoted, often to cope with stressors of the profession.

Substance use (mainly alcohol use) was reported consistently throughout all interviews as a form of stress management, bonding, and networking. Prior research has been done on the extent of mental health and substance use by law school students and within the legal profession and has been referred to as "the elephant in the room" (17,2).

One participant described the substance use as fitting within *"a lot of work hard and play hard mentality,"* in their law school, which held events called *"Bar Night, [with] a lot of the socializing [around] drinking and smoking and other drugs."*

-Deputy Prosecutor, practicing 15 years

One participant spoke to bonding *"We'll go out. We'll go out and drink here and stuff. We're all friends right now, so it is good, and that helps…because they can kind of understand what we're going through more than our spouses can, and it's almost like we're close to these people than our spouses, and they know."*

- Deputy Prosecutor, practicing 7 years

3. Aversion to addressing issues of (personal) substance use and mental health may be a driver of stigma.

A prevalent theme identified in this qualitative study was the presence of stigma associated with the use of non-alcohol substances and the acknowledgment of having a substance use disorder.

"There is definitely stigma if you're considered an addict…but drinking and things like that are considered part of the legal professional culture."

- Criminal Defense Attorney, practicing 7 years

Another participant reported:

"You know they have happy hours and all that stuff for attorneys, so I feel like drinking and alcohol isn't considered as big of a problem."

- Deputy Prosecutor, practicing 20 years

Stigma is also discussed in relation to the concept of avoidance and denial of personal mental health and/or substance use disorder in criminal legal professionals. This avoidance and denial seem to create the practice of identifying differently than defendants with substance use disorder. It was reported in this study that many colleagues of participants saw their drinking and substance use behavior as "different" and "not as bad". Justifications and denial of their own substance use, and misuse was described as: "fine" when attached to their career advancement and stress management, accepted, and even encouraged (as opposed to "breaking the law"). It was reported by participants that there is an external and internal incongruency of substance use values (with criminalized deviant behavior being the separator) among legal colleagues who use substances. One participant reported:

"I have so many colleagues who drink too much and when I ask if they want to join our recovery meetings we hold for clients at the courthouse it's just like 'Well, I'm the lawyer. I'm in control. I have my shit together. I represent the people that don't have their shit together."

- Criminal Defense Attorney, practicing 15 years

Another participant reported:

"I have many legal friends who are "functioning" alcoholics. They wouldn't call themselves that of course. They don't see themselves as having a problem…mainly because of their prestigious position and privilege. In their mind they're not in the same category as the people they prosecute or defend."

-Senior Criminal Defense Attorney, practicing 23 years

f. American Bar Association (ABA) seems to be behind or "not doing enough" to address substance use within the legal profession.

The ABA is also viewed as "falling short" in incorporating these topics into curriculum and attorney education/intervention. As one criminal defense attorney (practicing 7 years) said, *"Often times the Bar will look the other way once an attorney starts falling short due to their drinking or whatever. They don't usually intervene until it gets really bad."*

Another participant stated:

"The ABA is kind of out of it. They don't know much about substance use, addiction even when it comes to their own attorneys. They too are out of the loop; they don't really understand or know or concern themselves with that kind of stuff."

-Deputy Prosecutor, practicing 24 years

4. Inadequate training for the issues and cases criminal legal professionals' encounter.

There seem to be missing components to the curriculum of law school and continuing education. Although the practice of law may involve different specialties, there are common issues that all attorneys may find themselves faced with. Given the complexities of our nation's current political and economic climate, knowledge on systems (and how these affect various populations) may be necessary to understand future clients' barriers to justice and ways to support resilience while navigating these interlocking systems. It may also be important for attorneys to understand trauma, manifestations of trauma and how their own trauma may affect/transfer onto clients or case proceedings. As stated in earlier findings, self-care awareness, healthy stress coping and being aware of addiction is necessary for the physical and mental

health of legal professionals. Participants described a lack of knowledge, awareness and misinformation on substance use, substance use theories, science-based interventions like medication for addiction treatment (MAT) or barriers faced by defendants with substance use disorder, as a Criminal Defense Attorney, practicing 15 years stated, *"The general attorney population doesn't think they need to know those things, they're oblivious to their misinformation or lack of information."*

"I think it would've been good to have some substance use stuff… for the same reasons a lot of clients can have trauma, a lot of clients can have substance use issues, in order to understand that, and some sort of self-care component, so attorneys can even see some of their own addictions."

-Deputy Prosecutor, practicing 7 years

Many participants endorsed seeking knowledge on their own time or based on their own personal experiences (themselves or a loved one) with substance use or trauma.

"Mostly everything I know and what I have shared with you has been acquired from reading books like 'The Body Keeps the Score'.

-Elected District Attorney, practicing 16 years

"I do my own reading and learning about addiction because I have a few people very close to me who struggle."

- Criminal Defense Attorney, practicing 15 years

5. **Substance use curriculum could be beneficial for law students (as a clinic) and current legal professionals (as continuing education credits workshop)**

Majority of our participants reported that incorporating a substance use awareness curriculum would be beneficial for legal scholars and professionals. Substance use awareness can be beneficial both for the legal community in their own lives and the clients they serve. Participants of this study offered and/or endorsed suggestions of how to incorporate substance use disorder curriculum. All participants believed that a curriculum would be beneficial for both law students and practicing attorneys (particularly those that are engaged in public service) but presented in different ways. Legal students would benefit from a more "hands on" approach by participation in a clinic (working with "real" substance use clients) with guidance from a professor or in a drug court setting. Practicing attorneys would benefit from a continuing education units (CEU) workshop, as they are required to gather CEU's every year to keep their license current. These workshops can offer units in a variety of areas (which increases the appeal) such as Ethics, Recognition and Elimination of bias and Competency.

One participant stated:

"Well, we had some clinics, you could do a clinic, we have legal clinics. Clinics are like internships when you go actually take on clients and the supervisor is your professor. So, you actually work cases, so you get hands-on experience."

- Criminal Defense Attorney, practicing 14 years

"Getting in contact with the bar association and putting on continuing education trainings for federal and public defenders, DA's, putting on trainings for them especially since we are doing the work directly."

- Deputy Prosecutor, practicing 25 years

Discussion

This study filled knowledge gaps concerning occupational stress experienced by criminal legal system professionals, the various manifestations of stress they encounter, and how these factors drive and facilitate practices of stigma surrounding substance use. Additionally, we highlight the importance of incorporating curricular content on these issues to better support the well-being of legal professionals and the clients they serve. The existing literature on occupational burnout, stigma, biases, and discrimination towards individuals with substance use disorder among criminal legal professionals is limited. Based on insights from previously mentioned studies conducted among medical and health professionals, we assert that similar information is crucial for criminal legal system professionals due to the demanding and high-stress nature of their occupation, combined with frequent and judgment-oriented interactions with defendants with substance use disorder. The lack of relevant substance use curriculum, along with the intense stressors, privileged, and authoritative aspects of their profession, may contribute to the development of substance use stigma and negative perceptions toward substance use related cases.

This study revealed that the high-stress environment of practicing within the criminal legal system may result in professionals becoming overworked, less empathetic, neglectful of self-care, and in turn, battling with mental health issues. Existing data show 28% of attorneys reported experiencing "mild or higher levels of depression," and nearly 50% expressed concerns about experiencing depression at some point during their career (2). Legal professionals may resort to substance use, sometimes encouraged by offices and law schools to maintain an elite image, bond with peers, network at events and cope with the stressors of the work. Alcohol is the

main substance normalized among this profession, but other drug use is more stigmatized. This finding is supports one of the largest studies done, based on responses from almost 13,000 attorneys, which found that about a fifth of all lawyers qualify as problem drinkers, but many declined to answer other drug related survey questions, perhaps due to the stigma surrounding drug use and questions of fitness to practice (2). Additionally, many procedures, organizations, occupational culture, and curriculum within the legal profession are insufficient and do not align with current demands/necessities regarding substance use-related cases. There are indeed missing components in the criminal legal system professionals' curriculum, including material on trauma, substance use disorder, self-care, assessing stigma and biases, and strategies to avoid burnout, which can have significant consequences for just legal representation. Many criminal legal professionals' lack knowledge of substance use theories, interventions, or most recent evidence-based treatments (like MAT), to best interface and prepare for the cases/clients they serve. Addressing these gaps in the curriculum could be achieved through clinical training for students and incorporating continuing education requirements for practicing professionals.

One profound and unexpected finding was the phenomenon of "distancing" or viewing one's own substance use issues as "different" than defendants with similar issues. This highlights the sociological phenomenon of "othering/distancing" in which some individuals (in-group) define others (out-group) as not fitting in with their group, leading to negative perceptions, prejudice, and discriminatory practices (18). Othering is a phenomenon often studied by sociologists that is used in developing self-identity, to create, validate and strengthen one's sense of self (esteem and worth), oneself often becomes defined against another. Recent use of the term "the other" has come to be most used to refer to an individual or group who has been or is

being marginalized (stigmatized) from another (19). Most literature relating to “othering” and substance use disorder show that this is an attempt to psychologically distance from being associated with, labeled as, or identifying with negative stereotypes of the diagnosis (20, 21). Apart from the lack of information, substance misuse among "others" (e.g., defendants with substance use disorder) is stigmatized and considered less justified due to its lack of association with elite occupational activities, scholastic "maintenance", and the potential involvement of criminal charges. This insight is crucial in understanding how power dynamics and the legal community's culture may contribute to overt and covert discriminatory outcomes for individuals seeking fair and just treatment within the legal system. This information underscores the need to explore areas of social psychology and reevaluate the distribution of power within occupations with an aspect of influence over the public. Furthermore, this finding supports further examination of the potential benefits of integrating substance use curriculum into legal training that incorporates a science and public health approach presented by a legal peer and an individual with lived substance use disorder experience. Mental health stigma research shows that direct education, open conversation, and exposure to the “stigmatized” population can create change in perspectives and reduce stigma (22). Moreover, recent research has found that incorporating stigma dialogue within the higher education environment is valuable (23, 24).

These findings emphasize the need for targeted interventions, educational reforms, and workplace support to address the mental health and substance use challenges faced by criminal legal professionals. Curricular enhancements that integrate substance use awareness, self-care strategies, and trauma-informed approaches could better prepare legal scholars and practitioners to navigate the complexities of their profession. Additionally, addressing stigma towards

substance use and mental health within the profession is vital to promote a more empathetic and supportive environment.

While this study offers valuable insights, several limitations should be acknowledged. The qualitative nature of our research limits the generalizability of findings to a broader population of criminal legal system professionals. Additionally, it is important to note a limitation related to the demographic composition of our participant sample. The majority of participants in our study identified as Caucasian, which resulted in a lack of diversity within our sample. This lack of diversity may limit the generalizability of our findings to more racially diverse populations within the criminal legal occupation. It is worth emphasizing that this observed demographic skew is reflective of the broader racial disparities present in the criminal legal occupation itself, where underrepresentation of individuals from historically marginalized racial and ethnic backgrounds is a well-documented issue (25, 26). These disparities are indicative of larger structural inequalities within the profession, including recruitment, retention, and promotion practices, which may have contributed to the demographic composition of our participant pool. The cross-sectional design of our study captures a snapshot in time and may not account for potential changes or developments over longer periods. The use of self-reported data could introduce bias or social desirability effects, potentially influencing participants' responses. Moreover, the study's reliance on convenience sampling may result in a sample that is not fully representative of all criminal legal professionals.

Despite these limitations, our research provides a significant contribution by uncovering the complexities of occupational stress, substance use, and stigma within the criminal legal

profession. Further research, including longitudinal studies and quantitative assessments, is necessary to validate and expand upon our qualitative findings. Proactive interventions, curricular enhancements, and policy changes are warranted to promote the mental health and well-being of legal professionals and to ensure equitable and ethical legal representation within the criminal legal system.

Chapter 1 contains unpublished material coauthored with Bazzi, Angela R., Beletsky, Leo, Reed, Mark B., Pitpitan, Eileen V., Smith, Laramie R.

The dissertation author was the primary investigator and author of this chapter.

TABLE 1.1: Descriptive characteristics of CLS professional interview participants

POP Study ID	Age in years	Hispanic / Latino (Y/N)	Race	Gender	Years of Legal experience	Type of law practiced
00-001	43	N	Caucasian	F	14	CD
00-002	35	N	Caucasian	M	7	CD
00-003	47	N	Caucasian	M	15	DA
00-004	25	N	Caucasian	F	1	CD
00-005	41	N	Caucasian	F	15	CD
00-006	51	N	Caucasian	F	23	CD
00-007	38	N	African American	F	13	CD
00-008	30	N	Caucasian	M	2	CD
00-009	63	N	Caucasian	F	22	DA
00-010	35	N	Caucasian	M	10.5	CD & DA (current)
00-011	41	N	Caucasian	M	20.5	DA
00-012	33	N	Caucasian/Asian	M	7	DA
00-013	28	N	Caucasian	M	3	DA
00-014	37	N	Caucasian	M	10	DA
00-015	49	N	Caucasian	M	25	DA
00-016	50	N	Caucasian	M	24	DA
00-017	40	N	Caucasian	F	16	DA

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CHAPTER 2: THE RELATIONSHIP BETWEEN OCCUPATIONAL BURNOUT AMONG CRIMINAL LEGAL SYSTEM PROFESSIONALS AND ATTITUDES TOWARDS DEFENDANTS WITH SUBSTANCE USE DISORDER.

Background

Occupational burnout is a state of physical, emotional, and mental exhaustion that results from prolonged exposure to stress in the workplace (1). The dimensions of burnout include emotional exhaustion, which reflects feelings of depletion and fatigue; depersonalization, characterized by a detached and cynical perspective; and personal accomplishment, representing a sense of efficacy and fulfillment in one's work (1). Workplace stress and associated consequences of burnout are estimated to cost more than 500 billion dollars in the United States alone, resulting each year in 550 million workdays lost due to stress on the job (2). According to a study by the World Health Organization, employee burnout and its associated symptoms are estimated to cost 1 trillion dollars globally, due to turnover and lost productivity (3). Burnout can affect individuals in any profession, but it is particularly common among ambitious, high-performance professionals in healthcare, social work, and other helping professions (4,5). Doubly concerning is the fact that occupational burnout can significantly impact the quality and effectiveness of services provided in various professions, and attitudes towards those they serve (6,7). The burnout literature among counselors and other healthcare professionals show that lack of resources, inadequate education and demanding caseloads increase provider burnout and can negatively impact client treatment outcomes (8). Existing research among behavioral and healthcare professionals shows that these negative treatment outcomes most often affect patients struggling with addiction and are closely associated with substance use disorder (SUD) stigma.

Criminal legal system (CLS) professionals' (prosecutors and criminal defense attorneys[2]) are public servants and arguably fall into the helping profession category, but there is little research assessing their burnout and how this relates to attitudes toward defendants with substance use disorders (DWSUD). Studies investigating burnout among medical professionals and other human services occupations consistently indicate a substantial risk of burnout, especially among personnel engaged in interactions with or providing services to "difficult clients", including individuals with SUD (9, 10, 11, 12). Often, CLS professionals are handling 200-600 cases at a time (13,14). Reports in recent qualitative research suggest that 60-80% of these criminal legal cases are substance use related (see dissertation paper 1, key findings #1, subtheme d). Additionally, nearly 85% of the US incarcerated population has a substance use-related issue (15) ranging from crimes committed while intoxicated, to acquiring means/funds for substances, to sales and distribution. These staggering statistics support the need for research on the association between CLS professionals' occupational burnout and attitudes towards DWSUD, to better understand the role SUD-related stigma plays in the CLS.

SUD stigma refers to the negative attitudes, stereotypes, and discriminatory practices that people use to discredit and devalue those who struggle with addiction (16). SUD stigma is pervasive, but it has largely been explored (within medical and behavioral health professionals) in relation to willingness to engage with people with SUD, quality of services provided, administering life-saving medication and appropriate treatment (17,18). The existing literature

[2] Under the umbrella term criminal defense attorney, the terms "criminal defense attorney" and "public defenders" are often used interchangeably. Both are legal professionals, who specialize in providing defense representation for individuals accused of criminal offenses. Public defenders are government employed public attorneys and are appointed to represent indigent individuals who cannot afford private legal counsel. Criminal defense attorneys include private and government-contracted defense lawyers representing criminal defendants.

addressing negative attitudes and stigma consistently finds that lack of education, burnout, and negative exposure creates both implicit and explicit bias (19), therefore possibly affecting trial outcomes, incarceration rates, and treatment strategies (within the CLS).

The relationship between burnout among CLS professionals and the stigma towards DWSUDs constitutes a troubling cycle. On one hand, the high levels of burnout experienced by these professionals can inadvertently reinforce existing stigmas. Burnout can lead to high depersonalization, emotional exhaustion, and low perceived effectiveness (1), which may translate into cynicism toward SUD-related cases, harsh judgments and negative attitudes towards defendants struggling with SUD. This, in turn, further marginalizes and stigmatizes these defendants within the CLS, potentially leading to a lack of engagement in case-related orders, disillusionment with the systems integrity and consequentially, perpetuation of the cycle of recidivism. Conversely, it is herein hypothesized that the stigmatization of DWSUDs can significantly contribute to the burnout experienced by legal professionals. Constant exposure to individuals that re-enter the system, trigger stigmatizing attitudes and societal biases can intensify stress levels, create a lack of professional efficacy and emotional exhaustion among these professionals, undermining their overall well-being. Recognizing this reciprocal relationship highlights the importance of addressing both burnout and stigma in the CLS to promote fairer, efficacious, more compassionate practices that benefit both CLS professionals and the individuals they serve.

Assessing how burnout may be associated to stigmatizing attitudes, beliefs, and behaviors towards SUD and DWSUD has yet to be researched among CLS professionals. Additionally, how burnout relates to possible discriminatory practices in substance use related cases has not

been investigated among CLS professionals (20). As CLS professionals are exposed to increasing SUD caseloads, being overworked, and drawing inferences from solely personal and situational circumstances, this leads to burnout which may be associated with negative attitudes towards DWSUD. This study was designed to test the following hypotheses:

H1: Higher emotional exhaustion (EE) scores (subscale from MBI (1)) are associated with negative attitudes toward defendants with SUD (measured by MCRS scale (21)).
H2: Higher depersonalization (DP) scores (subscale from MBI (1)) are associated with negative attitudes towards defendants with SUD (measured by MCRS scale (21)).
H3: Higher personal accomplishment (PA) scores (subscale from MBI (1)) are associated with positive attitudes towards defendants with SUD (measured by MCRS scale (21)).

Methods

Participants and Procedures:

This analysis utilizes baseline data from CLS professionals who attended one of six didactic educational intervention sessions targeting burnout and SUD awareness and attitudes. Participants attended these trainings through their employer in order to foster their professional development on occupational wellness as well as to increase SUD-related education for occupational efficacy. Offices included two county public defense[3], two county prosecution, one

[3] In the language of criminal defense, the terms “criminal defense attorney” and “public defenders” are often used interchangeably. Both are legal professionals, who specialize in providing defense representation for individuals accused of criminal offenses. Public defenders are government employed public attorneys and are appointed to represent indigent individuals who cannot afford private legal counsel. Criminal defense attorneys include private and government-contracted defense lawyers representing criminal defendants.

statewide public defense program, and one nationwide prosecution program. Participants were eligible if they were over 18 and a current attorney or staff working in a criminal legal office.

Participants were consented and invited to complete a baseline quantitative survey, self-administered online via Qualtrics software which they accessed through a QR code and URL, which was posted on a slide at the beginning of the training intervention. Participants took the pre-training survey during the first ten minutes before the training started. Baseline responses from all six trainings yielded 127 unique participants. A descriptive sample of 109 participants remained for IV constructs of EE, DP and PA and covariates (see TABLE 2.1). After accounting for further missing data, an analytic sample of 101 participants remained for the regression models (see TABLE 2.3).

Measures:

The Medical Condition Regard Scale (MCRS) (21) was used to assess the outcome variable of interest. MCRS has been used in previous literature with physicians, counselors, and other health and human services trainees and clinicians to measure responses to patients they like and dislike, assessing for positive and negative regard (22, 23, 24, 25, 26). The MCRS was used for this study to measure the stigmatizing attitudes participants have toward the medical condition of SUD. One main component of stigmatizing attitudes, which relates to this work, is how stigmatizing attitudes and negative feelings toward SUD may lead to the unwillingness to treat, interact with or discriminatory behavior that prevents facilitating SUD treatment, support, and recovery. This measure has been applied to various medical and psychiatric conditions and has showed with psychometric properties of Cronbach's alpha of 0.87 and a test-retest reliability of 0.84 respectively for assessing attitudes for any medical condition (27, 28, 29). In the original

study (30), testing psychometrics, Cronbach's coefficient alpha for the MCRS was α=.87, and all factor loadings were greater than .40. The test–retest reliability coefficient was .84. A test of construct validity revealed that the MCRS identified a difference in attitude changes between medical students who had rotated on an addiction treatment program than those who had not (31).

MCRS use has shown valid and reliable results in attitudes towards specific medical conditions and whether individuals in the health and human services fields find working with such medical conditions to be enjoyable, treatable, and worthy of medical resources. We contacted the co-creator of the MCRS to inquire on permission for adaptation, which was granted. We modified this scale for CLS professionals by changing the language from *"patient"* to *"defendant"*. We also modified questions that relate to medical resources/treatments (e.g., *"I can usually find something that helps patients like this feel better."* modified to *"I can usually find strategies that helps defendants like this attempt/access recovery.")*. Additionally, we modified questions that apply to public funds used by the local governments to handle SUD related cases, as well as facilitating recovery (e.g., *"Treating patients like this as a waste of money."* modified to *"Dealing with defendants like this is a waste of taxpayer dollars."*). A sample item for negative attitude toward DWSUD is *"Defendants like this irritate me."* A sample item for positive attitude toward DWSUD is *"Working with defendants like this is satisfying."*

Modified scale items were reviewed and approved by dissertation committee. Key informant surveys were administered before data was collected to ensure time and modified language appropriateness.

The MCRS item responses are scored on a 6-point Likert-scale ranging from (1) Strongly disagree; (2) Disagree; (3) Not sure but probably disagree; (4) Not sure but probably agree; (5) Agree; (6) Strongly agree. Items are summed to produce a single score, with lower items reflecting lower regard (i.e., greater stigma). In a previous study, the MCRS score range was from 11 (lowest regard) to 66 (highest regard) (31). Six items are affiliated with positive attitudes (items 1, 2, 4, 6, 9, 10) and 5 items are affiliated with negative attitudes (items 3, 5, 7, 8, 11) Responses to these five negative regard questions (items 3, 5, 7, 8, 11) are reverse coded prior to computing the total score. This composite score is what was used as the outcome in the current analysis.

The Maslach Burnout Inventory (MBI) (1) subscales are what were used as the three independent variables of interest. The MBI is a psychological assessment instrument comprising 22 symptom items pertaining to occupational burnout. The MBI has been used extensively in research for more than 25 years since its initial publication. The MBI survey addresses three burnout constructs (subscales); **Emotional Exhaustion** (EE) (9 items), which measures feelings of being emotionally overextended and exhausted by one's work, **Depersonalization** (DP) (5 items) measuring the disconnected and impersonal response to recipients of one service/work, and **Personal Accomplishment** (PA) (8 items) which measures feelings of competency in one's work. Several studies have assessed the validity and internal reliability of the MBI's three-factor structure and reported estimates of internal reliability (Cronbach's alpha) ranging from α= .90-.77 for emotional exhaustion, α=.76-.71 for depersonalization and α=.78-.71 for personal accomplishment (32, 33, 34, 35, 36). Similarly, strong test-retest reliability has been established for the MBI subscales (.60 to .89) (32). Burnout on these subscales is determined as a continuous score rather than an arbitrary dividing point between "present" and "absent." A

burnout profile is obtained via composite scores on each of the three dimensions (37). A sample item for Emotional Exhaustion is *"I feel frustrated by my job."* A sample item from the Depersonalization subscale is *"I've become more callous toward people since I took this job."* A sample item from the Personal Accomplishment subscale is *"I feel I'm positively influencing other people's lives through my work."*

All the MBI items are scored using a 7-point Likert scale from Never (1), a few times a year (2), once a month (3), a few times per month (4), once a week (5), most days (6), Everyday (7). Responses to each subscale are summed and used to interpret degree of burnout as follows: Emotional Exhaustion (0-17 = low-level burnout, 18-29 = moderate burnout, ≥30= high-level burnout), Depersonalization (0-5= low-level burnout, 6-11 = moderate burnout, ≥12= high-level burnout), Personal Achievement (0-33= high-level burnout, 34-39 = moderate burnout, ≥40= low-level burnout). Low scores on PA subscale indicate a higher level of burnout. We use composite scores on the EE, DP, and PA subscales as three independent exposures to test their association with attitudes towards DWSUD among CLS professionals in the current study.

Covariates of interest include sociodemographic information (age, gender, ethnicity, race) and key occupational characteristics such as job position (e.g., Criminal Defense Attorney, Prosecutor), and length of time working in the CLS.

Age was measured as a continuous variable by self-report at time of survey completion. Next, participants were asked to report their gender. The response options were "Man", "Woman", "Transgender Man/Transmasculine", "Transgender Woman/Transfeminine", "Non-binary", "Prefer not to say", if they felt none of the options were applicable, participants were given the opportunity to write in an identity that best describes them. Based on the patterns of

responses, we chose to further collapse this variable into the following categories: “Man”, “Woman”, “Another Gender”. The “Another Gender” variable was comprised of 2 participants who preferred not to report their identity and 1 participant who identified as “Agender”. Due to these low response numbers, we made the choice to combine these responses into one category. The variable of gender was then dummy coded for insertion into the linear regression model with “Man” serving as the reference group.

Ethnicity and race were measured as two separate variables. Ethnicity was measured by asking participants to choose one of the two response options “Hispanic, Latin-X” or “Non-Hispanic, Latin-X”. Participants were asked to “select all that apply” regarding their race. The response options were “White”, “Black or African American”, “Asian”, “American or Alaskan Native”, “Middle Eastern or North African”, “Native Hawaiian or Other Pacific Islander”, or “Other race, ethnicity, or origin”. If participants selected the “Other race” option, they were given the opportunity to write in what best applies. Only one participant selected more than one race, and therefore, they were categorized as “Other race” for inclusion in the analysis. The variable of race was then dummy coded for insertion into the linear regression model with “White” serving as the reference group.

Next, current job position was measured by selecting a single option for “Criminal Defense Attorney”, “Prosecutor”, “Paralegal”, “Investigator”, “Social Worker”, “Administrative”, or “Other”. If participants selected the “Other” option, they were given the opportunity to write in what best applies. The main interest for this analysis was for Criminal Defense and Prosecution, this combined with low response rates for the other categories led us to collapse this variable for the analysis into “Criminal Defense Attorney”, “Prosecutor”, and

"Other". The variable of job position was then dummy coded for insertion into the linear regression model with "Criminal Defense" serving as the reference group.

The final covariate inserted into the analysis was length of time working in the CLS. This continuous variable was measured by having participants self-report the number of years they have worked in the CLS.

Data Analysis:

To examine the baseline association between three conceptual constructs of occupational burnout (i.e., MBI subscale scores for EE, DP, and PA) and CLS professionals' attitudes toward DWSUD (i.e., MCRS score), controlling for baseline sociodemographic factors (age, gender, race, ethnicity, job position, length of time working in the CLS), we ran a series of three simple linear regressions. The MBI subscales (EE, DP, PA) were inserted into the model separately for a total of 3 linear regression models.

Descriptive Statistics. Prior to inferential analysis, descriptive statistics were conducted (i.e., frequency and percentage for categorical variables and mean and standard deviation for continuous variables). See TABLE 1 for these descriptive statistics. We conducted bivariate associations to examine the relationships between the variables of interest before performing the regression analysis. During this initial analysis, we explored the associations between the dependent variable and each independent variable and covariates separately, without controlling for other factors.

Covariate Selection. Ultimately, these univariate analyses showed 2 significant associations between the covariates and the dependent variable. See TABLE 2 for these bivariate

associations. However, due to the novelty of this study, we chose to include the proposed covariates of interest in line that were theoretically or empirically identified as potential predictors or confounders in prior burnout studies among similar professions (38, 39, 40, 41, 42, 43, 44) in the subsequent regression analysis. This approach allowed us to account for the influence of these variables and to assess their individual contributions to the outcome of interest. By including all relevant variables in the regression analysis, we aimed to minimize the risk of omitted variable bias and ensure a comprehensive evaluation of the relationships between the independent variables and the dependent variable. This approach allowed us to control for potential confounding effects and to assess the unique contribution of each independent variable in explaining the variance in the outcome of interest.

Statistical Assumptions. Data was checked to verify that it met all 7 assumptions to run linear regressions (45). To meet the 1st and 2nd assumption which requires that the dependent variable and the independent variable are continuous, we reviewed that the variables are continuous. To meet the 3rd assumption (linear relationship between variables), we created a scatterplot using SPSS, where we plotted the dependent variable against the independent variable and then visually inspected the scatterplot to check for linearity. To meet the 4th assumption (no significant outliers), we used SPSS to identify outlier data on a scatterplot and histogram on data and included criteria (more than 4 standard deviations from the mean) to help detect possible outliers. To meet the 5th assumption (independence of observations), we ran a Durbin-Watson test for each linear regression model. To meet the 6th assumption (homoscedasticity), we looked to see if data violated or met the assumption when interpreting the data via scatterplot. Finally, to meet the 7th assumption (all independent variables are uncorrelated with the error term), we used

SPSS to create a Normal P-P Plot to check that the residuals (errors) of the regression line for approximate normal distribution.

Multivariable Regression. After testing for the 7 assumptions, we conducted a multivariable linear regression analysis to determine the independent association between EE, DP, and PA burnout-related constructs on CLS professionals' attitudes toward DWSUD (H1-H3), controlling for age, gender, race, ethnicity, job position, and length of time in occupation within the CLS. The regression results were used to determine the direction, magnitude, and significance of linear relationship between occupational burnout and CLS professionals' attitudes toward DWSUD accounting for demographic variables that are theorized to affect the relationship in the literature. We chose to test each a-priori hypothesis in a separate model because each model analyzes a unique component of how burnout manifests. Therefore, we applied the Bonferroni correction to control for Type 1 error rate due to multiple comparisons by setting alpha level to p=0.017 (46).

Results

Participant demographics are reported in TABLE 1. Just over half of the participants were Women (51.4%), and most were White (75.2%), non-Hispanic (90.8%), and Prosecutors (45%), followed by Criminal Defense Attorneys (42.2%). Approximately 44% of the sample have daily contact with DWSUD, in a work context. The mean age of our sample was 42.72 (SD=12.13). The mean length of time that participants have worked in the CLS was approximately 14 years (SD=10.99).

Bivariate associations are reported in TABLE 2 to explore the significance between our dependent variable and covariates of interest. Only two covariates were found to be significant at a .01 level. Job position was found to have a significant association with MCRS mean score between groups. “Other” position had a significantly higher MCRS mean score, indicating “Other” position have more positive attitudes towards DWSUD than “Criminal Defense” and “Prosecutor”. An ANOVA was run between “Man”, “Woman” and “Another Gender” and yielded a significant difference between groups and the MCRS mean score; however, given there were only 3 respondents in the “Another Gender” group, an independent samples t-test was conducted to compare MCRS mean scores for “Man” and “Woman”, which also yielded significant results (p=.004) indicating that respondents who identified as “Woman” have more positive attitudes towards DWSUD than respondents who identified as “Man”. All other covariates were not found to be significant.

1st and 2nd assumption were met, as variables are continuous. The 3rd assumption (linear relationship between variables) was found to be linear via a scatterplot using SPSS. The 4th assumption (no significant outliers) was met, as no outliers were found via SPSS scatterplot and histogram. The 5th assumption (independence of observations) was met via SPSS Durbin-Watson test for each linear regression model. The 6th assumption (homoscedasticity) was met via SPSS scatterplot. Finally, the 7th assumption (all independent variables are uncorrelated with the error term), was met via a SPSS Normal P-P Plot. The model for Emotional Exhaustion yielded a statistic of 2.203 which suggests no autocorrelation. The model for Depersonalization yielded a statistic of 2.149 which suggests no autocorrelation. The model for Personal Accomplishment yielded a statistic of 2.042 which suggests no autocorrelation.

Once all assumptions were met, we proceeded to run the simple linear regressions.

Hypothesis 1: We first ran a multivariable linear regression with Emotional Exhaustion as the independent variable. The results of this linear regression revealed that the IV and covariates were collectively a significant predictor of the MCRS composite as the DV (R squared=.278; f=2.57; p=.005). There was a non-significant (β= -.137; p=.051) relationship between greater Emotional Exhaustion (EE) and more negative attitudes toward DWSUD (MCRS scale), the direction hypothesized was supported. The regression results revealed one significant covariate at the $p < 0.017$; compared to Criminal Defense Attorneys, Prosecutors display a significantly lower MCRS score (β=-4.73; p=.006), meaning Prosecutors have more negative attitudes towards DWSUD than Criminal Defense Attorneys. No other covariates were significant in this model (all $p > 0.017$).

Hypothesis 2: Next, we ran a multivariable linear regression model with Depersonalization as the independent variable. The results of this linear regression revealed that the IV and covariates were collectively a significant predictor of the MCRS composite as the DV (R squared=.301; f=.288; p=.002). There was a significant negative relationship between greater Depersonalization and more negative attitudes toward DWSUD (β= -.326; p=.010). The regression results revealed one significant covariate at the $p < 0.017$; compared to Criminal Defense Attorneys, Prosecutors display a significantly lower MCRS score (β= -4.69; p=.005), meaning Prosecutors have more negative attitudes towards DWSUD than Criminal Defense Attorneys. No other covariates were significant in this model (all $p > 0.017$).

Hypothesis 3: Finally, we ran a third model with Personal Accomplishment as the independent variable. The results of this linear regression revealed that the IV and covariates

were collectively a significant predictor of the MCRS composite as the DV (R squared=.430; f= 5.046; p=.001). The results of this linear regression revealed a significant positive relationship between greater Personal Accomplishment and less negative attitudes toward DWSUD (β= .491; p<.001), such that as professional efficacy increases, MCRS scores increase as well. The regression results revealed two significant covariates at the $p < 0.017$; compared to Criminal Defense Attorneys, Prosecutors display a significantly lower MCRS score (β= -3.87; p=.011), meaning Prosecutors have more negative attitudes towards DWSUD than Criminal Defense Attorneys. Compared to Men, Women have a significantly higher MCRS score (β= 3.64; p=.010), meaning Men have more negative attitudes towards DWSUD than Women. No other covariates were significant in this model (all $p > 0.017$).

Discussion

The aim of this study was to examine the relationship between three distinct constructs of occupational burnout among CLS professionals and attitudes towards DWSUD. To our knowledge, this is the first study to examine the associations between the constructs of burnout and stigma towards clients with specific health conditions among this population. Compared to helping professions, CLS professionals exhibit similar substantial burnout in all three constructs (5, 47). Initially, we hypothesized that greater Emotional Exhaustion (EE) and Depersonalization (DP) experiences of occupational burnout would be negatively associated with attitudes towards DWSUD, and that greater Personal Accomplishment (PA) (i.e., lower occupational burnout) would be positively associated with attitudes towards DWSUD. The results supported the direction and magnitude of all three hypothesized relationships; however, the only the associations between DP and PA reached statistical significance. The significant associations

between burnout and stigma towards DWSUD elucidate the need for comprehensive assessment and education on the potential consequences of burnout (like stigmatizing attitudes toward DWSUD) for CLS professionals, aligning them with the support, interventions, and awareness typically provided to their peers in other helping professions (47).

The association between greater Emotional Exhaustion (EE) and more negative attitudes towards DWSUD may not have reached statistical significance because EE is often related to workload, job demands, lack of resources, the high stress, and emotional toll of the work itself. These factors are often inadequacies at the organizational level (48, 49) and may be less directly related to the individuals CLS professionals interact with in their daily duties. One study within a law enforcement organization found that although EE is partially the result of employee characteristics and interpersonal environment, it is profoundly affected by departmental context, administrative policy, and practices (50). This emphasizes the need for better CLS organizational support (funding, training, and resources), policy solutions and evidence-based practices (vs. punishment) in resolving SUD-related cases, to reduce the burdens caused by excessive workload. It is important to mention that although EE may not be significantly associated with negative attitudes toward DWSUD in this study, it could impact a CLS professionals' ability to empathize or respond compassionately with defendants in occupational situations. Literature among clinical occupations link an inverse correlation between EE and empathy (51). Furthermore, empathy has been highlighted as a core component to good clinician/client relationships (52) and subsequently crucial to ensuring the delivery of good quality care (53) and a client's positive therapeutic outcome (54). Therefore, we can hypothesize that EE creates less capacity for empathy, leading to unjust treatment, poor legal services, and negative interactions

with DWSUD that contribute to defendants' experiences of stigma in their contact with CLS professionals.

The significant association between greater Depersonalization (DP) and negative attitudes toward DWSUD suggests DP, which is characterized as a sense of detachment or cynicism, may lead to an impersonal, contemptuous, stereotypical perspective of DWSUD. CLS professionals may view DWSUD as just "cases" or "problems" needing punishment, rather than as individuals deserving of empathy, therapeutic treatment, and support. Stereotypes often oversimplify compounding issues, leading to stigmatizing beliefs or assumptions about DWSUD, further hindering rehabilitation, neglecting to recognize and address the numerous underlying matters and barriers that make recovery difficult (55). DP may indeed exhibit a stronger association with the most adverse outcomes of burnout (56). Health professional studies show DP relates to a deeper psychological detachment from the emotional, social, and cognitive aspects of work (and clientele), resulting in a crisis of professional motivation, efficacy expectations (57) and ideal treatment outcomes (58). Depersonalization may serve as a self-protective mechanism for CLS professionals who are experiencing burnout. DP can be a coping strategy (59, 60) to shield oneself from the exhaustive toll of recidivism while engaging with DWSUD. By distancing oneself, CLS professionals may attempt to protect their emotional well-being, but may inadvertently reinforce stigmatizing attitudes. CLS organizational factors such as a highly adversarial dynamic (61), pressure for high conviction rates or "tough on crime" workplace culture (62, 63), coupled with limited resources (see dissertation finding 1, subtheme d), can exacerbate the association between DP and stigma toward SUD related cases. In environments like the CLS and law enforcement, where negative attitudes, stereotypes, and moral questioning towards individuals with SUD are prevalent or reinforced (63, 64, 65),

professionals experiencing DP may be more susceptible to adopting stigmatizing beliefs and behaviors.

The results indicate that there is a significant association between greater Personal Accomplishment (PA), characterized by the belief in one's ability to perform work related tasks effectively and feel accomplished in their work goals, and positive attitudes towards DWSUD. This finding is in line with literature among mental health professionals, demonstrating that attitudes toward difficult patients improve when armed with skills, support, and procedures to effectively manage challenging circumstances (66). Perceived level of resources, supervision, support with administrative tasks and a balanced amount of direct work with clients are found to positively impact PA among clinical populations (67 68), and consequentially improve perceived quality and client-centered care (69). High PA can be associated with positive outcomes and a sense of fulfillment in one's work. Many individuals get into public service/helping professions because of a strong pull to make a positive impact in people's lives and actively create change in the world (see dissertation finding 1, subtheme b, 70,71). When CLS professionals believe in their ability to make a positive impact on the lives of individuals with SUD and the surrounding community, they may be more motivated to refer to quality care and support, which might lead to more positive attitudes and a genuine desire to help facilitate pathways for individuals on their journey to recovery. Adopting this public health concept is vital to reducing recidivism and changing the punitive, carceral relationship between the CLS and DWSUD related cases (72,73). The current state of dealing with SUD related cases in the CLS fueled by policy and laws informed by the "war on drugs" has led to exorbitant incarceration rates, high recidivism, and public health/safety risks (63, 74, 75). Findings from this study suggest we need to shift directions and give CLS professionals the tools and opportunities to recommend rehabilitation

grounded in evidence-based treatment pathways. Such tools may help CLS professionals feel more competent in their work and feel better equipped to understand the challenges faced by defendants who struggle with SUD.

Prosecutors exhibited significantly lower MCRS scores than criminal defense attorneys (having significantly more negative attitudes toward DWSUD compared to criminal defense attorneys) when controlling for all three constructs of burnout. This might indicate that managing increasing SUD-related cases, coupled with the punitive nature of law enforcement culture (76) could be influencing their attitudes (77). Prosecutors may be more prone to negative attitudes toward DWSUD due to dealing with mounting SUD-case related recidivism, with minimal training, resources, and policies to facilitate changed behavior (78, 79). The body of stigma-related research within healthcare professions consistently demonstrates that unfavorable attitudes have a significant impact on patient care and the results of their recovery/efforts (80). Prosecutors play a pivotal role in charge decisions, thus, negative attitudes toward DWSUD can potentially affect legal objectivity, equitable justice, effective opportunities for rehabilitation and the likelihood of favorable defendant outcomes.

The finding that Women exhibited higher MCRS scores (more positive attitudes toward DWSUD) compared to Men in the PA model, further highlights the complexity of factors influencing attitudes within different roles and gender contexts (59, 81). Empathy may play a role in this gender specific finding. Years of research in various disciplines across neuroscience, social psychology, medicine, and political science show that women have greater empathetic responses than men (82, 83, 84, 85). Additionally, some research shows that women are more

likely to report or feel comfortable reporting a more empathetic response, perhaps due to societal and cultural acceptance of this trait in females (86).

Several limitations of this study should be acknowledged. Firstly, the non-randomized, relatively small sample size with limited geographical representation may constrain the generalizability of the findings to broader regions and diverse populations. Given the pioneering nature of this research within a hard-to-reach demographic, it provides a valuable foundation for future, more expansive investigations. Subsequent research endeavors could aim to replicate the study on a larger scale and include a more diverse participant cohort, thereby strengthening the external validity of the results. Secondly, the study's reliance on cross-sectional data restricts the examination of causal relationships or temporal changes over time. Future research could greatly benefit from adopting longitudinal designs, permitting the assessment of how burnout and stigma evolve over extended periods. Moreover, the data collection method employed self-administered online surveys, which are susceptible to self-reporting biases and the influence of social desirability. To mitigate these concerns, we incorporated letter/number identifiers to alleviate potential apprehensions related to providing socially undesirable responses.

The study's overall aim was to explore how different dimensions of occupational burnout might influence attitudes towards DWSUD. While EE did not show a significant direct relationship with attitudes, it is important to acknowledge its potential indirect impact on professionals' empathetic responses. Future research would benefit from further exploring the mediating factors or mechanisms through which EE may indirectly affect attitudes, shedding light on the complex interplay between burnout, compassion fatigue and its consequences on DWSUD. DP emerged as a critical factor influencing negative attitudes, potentially due to its

detachment and cynical aspects. This perspective may hinder professionals from recognizing the complexity of SUD and the need for compassionate responses. Training, particularly involving how the constructs of burnout can create well-being and ethical concerns, feasible resources for self-care and SUD-related cases and positive exposure to individuals with lived experience may help to minimize both detachment and stigma towards DWSUD. The positive relationship between PA and positive attitudes emphasizes the significance of fostering a sense of efficacy and belief in one's ability to create positive change in while engaging in their work with DWSUD. Future research would benefit from evaluating changes in burnout, stigma, and wellness behaviors among this population from targeted trainings and intersectional occupational wellness/SUD education interventions.

Chapter 2 contains unpublished material coauthored with Beletsky, Leo, Pitpitan, Eileen V., Reed, Mark B., Bazzi, Angela R., Smith, Laramie R.

The dissertation author was the primary investigator and author of this chapter.

TABLE 2.1: Descriptive statistics for CLS professional participants

Variables	N (%)	M (SD)
Gender Identity		
Man	50 (45.9)	
Woman	56 (51.4)	
Another Gender	3 (2.8)	
Age		42.72 (12.13)
Race		
White	82 (75.2)	
Black or African American	12 (11.0)	
Asian	5 (4.6)	
American Indian or Alaskan Native	0	
Middle Eastern or North African	1 (.9)	
Native Hawaiian or Other Pacific Islander	2 (1.8)	
Other race, ethnicity, or origin	7 (6.4)	
Ethnicity		
Hispanic, Latin-X	10 (9.2)	
Non-Hispanic, Latin-X	99 (90.8)	
Current Job Position		
Criminal Defense	46 (42.2)	
Prosecutor	49 (45.0)	
Other	14 (12.8)	
Length of time working in the criminal legal system		13.80 (10.99)
Contact with defendants with SUD within a work context		
Never	3 (2.8)	
Less than once a month	9 (8.3)	
Once a month	4 (3.7)	
2-3 times a month	11 (10.1)	
Once a week	11 (10.1)	
2-3 times a week	23 (21.1)	
Daily	48 (44.0)	

TABLE 2.2: Bivariate information

Variables	Test	Test statistic	P-Value
MCRS-Age	Pearson Correlation	r= -.063	.508
MCRS-Years in CJ	Pearson Correlation	r= -.151	.090
MCRS- Ethnicity	T-Test	t= 1.568	.119
MCRS- White	T-Test	t= .213	.831
MCRS- Black	T-Test	t= -.861	.391
MCRS- Asian	T-Test	t= -.532	.596
MCRS- Mid Eastern	T-Test	t= 1.762	.080
MCRS- Pacific Islander	T-Test	t= -.643	.521
MCRS- Other	T-Test	t= .560	.577
MCRS- Position	ANOVA	f= 8.068	<.001*
MCRS- Gender	ANOVA	f= 4.874	.009*

TABLE 2.3: Linear regression models of burnout constructs and attitudes toward defendants with substance use disorder

		Model 1			Model 2			Model 3		
		B	SE	Sig.	B	SE	Sig.	B	SE	Sig.
IV	Emotional Exhaustion	-0.14	0 .07	.051	-	-	-	-	-	-
	Depersonalization	-	-	-	-0.33	0.12	.010*	-	-	-
	Personal Accomplishment	-	-	-	-	-	-	0.49	0.09	<.001*
Age		0.16	0.13	.214	0.11	0.13	.380	0.13	0.12	.275
Gender	Man	Ref.			Ref.			Ref.		
	Woman	3.73	1.55	.019	3.27	1.52	.034	3.64	1.37	.010*
	Another Gender	-6.95	4.92	.161	-7.13	4.82	.143	-7.09	4.35	.106
Non-Hispanic, Latin-X		-5.29	2.59	.044	-4.68	2.56	.071	-3.09	2.33	.188
Race	White	Ref.			Ref.			Ref.		
	Black or African American	0.11	2.54	.966	0.27	2.49	.913	-0.69	2.26	.759
	Asian	-0.22	3.82	.953	0.13	3.77	.972	-1.47	3.39	.667
	Middle Eastern or North African	3.93	7.51	.602	3.98	7.37	.591	-1.21	6.65	.856
	Native Hawaiian or Other Pacific Islander	12.02	5.89	.044	11.28	5.81	.055	8.79	5.27	.099
	Other race, ethnicity, or origin	.78	3.16	.806	-1.44	3.02	.636	-1.78	2.73	.515
Position	Criminal Defense Attorney	Ref.			Ref.			Ref.		
	Prosecutor	-4.73	1.67	.006*	-4.69	1.64	.005*	-3.82	1.49	.011*
	Other	0.65	2.72	.811	1.36	2.52	.592	2.88	2.23	.200
Years worked in CLS		-0.21	0.14	.147	-0.17	0.14	.245	-0.15	0.13	.248

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CHAPTER 3: DOING WELL BY DOING GOOD: OCCUPATIONAL WELLNESS TRAINING TO ALIGN CRIMINAL LEGAL PROFESSIONALS' INTENTIONS AND ATTITUDES WITH PUBLIC HEALTH GOALS.

Background

Occupational stress and burnout, along with their associated repercussions, have been extensively studied in diverse professions, including healthcare, education, social work, emergency response services, media, and finance (1). Research in the broader field of occupational stress reveals that a substantial 83% of US workers experience work-related stress (2), with approximately 65% characterizing work as a significant driver of overall stress (3). The consequences of workplace stress are far-reaching, ranging from employee mental health struggles (4)- contributing to 120,000 deaths in the US each year (5)- to significantly impacting organizational costs and the quality of services provided to consumers, patients, and clients. Healthcare and public service professions are known to be particularly vulnerable to occupational stress and burnout. However, there is a notable research gap when it comes to investigating occupational stress, burnout, barriers to wellness and practices among public servants, including criminal legal system (CLS) professionals. CLS professionals are individuals who work within the field of law and are involved in various aspects of the criminal legal system, including prosecutors and criminal defense attorneys[4].

Burnout statistics and its associated consequences are sparce among CLS professionals but research among general attorneys can be used to draw inference. In one state alone, 77% of

[4] Under the umbrella term criminal defense attorney, the terms "criminal defense attorney" and "public defenders" are often used interchangeably. Both are legal professionals, who specialize in providing defense representation for individuals accused of criminal offenses. Public defenders are government employed public attorneys and are appointed to represent indigent individuals who cannot afford private legal counsel. Criminal defense attorneys include private and government-contracted defense lawyers representing criminal defendants.

legal professionals reported experiencing high levels of burnout (6) compared to 25.2% of the general population (7). Elevated stress levels within the broader legal profession have been linked to heightened challenges in mental health and issues with problematic substance use (8). A large study among American attorneys shows that nearly 40% screen positive for problematic substance use (compared to 15% of physicians and surgeons) (8). 61% reported concerns with anxiety at some point in their career and 46% reported concerns with depression (8). Furthermore, attorneys have one of the highest rates of divorce (35%) and rank 5th occupationally in the incidence of suicide (9, 10). These alarming statistics among legal professionals may lead to lost productivity and professional impairment such as stigmatizing views or discriminatory practices (11,12).

CLS workforce encounter formidable challenges in their line of employment, but they often have limited opportunities for engagement or workplace support in implementing occupational wellness strategies (13) particular to the difficulties they face. One significant aspect of these challenges that can contribute to occupational stress and burnout is the sheer volume of substance use-related cases. Approximately 85% of individuals with substance-use related cases engage with the CLS, but only 11% are referred or engage in any type of treatment (14). Moreover, a recent report on medications for addiction treatment (MAT) stated that only 5% of people with opioid use disorder in the carceral system are receiving medication treatment (15) though studies show MAT lowers morbidity (16), illicit drug use (17), and decreases criminal activity (18). Additionally, stakeholders within this system may lack awareness of the advantages of MAT, often relying solely on behavioral counseling or detoxification without implementing follow-up treatment (15). The lack of adequate training or preparation in the

science driven best practices, intervention tools, and resources related to SUD-related cases further compounds the difficulties for CLS professionals. Consequently, the lack of improvement in outcomes for defendants with substance use disorder (DWSUD), or defendants with SUD-related cases engaging in criminalized behavior hinders efforts to reduce recidivism, alleviate caseload burden, and contributes to occupational stress among CLS professionals. Furthermore, this situation may foster stigmatizing views towards these specific defendants. CLS professionals frequently interact with defendants grappling with SUD, enduring exposure to prevailing negative societal biases. Their perceptions and beliefs may, in turn, be shaped by the demands of their workload, the pressure to align with the political climate, and the absence of comprehensive education on SUD.

Extensive documentation exists regarding the detrimental consequences associated with involvement in the CLS, encompassing risks such as overdose, sexually transmitted infections, HIV, and overall worse health outcomes (19, 20, 21). However, our research contributes uniquely by shedding light on the adverse impacts of this system on the individuals who operate within it. Addressing and alleviating these harms experienced by the workforce can have far-reaching implications for overall public health (22). This is especially pertinent in the current context, given the increasing acknowledgment of the CLS's role as a structural driver to overdose and various health risks (23). Remarkably, there is a dearth of empirically validated interventions designed to mitigate these systemic harms, underscoring the timeliness and significance of this work.

There may be multiple avenues of education and awareness for CLS professionals to prevent stigma, including psychoeducation on various theories (trauma-informed, social learning and bio-medical model). Prominent researchers specializing in substance use propose that recent advancements in addiction science have the potential to fundamentally transform conventional public safety approaches, which are currently focused on sanctions and penalties (24). These developments offer innovative therapeutic strategies against addiction, which could be effectively implemented within the CLS (25). Some of these treatments include harm reduction strategies- accessing medication for SUD treatment, peer navigators, community supervision combining various therapies, and extending warm handoffs to housing, employment, education, and family reunification support. This study utilized an adapted SHIELD training for CLS professionals. The SHIELD training was developed by Leo Beletsky J.D., MPH (Dissertation Co-Chair) starting in 2004. SHIELD was designed for law enforcement by melding occupational wellness strategies, such as preventing needlestick injury on duty, with public health-related content relating to harm reduction, overdose prevention, and related topics. Bundling occupational and public health content demonstrated early promise in reducing stigma and improving officer behavioral intentions among people who use drugs (26). Through further intervention development the SHIELD training for law enforcement became the first intervention to show marked improvements in practices that relate to both occupational and public health among law enforcement (27).

Following the SHIELD training framework of bundling occupational wellness and education on SUD and MAT as a strategy to stigma reduction and improving behavioral intentions, we aimed for similar goals among CLS professionals (SEE TABLE 1 and

APPENDIX A. TRAINING OUTLINE for more detail on training the intervention) to address the following hypotheses:

H1: Compared to pre-test observations, mean scores on CLS professionals' behavioral intentions to regularly recommend MAT for SUD related cases will significantly increase, following the intervention.

H2: Compared to pre-test observations, mean scores on CLS professionals' behavioral intentions to engage in self-care behaviors 10 minutes a day, to manage occupational stress, will significantly increase following the intervention.

H3: Compared to pre-test observations, mean scores on CLS professionals' attitudes towards DWSUD will significantly improve, following the intervention.

METHODS

Participants and Procedures:

This analysis utilizes pre-post training survey data from CLS professionals who attended one of six didactic educational intervention sessions targeting burnout and SUD awareness and attitudes. Participants attended these trainings through their employer to foster their professional development on occupational wellness and to increase SUD-related education for occupational efficacy. Offices included two county public defense[5], two county prosecution, one statewide

[5] Under the umbrella term criminal defense attorney, the terms "criminal defense attorney" and "public defenders" are often used interchangeably. Both are legal professionals, who specialize in providing defense representation for individuals accused of criminal offenses. Public defenders are government employed public attorneys and are appointed to represent indigent individuals who cannot afford private legal counsel. Criminal defense attorneys include private and government-contracted defense lawyers representing criminal defendants.

public defense program, and one nationwide prosecution program. Participants were eligible if they were over 18 and a current attorney or staff working in a criminal legal office.

For pre-training data, participants were consented and invited to complete a quantitative survey, self-administered online via Qualtrics software which they accessed through a QR code and URL, which was posted on a slide at the beginning of the training intervention. Participants took the pre-training survey during the first ten minutes before the training started.

For post-training data, participants were invited to complete a quantitative survey, self-administered online via Qualtrics software which they accessed through a QR code and URL, which was posted on a slide at the end of the training intervention. Participants took the post-training survey during the last five minutes after the training ended.

Pre- and post-training data was merged using a unique identifier of 1.) First letter of first name, 2.) First letter of last name, 3.) Day of birth (1-31), 4.) Number representing month of birth (1-12).

Pre-post training responses from all six trainings yielded 42 participants with completed pre- and post- behavioral intentions to refer to MAT, 50 participants with completed pre- and post- behavioral intentions to engage in ten minutes a day of self-care to manage occupational stress, and 45 participants with completed pre- and post- attitudes towards DWSUD, after accounting for missing data (i.e., participants who did not give identifier information or did not complete either the pre-or post-surveys).

Intervention

Intervention content (see TABLE 1) was adapted from the SHIELD training which bundles occupational wellness topics, occupational wellness strategies, and SUD related education. This study utilized a 90-minute single-session intervention of an adapted SHIELD training for CLS professionals. Intervention content was delivered by one peer (attorney) and one harm reductionist (person with lived SUD experience) through two modules to indirectly (Module 1) and directly (Module 2) address drivers and practices of SUD-related stigma and treatment.

Module 1: Address drivers and facilitators of CLS professional burnout by teaching participants how to identify and address signs and symptoms of burnout, toxic stress, occupational trauma, and how to create opportunities to address burnout and improve occupational wellness by improving behavioral intentions to engage in self-care activities (e.g., advocating for workplace policy change, and creating a wellness/self-care routine starting with small time frame- ten minutes at a regular exposure rate- daily and increasing dose/exposure as this becomes feasible and manageable).

Module 2: In an effort to combat stigma, the adapted SHIELD intervention content addressed drivers and facilitators of lack of SUD related knowledge by teaching about SUD evidence-based best practices (particularly MAT), barriers to wellness for defendants with SUD (including taking into consideration obstacles that might make a person unsuccessful in completing court orders), and inform on harm reduction strategies and diversion strategies to alleviate recidivism/workload and burnout while improving outcomes for defendants with SUD.

Combined Module 1 and 2 aim to improve outcomes in SUD-cases, reduce the impact of SUD stigma in SUD related cases by improving MAT-related behavioral intentions in SUD related cases (H1), improve CLS professional's capacity to serve SUD cases by reducing occupational burnout and increasing wellness through improved self-care practices (H2), and improve attitudes towards DWSUD involved in the CLS (H3). SEE APPENDIX A. TRAINING OUTLINE for a detailed SHIELD Intervention training outline**.**

Measures

Behavioral Intentions (BI). BI survey questions of SUD-related cases and self-care practices were formulated based on The Theory of Planned Behavior (TPB) (28). TPB is a cognitive behavioral theory developed by Icek Ajzens in 1985. TPB proposes that the decision an individual makes to engage in a specific behavior can be predicted by their intention to engage in that behavior (28). Ajzens states in his sample questionnaire that formative research is required and encouraged to create questionnaires suitable for the behavior and population of interest (28). The first construct of this theory is behavioral intention. Ajzens TPB proposes that the greater the intention to engage in a given behavior, the more likely it is to perform that behavior. The second construct is attitude towards the behavior, which is the extent to which a person has a favorable or unfavorable assessment of a given behavior. This can be measured by behavioral belief strength. Subjective norms is the third construct which is the social norms or pressures to perform/not perform a behavior. This can be measured by normative practices, expected/influenced practices, or motivation to comply to the subjective norm (29). Perceived behavioral control is another important aspect of this theory, which refers to perceived ease or difficulty of engaging in the behavior. We utilized Ajzen's guidelines for constructing TPB

questionnaires on intended and planned behavior to structure all behavioral intentions questions (30).

As demonstrated above, constructs of subjective norms, attitudes and expectations are distal factors that predict planned behavior through behavioral intentions. TPB states that the most proximal and robust predictor of future behavior is the behavioral intention to engage in the specific behavior being measured. Ajzen also states that each TPB construct is a separate measure (as opposed to subscales of an overall measure). Given these two points, we utilized the construct of behavioral intentions for the purposes of this dissertation. Utilizing behavioral intentions construct, it allowed for measuring pre- and post-training changes in the areas that are most influential in our inquiry on how burnout and stigma (as well as a training addressing these) may affect behavioral intentions of SUD related case practices and self-care practices.

Behavioral intentions to refer to MAT for SUD related cases was adapted from the original SHIELD pre-training survey in which law enforcement officers were surveyed about their intended practices when engaging with/assessing whether to arrest individuals who use drugs or have drug use paraphernalia (31). We adapted this extant question to assess for intention to refer defendants to MAT on a regular basis. For the purposes of this study, we define MAT as "Medications for addiction treatment (MAT) are the FDA-approved medications used for the treatment of Alcohol Use Disorder or Opioid Use Disorder. These medications include Methadone, Buprenorphine (Suboxone), and Vivitrol (Naltrexone)." We analyzed one question for this section and used the mean score to compare pre- and post-training changes of this single item. This question is: *"I intend to refer defendants with substance use disorder to MAT on a*

regular basis." Response options use 5-point Likert-scale ranging from (1) Very unlikely; (2) Not likely; (3) Neutral; (4) Likely; (5) Very likely.

Behavioral intentions of self-care behavior was constructed from the TPB guidelines (30) utilized for the behavioral intentions of SUD related case practices as well. We surveyed CLS professionals' behavioral intentions to engage in self-care for managing occupational stress-with a dose of ten minutes and daily exposure rate. This dose and exposure rate is based on The National Alliance on Mental Illness (NAMI) recommendation of building resilience and better mental health behavior habits (32). We analyzed one question for this section and used the mean score to compare pre- and post-training changes of this single item. This question was: *"I intend to engage in self-care (to manage occupational stress) for at least 10 min, per day."* Response options use 5-point Likert-scale ranging from (1) Very unlikely; (2) Not likely; (3) Neutral; (4) Likely; (5) Very likely

The Medical Condition Regard Scale (MCRS) (33) was used as assess the outcome variable of interest. MCRS has been used in previous literature with physicians, counselors, and other health and human services trainees and clinicians to measure responses to patients they like and dislike, assessing for positive and negative regard (34, 35, 36, 37, 38). The MCRS was used for this study to measure the stigmatizing attitudes participants have toward the medical condition of SUD. One main component of stigmatizing attitudes, which relates to this work, is how stigmatizing attitudes and negative feelings toward SUD may lead to the unwillingness to treat, interact with or discriminatory behavior that prevents facilitating SUD treatment, support, and recovery. This measure has been applied to various medical and psychiatric conditions and

has showed with psychometric properties of Cronbach's alpha of 0.87 and a test-retest reliability of 0.84 respectively for assessing attitudes for any medical condition (39, 40, 41). In the original study (42), testing psychometrics, Cronbach's coefficient alpha for the MCRS was α=.87, and all factor loadings were greater than .40. The test–retest reliability coefficient was .84. A test of construct validity revealed that the MCRS identified a difference in attitude changes between medical students who had rotated on an addiction treatment program than those who had not (43).

MCRS use has shown valid and reliable results in attitudes towards specific medical conditions and whether individuals in the health and human services fields find working with such medical conditions to be enjoyable, treatable, and worthy of medical resources. We contacted the co-creator of the MCRS to inquire on permission for adaptation, which was granted. We modified this scale for CLS professionals by changing the language from *"patient"* to *"defendant"*. We also modified questions that relate to medical resources/treatments (e.g., *"I can usually find something that helps patients like this feel better."* modified to *"I can usually find strategies that helps defendants like this attempt/access recovery.")*. Additionally, we modified questions that apply to public funds used by the local governments to handle SUD related cases, as well as facilitating recovery (e.g., *"Treating patients like this as a waste of money."* modified to *"Dealing with defendants like this is a waste of taxpayer dollars."*). A sample item for negative attitude toward defendants with SUD is *"Defendants like this irritate me."* A sample item for positive attitude toward defendants with SUD is *"Working with defendants like this is satisfying."*

Modified scale items were reviewed and approved by dissertation committee. Key informant surveys were administered before data was collected to ensure time and modified language appropriateness.

The MCRS item responses are scored on a 6-point Likert-scale ranging from (1) Strongly disagree; (2) Disagree; (3) Not sure but probably disagree; (4) Not sure but probably agree; (5) Agree; (6) Strongly agree. Items are summed to produce a single score, with lower items reflecting lower regard (i.e., greater stigma). In a previous study, the MCRS score range was from 11 (lowest regard) to 66 (highest regard) (43). Six items are affiliated with positive attitudes (items 1, 2, 4, 6, 9, 10) and 5 items are affiliated with negative attitudes (items 3, 5, 7, 8, 11) Responses to these five negative regard questions (items 3, 5, 7, 8, 11) are reverse coded prior to computing the total score. This composite score is what was used as the outcome in the current analysis.

Data analysis

Using a pre-post within-subjects study design, we assessed the preliminary effect of the SHIELD intervention adapted to CLS professions on changes in their behavioral intentions and attitudes toward DWSUD.

Descriptive Statistics. Prior to inferential analysis, descriptive statistics were conducted (i.e., frequency and percentage for categorical variables and mean and standard deviation were provided for continuous variables). See TABLE 2 for these descriptive statistics.

Statistical Assumptions. We tested for the 4 main assumptions for the paired sample t-tests (44). The 1st assumption which requires that the dependent variable must be continuous (interval/ratio), we reviewed that for each hypothesis, the DV is continuous. The 2nd assumption requires that observations are independent of one another, given that the individuals taking the surveys are subjects in the same sample for both pre-and post- (and surveys linked by identifiers), this assumption was met. The 3rd assumption requires that the DV should be approximately normally distributed, we ran this test via SPSS using the variable that represents the difference between paired values (not the original values themselves). The 4th assumption requires that the DV should not contain any outliers, we ran this test via SPSS using the variable that represents the difference between paired values (not the original values themselves). Following the standard for dealing with outliers, we chose to remove four outliers from intentions to refer to MAT DV, one from intentions to engage in self-care, and one from MCRS. Prior to removing the outliers, we confirmed that significance was not affected in any of the analyses, but chose to remove them anyway, as they violated the 4th assumption.

Paired Sample t-tests. For hypotheses 1 & 2 we used a paired sample t-test to compare the means (average) of pre- and post-survey results measuring behavioral intentions to recommend MAT for SUD related cases regularly and behavioral intentions to engage in self-care behaviors ten minutes a day (H2). For hypothesis 3, we summed composite scores for the MCRS and then conducted a paired sample t-test to compare the means (average) of pre- and post-survey results measuring changes in attitudes towards DWSUD (H3).

Results

Approximately an equal number of participants were Men (45.2-50%) and Women (50-54.8%) (see TABLE 1). Most were White (84-88.9%), non-Hispanic (90.5-92%), and prosecutors (42.9-48.9%), followed by criminal defense attorneys (42.2-47.6%). Approximately 45% of the sample have daily contact with DWSUD, in a work context. The approximate mean age of our sample was between 42.31(SD=13.48) and 43.09 (SD=13.71). The mean length of time that participants have worked in the criminal legal system was between 13.26 (SD=11.17) and 14.24 years (SD=11.41) (TABLE 1).

A series of paired sample t-test were conducted to examine the effects of the adapted SHIELD training for CLS professionals on behavioral intentions to refer to MAT for SUD-related cases, behavioral intentions to engage in 10 minutes a day of self-care to manage occupational stress, and attitudes toward DWSUD measured by the MCRS. The analysis focused on differences of scores before and after the intervention. All significance levels reported are for two-tailed analyses.

Hypothesis 1: Forty-two participants completed the pre- and post- behavioral intentions to refer to MAT for SUD-related cases question. The participants baseline result (pre-intervention) had a mean of 3.62 (SD=1.27), and post-intervention result had a mean of 4.05 (SD=1.04). The paired sample t-test revealed a significant increase of results after the intervention (p=.002). The mean likelihood to refer to MAT significantly improved from 3.62 to 4.05, indicating a substantial effect of the intervention on criminal legal professionals. Based on these results we have rejected the null hypothesis.

Hypothesis 2: Fifty participants completed the pre- and post- behavioral intentions to engage in 10 minutes a day of self-care to manage occupational stress question. The participants baseline result (pre-intervention) had a mean of 3.82 (SD=1.12), and post-intervention result had a mean of 4.14 (SD=0.83). The paired sample t-test revealed a significant increase of results after the intervention ($p=.012$). The mean likelihood to engage in 10 minutes a day of self-care to manage occupational stress significantly improved from 3.82 to 4.14, indicating a substantial effect of the intervention on criminal legal professionals. Based on these results we have rejected the null hypothesis.

Hypothesis 3: Forty-five participants completed the pre- and post- attitudes towards DWSUD measured by the MCRS. The participants baseline composite score (pre-intervention) had a mean of 47.71 (SD=8.27), and post-intervention composite score had a mean of 50.00 (SD=6.76). The paired sample t-test revealed a significant improvement of attitudes towards DWSUD after the intervention ($p<.001$). The mean composite score of the MCRS which measures attitudes toward DWSUD significantly improved from 47.71 to 50.00, indicating a substantial effect of the intervention on criminal legal professionals. Based on these results we have rejected the null hypothesis.

These results provide preliminary evidence supporting the promise of the newly adapted SHIELD training in improving criminal legal professionals' behavioral intentions to refer to MAT for SUD-related cases, behavioral intentions to engage in ten minutes a day of self-care to manage occupational stress, and attitudes towards DWSUD measured by the MCRS.

Discussion

The present study investigated the effects of the Adapted SHIELD training on behavioral intentions to refer to MAT for SUD-related cases, intentions to engage in self-care for managing occupational stress, and attitudes towards DWSUD among CLS professionals. The analysis focused on pre- and post-intervention scores, utilizing paired sample t-tests to examine significant changes in these key variables. The results revealed significant improvements in all three areas after the intervention, providing evidence for the effectiveness of the adapted SHIELD training.

The findings indicated an increase in CLS professionals' likelihood to refer defendants to MAT for SUD-related cases following the intervention. This suggests that education on the public safety and health benefits of MAT may be an important tool for increasing its application within the CLS. A recent study done with court staff found that previous education/training regarding MAT is associated with more positive attitudes towards its use, supporting the need for raising awareness and educational interventions within this population (45). Lack of knowledge, concerns of efficacy, accessibility, and stigma of medication vs. abstinence and have been noted as barriers to use and application of MAT (46, 47, 48, 49) which further supports an intervention providing knowledge and resources on these specific topics. Utilizing the SHIELD training to positively impact participants' willingness to consider MAT as a feasible and effective treatment option for DWSUD, could potentially lead to improved outcomes for this population within the CLS and beyond.

Secondly, the intervention yielded a significant effect on participants' behavioral intentions to engage in self-care practices for the management of occupational stress. This suggests that the SHIELD training played a pivotal role in heightening the awareness among CLS professionals regarding the significance of self-care and encouraging their dedication to integrating these practices into their daily routines. This is particularly valuable given recent research indicating that a strong commitment to self-care, to alleviate occupational burnout, can potentially prevent the progression of burnout and reduce periods of elevated stress (50). Within the literature on medical and behavioral health professionals, it is well-documented that elevated levels of burnout can detrimentally impact the quality of services rendered and treatment outcomes achieved (51, 52, 53). By substantially influencing the intentions of CLS professionals to embrace self-care practices, there is potential to enhance the quality of legal services, particularly those related to substance use. Since CLS professionals exercise broad discretion, improvements in the workforce wellness can help reduce the harms wrought by this system and even facilitate ancillary harm reduction interventions like deflection, diversion, and clemency. This is especially relevant in the context of ongoing crises in recruitment and retention of CLS professionals at all levels (54, 55, 56).

Furthermore, the adapted SHIELD intervention results demonstrated a substantial improvement in attitudes toward DWSUD among participants. This indicates that the SHIELD training has marked promise in positively influencing criminal legal professionals' attitudes and reducing stigmatizing views toward individuals with SUD. Research on stigma consistently highlights that perceptions and beliefs surrounding SUD are shaped by factors such as knowledge about these disorders and the extent and nature of one's personal interactions with individuals with SUD (57). More broadly, existing literature on negative attitudes and stigma

consistently underscores that a lack of education, burnout, and exposure to negative influences can give rise to both implicit and explicit biases (58).

Through the implementation of the adapted SHIELD training program, facilitated by an individual with lived SUD experience, we have the potential to transform knowledge and positive, purposeful exposure within the perspective of CLS professionals.

Recognizing the importance of being well-informed about a defendant's SUD and understanding how burnout, attitudes, biases, and knowledge gaps can obstruct sound decision-making is pivotal for improving incarceration rates and delivering unbiased legal services. For prosecutors, this awareness can lead to more informed and prudent decision-making, ultimately influencing the trajectory of cases and potentially contributing to more positive public health outcomes. A prosecutor's ability to recognize the complexities of SUD and mitigate biases can impact whether a DWSUD receives science-driven treatment or punitive measures, potentially influencing incarceration rates and lessening workload. On the other hand, criminal defense attorneys, equipped with a comprehensive understanding of SUD, can advocate more effectively for alternative sentencing and evidence-based rehabilitative measures, applicable to their clients' specific needs. Cultivating improved attitudes among CLS professionals can foster a more supportive and compassionate approach when working with DWSUD, potentially leading to a sense of enhanced efficacy and a reduction in discrimination within the CLS.

Some limitations of the study should be acknowledged. The sample size was small, with limited geographical reach, which may limit the generalizability of the findings to other regions and populations. The participant sample lacked racial and ethnic diversity, which limits generalizability and also does not identify particular differences among CLS professionals,

outside of those identifying as White, Non-Hispanic. Future research could replicate the study on a larger scale and include a more diverse participant pool to strengthen the external validity of the results. That would also make it possible to help stratify the sample by characteristics other than demographic, such as differences in how specific occupational roles, period of tenure, and other factors shape training uptake (59).

In conclusion, the results of this research highlight the importance of educational intervention in addressing occupational stress and stigma among criminal legal professionals. The Adapted SHIELD training showed significant potential in positively influencing behavioral intentions and attitudes related to SUD cases. By improving the professionals' openness to MAT and promoting self-care practices, the intervention has the potential to enhance the well-being of both criminal legal professionals and the defendants they serve. Moreover, by reducing stigmatizing attitudes, the training may contribute to a more compassionate and effective legal system that can create meaningful public safety gains. This study contributes valuable insights into the development of evidence-based interventions and recommendations on new requirements for CLS professionals and legal scholar wellness/SUD curriculum. Educational interventions show promise in enhancing the occupational wellness of CLS professionals and fostering a more inclusive, supportive, and effective legal environment for individuals with SUD.

Chapter 3 contains unpublished material coauthored with Smith, Laramie R., Reed, Mark B., Pitpitan, Eileen V., Bazzi, Angela R., Beletsky, Leo

The dissertation author was the primary investigator and author of this chapter.

TABLE 3.1: Overview of 90-minute SHIELD Intervention Training adapted to CLS Professionals

Module 1- Occupational wellness (45 minutes)	Learning objectives: • Learn and recognize the signs and symptoms of burnout, toxic stress, substance use and misuse as a coping mechanism. • Acknowledge the stressors of the profession and discuss how the legal field can encourage and perpetuate toxic stress, trauma, substance use and suicidal ideation. • Evaluate various areas of improvement and strategies for a wellness plan.
5-minute break	
Module 2- SUD knowledge for application on self and client/legal advocacy (40 minutes)	Learning objectives: • Identify and utilize substance use theories and evidence-based best practices for self-care while also improving interface with clients/defendants with SUD. • Understand barriers to wellness in SUD and SUD recovery and court orders that are not feasible or fitting to defendants needs/issues. • Gain an understanding of non-stigmatizing language that reflects an accurate, science-based perspective of SUD. • Inform on deflection/diversion assessment and harm reduction strategies (MAT and outsourcing) to alleviate burnout and recidivism. • Distinguish how improving knowledge on substance use disorder can be utilized to prevent occupational stress and fatigue. • Integrate advocacy work to create passion and impact in the field. • Provide resources

TABLE 3.2: Descriptive statistics of CLS professional participants

Participant sociodemographic by outcome	Primary outcomes		
	BI MAT referral N= 42	BI self-care N= 50	MCRS N= 45
	n (%)	n (%)	n (%)
Gender Identity			
Man	19 (45.2)	25 (50)	21 (46.7)
Woman	23 (54.8)	25 (50)	24 (53.3)
Another Gender	0 (0)	0 (0)	0 (0)
Age (M/SD)	42.31 (13.48)	43.04 (12.91)	43.09 (13.71)
Race			
White	37 (88.1)	42 (84)	40 (88.9)
Black or African American	3 (7.1)	4 (8)	2 (4.4)
Asian	0 (0)	0 (0)	0 (0)
American Indian or Alaskan Native	0 (0)	0 (0)	0 (0)
Middle Eastern or North African	0 (0)	0 (0)	0 (0)
Native Hawaiian or Other Pacific Islander	1 (2.4)	1 (2)	1 (2.2)
Other race, ethnicity, or origin	1 (2.4)	3 (6)	2 (4.4)
Ethnicity			
Hispanic, Latin-X	4 (9.5)	4 (8)	4 (8.9)
Non-Hispanic, Latin-X	38 (90.5)	46 (92)	41 (91.1)
Current Job Position			
Criminal Defense	20 (47.6)	23 (46)	19 (42.2)
Prosecutor	18 (42.9)	24 (48)	22 (48.9)
Other	4 (9.5)	3 (6)	4 (8.9)
Length of time working in criminal legal system (M/SD)	13.26 (11.17)	14.24 (11.41)	14.11 (12.02)
Contact with defendants with SUD within a work context			
Never	1 (2.4)	1 (2)	1 (2.2)
Less than once a month	5 (11.9)	6 (12)	6 (13.3)
Once a month	1 (2.4)	2 (4)	2 (4.4)
2-3 times a month	2 (4.8)	3 (6)	2 (4.4)
Once a week	3 (7.1)	5 (10)	3 (6.7)
2-3 times a week	11 (26.2)	16 (32)	13 (28.9)
Daily	19 (45.2)	17 (34)	18 (40.0)

TABLE 3.3: Pre-post t-test results of CLS professionals

	Pre- intervention		Post- intervention				
	Mean	Standard Deviation	Mean	Standard Deviation	Mean difference	t-value	p-value
BI MAT referral	3.62	1.27	4.05	1.04	.429	3.23	.002*
BI self-care	3.82	1.12	4.14	0.83	.320	2.61	.012*
MCRS	47.71	8.27	50.00	6.76	2.29	3.61	<.001*

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OVERVIEW

This dissertation serves as a crucial milestone in our understanding of the challenges faced by Criminal Legal System (CLS) professionals and the impact of their occupational stress. By inquiring into the dimensions of this stress, this study elucidates its manifestations and the intricate interplay between occupational burnout and stigma towards defendants with substance use disorder (DWSUD). Through mixed methods research and analysis, this dissertation not only quantifies the relationship between burnout and stigma but also uncovers, qualitatively, their nuances and the profound effects they exert on CLS professionals and their practices. Furthermore, this body of work provides empirical evidence showcasing that these practices are malleable and have potential for transformative change. This work shows the positive outcomes resulting from a targeted SHIELD training intervention, which not only addresses burnout but also provides education and resources to foster more empathetic, informed, and effective substance use disorder (SUD)-related case practices. In doing so, this research not only contributes to the novel foundation of data on CLS occupational stress and stigma, but also offers a beacon of hope that intervention and reform are viable avenues toward enhancing the well-being of CLS professionals, subsequently impacting the effective administration of justice for and treatment of DWSUD.

Integrating the existing literature into this body of work

To our knowledge, this is the first body of work to explore the connections between occupational burnout and the stigmatization of defendants with health conditions (SUD) within the CLS demographic. Throughout this dissertation, we compare our results with literature among behavioral and healthcare professionals to strengthen the validity of our findings. Overall,

our findings are in line with literature among other helping professions that interface with individuals with SUD. SUD and SUD-related consequences are increasing, particularly among individuals between the ages of 26-40 (1). Due to SUD related criminalized behavior, the CLS is engaging with an exorbitant number of SUD-related cases, as demonstrated by recent statistics (2) and corroborated by our findings. Healthcare research also shows that SUD-related emergency services are escalating (3,4) and there are strains on capacity for treatment and support due to rising demand (5). Behavioral and healthcare literature also reflect the similar intense emotional, mental, and physical symptoms these CLS professionals expressed in dealing with this public health problem. The body of research on burnout within medical professionals and various human services sectors consistently indicates a heightened risk of burnout among individuals who engage with or offer services to individuals with SUD (6, 7, 8, 9). Due to increasing SUD-related caseloads, CLS professionals are not immune to similar burnout risks and reported similar phenomenon experienced by counselors, physicians, EMS, and nurses (10, 11, 12, 13, 14, 15, 16). One qualitative finding that is particularly interesting is the phenomenon of "othering" (17) that was expressed by our qualitative participants. Due to the stigma associated with being a person with an SUD, many of these CLS professionals may distance themselves from identifying as having the same issues as defendants with SUD-related issues. The literature on othering and SUD suggests that people who meet diagnostic criterion for SUD, utilize this psychological phenomenon to avoid being labeled or identifying with the negative stereotypes associated with having an SUD (18).

Our study shows that stigma towards DWSUD does have a significant relationship with particular burnout constructs (depersonalization-DP and personal accomplishment-PA). Other

studies support the finding that high levels of cynicism (DP) are associated with negative attitudes toward various marginalized groups (19, 20, 21). Behavioral and healthcare literature also show that a professional's sense of efficacy (PA) when delivering services is also associated with attitudes toward groups with various diagnoses (22, 23). The only other study that has used the MBI (24) and MCRS (25) to assess a relationship between burnout and attitudes toward medical conditions found no association, though SUD was not one of the health conditions assessed by the MCRS in a population of doctors (26). It is important to note an important finding, in line with other law enforcement research, that Prosecutors had significantly more negative attitudes toward DWSUD than criminal defense attorneys, controlling for all three constructs of burnout. This demonstrates the impact that authoritarian law enforcement culture may have on stigma toward marginalized groups (27, 28).

The adapted SHIELD training intervention for CLS professionals revealed significant improvements in intentions toward effective practices toward SUD-related cases, intentions to engage in wellness activities to manage occupational stress, and attitudes toward DWSUD. This intervention was delivered by a legal peer and an individual with lived SUD and formerly incarcerated experience. Behavioral, healthcare and law enforcement literature also support the findings that educational training and exposure to individuals with lived experience are excellent strategies to increase knowledge, a sense of efficacy and reduce stigma (29, 30, 31, 32, 33, 34). 20 years of empirical data on this SHIELD training for law enforcement officers exhibits similar improvements in SUD-related knowledge, policing behaviors, and attitudes (35, 36).

INCORPORATING OUR FRAMEWORK

Using the Health Stigma and Discrimination Framework (37) as our guide, this dissertation sought to uncover drivers, facilitators, and practices of SUD stigma within the CLS and assess an adapted training to address occupational burnout/SUD knowledge. The exploration of SUD stigma within the CLS is of paramount importance, as it sheds light on a critical yet often overlooked dimension of the CLS landscape. Understanding and addressing stigma is a cornerstone in the pursuit of fair and equitable treatment for all individuals, especially those dealing with SUD and its related challenges. Across the three aims, the purpose of this research was to investigate this topic, with the Health Stigma and Discrimination Framework, to explore and examine how deeply complex, troubled, and often futile the CLS occupation, organizations and institution is in its relationship with DWSUD, SUD-related cases and practices.

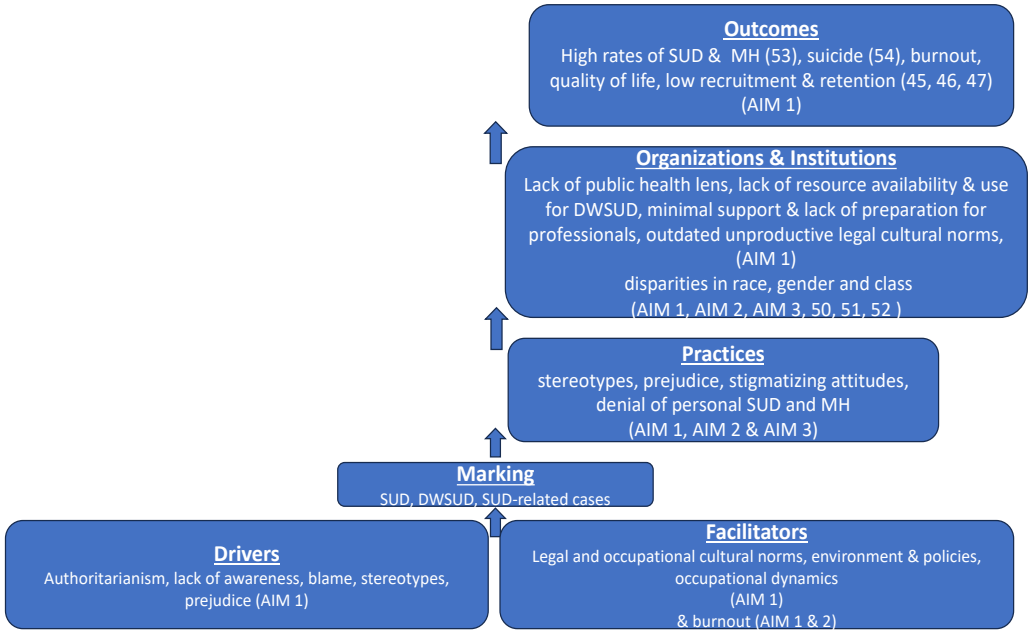

FIGURE 3.1: Health Stigma and Discrimination Framework Applied

Firstly, in chapter 1 (AIM 1), we use the Health Stigma and Discrimination Framework to guide our interview questions and deductive thematic analysis. This exploration is a valuable foundation for understanding the novel area of SUD related stigma within the CLS. After the 17th interview with various CLS professionals, all identified themes exhibited consistent saturation. We discover deeply rooted drivers, facilitators, and alarming practices of SUD related stigma. Drivers range from the authoritarian nature of the CLS (high stakes, punitive-driven judgements toward SUD-related cases), lack of awareness on science-driven treatments like medication for addiction treatment (MAT) and relevant SUD education or resources which creates a sense of futility. This futility often leads to blaming DWSUD, stereotypes of DWSUD, and heightened occupational stress/burnout, ultimately producing a cyclical dynamic. Facilitators involve non-adaptive, ineffective occupational cultural norms of the CLS environment (minimal rehabilitative resources, moral and polarizing judgement in SUD-related cases vs. utilizing public health, science-driven treatments for SUD-related cases) that drive and enable negative stigma manifestations of SUD and people who struggle with substance use. Due to these outdated, unproductive cultural norms, occupational wellness is significantly minimal. Often, these CLS professionals receive little support from organizations and institutions for managing their stressors. Emphasis on promoting and engaging in self-care in legal scholar training and legal professional standards is left for the individual to seek out. Emphasis rarely addresses the role of the system/organization in enabling and reducing mental health and SUD stigma, establishing better benefits, training, and strategies to reduce burnout. There is, however, common and reinforced practices to use substances to network, manage and alleviate the stressors of the occupation. Because of the stigmatizing cultural norms, CLS professionals are hesitant to admit a struggle with substances or to be viewed as an individual with SUD. This

leads to the phenomenon of "othering" (38,39) further perpetuating SUD-related stigma manifestations within the CLS.

In chapter 2 (AIM 2), we use the Health Stigma and Discrimination Framework to guide our scale choices, measure adaptations, hypotheses and understanding of the results. Guided by this framework, we identified that it is pertinent to assess the relationship between occupational burnout constructs and stigma towards DWSUD. Our highly reliable and valid measure choices were adapted for language relevant to the CLS population. The Maslach Burnout Inventory (MBI) (24) was used to assess the extent of occupational burnout and the Medical Condition Regard Scale (MCRS) (25) was used to assess attitudes toward DWSUD. Based on healthcare literature and our guiding framework, we hypothesized that there is a significant relationship between the 3 various constructs (emotional exhaustion-EE, depersonalization-DP, and personal accomplishment-PA) of occupational burnout among CLS professionals and attitudes toward DWSUD. Results among our analytic sample of 101 participants support that specific constructs of high occupational stress and burnout relate to significant manifestations of stigma toward DWSUD. Although EE was non-significant, the direction and magnitude was supported. This demonstrates that EE has an inverse relationship with attitudes toward DWSUD, which reinforces an aspect of our hypothesis that occupational burnout may drive and facilitate SUD stigma practices. DP has a significant inverse relationship with stigma towards DWSUD. This shows that high occupational burnout, manifesting in detachment (from the work) and cynicism, drives and facilitates stigma toward DWSUD. Conversely, as attitudes toward DWSUD improve, DP decreases. PA has a significant positive relationship with attitudes toward DWSUD. This indicates that a high sense of efficacy and positive impact, while engaging in occupational duties,

relates to more positive attitudes toward DWSUD. Contrariwise, a reduced sense of effectiveness and constructive impact drives and facilitates negative attitudes toward DWSUD. These findings give support in utilizing the Health Stigma and Discrimination Framework to guide and theorize an adapted SHIELD occupational wellness/SUD education training intervention to address the drivers and facilitators and practices of SUD-related stigma in the CLS.

In chapter 3 (AIM 3), we use the Health Stigma and Discrimination Framework to guide justification to utilize an adapted SHIELD training and assess changes in drivers, facilitators, and practices of SUD stigma among CLS professionals. The SHIELD occupational wellness/SUD education training has been used for law enforcement for over 20 years and consistently sees improvements in job satisfaction, public health/safety, reductions in burnout and overdose/addiction in the community. The objectives and outcomes of the SHIELD training encompass our goals in utilizing an intervention to assesses changes in SUD stigma drivers, facilitators, and practices within the CLS, thereby adapting this training for this novel population. The results of the intervention showed significant improvements in 1.) behavioral intentions to refer to MAT for SUD-related cases (n=42) (by providing SUD education and local resources in science-driven treatments), 2.) behavioral intentions to engage in self-care to manage occupational stress (n=50) (by providing acknowledgement and education on occupational stress, consequences associated, and tools/strategies to address burnout delivered by a well-informed legal peer), and 3.) attitudes toward DWSUD (n=45) (by providing science-driven SUD education, treatment strategies and delivered by an individual with lived experience). These findings support the validity of the adapted SHIELD training, delivered by a peer and an

individual with SUD lived experience, to address various drivers, facilitators, and practices of SUD stigma among the CLS population.

The analysis of the findings in this dissertation was informed by our framework and approached with a triangulation strategy. We combined both qualitative and quantitative research methods to provide a comprehensive understanding of the challenges faced by CLS professionals and the multifaceted impact of occupational stress on their experiences and practices. The triangulation of these two data sources allowed us to cross-validate our findings and draw a more comprehensive picture of the relationship between occupational stressors, burnout, and stigma in the CLS. Quantitative data provided statistical support for areas of our framework we chose to measure, while qualitative data enriched our understanding of the underlying drivers, facilitators, and practices of SUD stigma among CLS professionals.

Furthermore, the results from the intervention phase, where the adapted SHIELD training was implemented and evaluated, added a practical dimension to our analysis. By assessing changes in behavioral intentions and attitudes, this intervention data reinforced the adaptability of CLS practices and the potential for change in addressing the challenges these professionals face. Creating a framework that guides novel or understudied areas of stigma research, options for measurement, solutions for interventions, and reflections on partnering with organizations, institutions and communities is, in fact, the overall goal of the creators of the Health Stigma and Discrimination Framework (40).

IMPLICATIONS AND FUTURE DIRECTIONS

Making space for those with lived experience to guide the research.

A strength of this research is the PhD candidate researchers lived experience, which informed not only the selection of the research problem, but also provided a unique lens. We would be incredibly remiss if we did not start with the implication of the significance individuals with lived experience bring to this work and SUD research. It is essential to make room at the research table for people with lived experience. We have experienced first-hand the gaps and failed systems. Research questions and solutions to SUD related issues should be guided and informed by those who know what needs to improve. Our unique perspectives and personal accounts serve as priceless assets that enhance the comprehensiveness, authenticity, and feasibility of the research. By actively involving those who have navigated the complicated, painful, brutal but difficult to escape abyss of SUD, research gains access to a wealth of insights that might otherwise remain hidden. An inclusive approach brings distinction to the understanding of the multi-layered issues related to substance use and SUD. It empowers individuals with lived experience to come forward and contribute to shaping effective interventions, policies, and support systems. We are at a time when the solutions to SUD require diverse and comprehensive strategies. Making it possible for individuals with lived experience to succeed as researchers stands as a pivotal catalyst for meaningful change and progress.

Reform

These dissertation findings emphasize the necessity of reforming both legal scholar and professional tools, practices, and policies to ensure that individuals with SUD are met with empathy, support, unbiased, efficacious treatment. This reform should encompass a public health

lens with increased funding for resources, the incorporation of peer navigators, diversion strategies for all stages of change, and the inclusion of harm reduction specialists within the CLS to alleviate workloads and enhance rehabilitative outcomes. We recognize that CLS professionals are only a part of the structure, therefore, education, practices and policy reform should be applied to Judges, Child Protective Services attorney/staff, Probation, Jail staff, Prison staff and other individuals upholding and dictating laws and policies affecting individuals with SUD. As society pleads for a more relevant, efficient, and equitable legal system, the investigation of SUD stigma serves as a critical step toward building a foundation of justice that is truly inclusive and responsive to the needs of all individuals, regardless of their circumstances. This stigma work sheds light on a specific area that warrants acknowledgement when evaluating the multifaceted impact of our drug laws and policies on vulnerable and marginalized individuals.

Re-evaluating the practices of those in power within the criminal legal system

In the realm of research, the choice of focusing on those with immense power versus the powerless holds profound implications for our understanding of societal dynamics and the pursuit of social equity. This dissertation has illuminated the significance of conducting research among individuals with power, revealing how their perspectives and actions may shape the systems (and its consequences) that govern our lives. This novel work lays a foundation for more inquiry into examining the motivations and actions of the powerful, so that we may uncover the root causes of inequities in this system. Studying those, like CLS professionals, with power offers a unique vantage point to unravel the mechanisms that maintain social hierarchies and influence policy decisions. By delving into the thoughts, attitudes, and behaviors of the powerful,

researchers gain insight into the motivations that drive their actions, and the underlying ideologies that sustain their positions. This knowledge is invaluable for identifying opportunities to challenge and transform structures that perpetuate inequalities. Furthermore, understanding the powerful is pivotal in comprehending the mechanisms of privilege and how they intersect with issues of race, gender, and class. Examining the perceptions and actions of those in positions of authority, can shed light on the ways in which systemic advantages (e.g., privileges afforded to some groups and not others- being able to afford private representation or bail) and harms (e.g., negative consequences from structural factors- racial profiling or collateral consequences of convictions) are both wielded and perpetuated, perhaps at times, unconsciously.

Nevertheless, this focus should not overshadow the importance of respectfully researching the experiences of the powerless. Particularly, as forementioned, allowing for researchers with lived experience to become principal investigators and work together with marginalized individuals. This is essential for creating a safe space, allowing for authentic narratives to uncover the injustices they face. Giving influence to the powerless creates invaluable insight to address social disparities, challenge discriminatory practices, and advocate for change.

Application of Health Stigma and Discrimination Framework to DWSUD

For future research, we plan to utilize the Health Stigma and Discrimination framework to explore and assess DWSUD's experience of anticipated stigma. This framework is structured to guide the evaluation of both the stigmatizer and the stigmatized. We will aim to uncover DWSUD experiences and related outcomes of drivers, facilitators, and practices of SUD stigma

in the CLS. Examining both perspectives is crucial for achieving true reform. The contrast of research among the stigmatizer and the stigmatized is not a binary choice, but rather a complementary endeavor. Both perspectives enrich our understanding of the complexities within societies and institutions. We will aim to explore the experiences of anticipated stigma in the system, understand how inequities affect internal narratives, give context to SUD-related recidivism, and pave the way for transformative change. As stigma researchers, the responsibility lies in using our findings to advocate for a more unprejudiced and equitable world, where power is exercised with discretion and the voices of all are heard and regarded.

Expanding Scope, Methods, Measures

Moving forward, it is essential to expand the scope and methods of this research to encompass various approaches (ethnographic/observation, focus groups, longitudinal surveys, etc.), larger and more diverse samples of CLS professionals, corrections, and defendants. Future research should examine various, more intricate mediators and moderators that contribute to SUD stigma and its consequences within the CLS. This area of research would benefit from the incorporation of work assessing stigma towards DWSUD with intersecting identities (race, gender identity, class, sexual orientation, etc.). Our qualitative findings regarding stereotypes justify exploring stigma towards defendants and their specific substances of use (methamphetamine, heroin, alcohol, etc.) and CLS professionals' stigma toward various pathways to recovery (MAT vs abstinence). Subsequent research should test psychometrics to validate and establish the reliability of the adapted scales used in this dissertation, ensuring their suitability for use with this specific population in future endeavors. There is also a great need for creation of more stigma scales, particularly for use in the CLS to bring more variety and context

to this novel work. Research in this area would benefit from relevant scales measuring stigma on both sides of the socio-ecological spectrum.

Supporting CLS Professionals Wellness and Education

These dissertation findings justify identifying CLS professionals under the label of "helping profession". This calls for improving preparation and training (including classes and training on trauma informed legal representation, external and internal bias, tools and resources for occupational related stress) much like therapists, social workers and healthcare professionals. Assessing burnout and furthering ways to alleviate SUD-related workload from these professionals outside of education is vital. It is imperative for organizations and institutions to prioritize the well-being of their legal professionals. Recognizing the demanding and often emotionally taxing nature of their work, these entities should take proactive steps to provide comprehensive support systems. This includes offering resources for stress management, access to free, affordable, and on-site mental health services, and promoting a culture of well-being within the workplace. Future research should examine barriers to engaging in self-care behaviors (for organizational and institutional change) and exploring further into the stigma of SUD among CLS professionals themselves. By investing in the wellness of legal professionals, organizations and institutions not only enhance the health and satisfaction of their workforce but also contribute to improved job performance, ethical decision-making, and ultimately, the delivery of just legal services. In an environment where burnout and stigma can have detrimental effects on both professionals and the individuals they serve, fostering a healthier workplace culture is essential for the betterment of the legal profession.

Furthermore, early interventions aimed at reducing stigma within the legal system warrant attention. Developing and implementing educational programs for legal scholars, particularly going into public service, on SUD, the impact of stigma, and strategies for creating a more effective environment could play a pivotal role in transforming the system. Collaboration between legal practitioners, mental health experts, individuals with lived experience and advocacy organizations will be crucial in designing effective interventions that address stigma holistically.

Incorporating technology-driven solutions, such as online training modules and virtual simulations, including regular contact and dialogue with individuals with lived experience, and the formerly incarcerated (for SUD related matters) could also facilitate widespread dissemination of stigma-reduction strategies and ensure continuous professional development.

MAT specific recommendations

Future studies would also benefit from identifying discrepancies in MAT knowledge, barriers to referral to MAT, including but not limited to; availability and feasibility of MAT treatment and resources, discretion and circumstances that may affect discretion to refer, attitudes towards MAT by Judges and how this affects MAT referral. Our findings show that by providing education and resources to various pathways to recovery for DWSUD, intentions to refer can change. It will be important for future work to not only identify intentions, but to longitudinally assess the number of referrals made within counties and how referrals may be affected based on state/county specific drug laws and policies. To assess MAT referral and engagement success, future research should examine defendant recidivism pre- and post- MAT referral.

By embracing these future directions, researchers, practitioners, and policymakers can work collaboratively to dismantle the barriers posed by stigma within the CLS. Ultimately, the aim is to create a more effectual and just legal process that upholds the rights and dignity of all individuals, regardless of their struggles with SUD.

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APPENDICES

A. ADAPTING SHIELD TO LEGAL PROFESSIONALS' TRAINING OUTLINE

10 minutes for Pre-training Survey

MODULE 1: OCCUPATIONAL STRESS AND WELLNESS/RESILIENCE

INTRODUCTION ON SHIELD TRAINING & TRAINER BACKGROUND (5 minutes)

- Bad News: Stress accumulates - Starts in law school (stats)
- Good News: Protect self from cumulative stress-
    - 1. acknowledge types, quantity, risks
    - 2. recognize symptoms
    - 3. Skills and strategies to alleviate
- **Acknowledge types of stress (10 minutes)**
    - Toxic stress vs good stress
    - General/Daily stress load: management, colleagues, personal life conflicts, workload, pay, physical environment (office, visiting jails)
    - Stress from mounting SUD-related cases
        - Slide on statistics of SUD and incarceration/legal involvement
        - Stress may involve:
            - Policy changes and political views on SUD cases that may interfere/put pressure on outcome
            - Lack of knowledge, preparation, support, or ability to impose orders based on evidenced based treatment
            - Perpetual cycling/recidivism
            - Pressure and burden of responsibility from media and community
    - Traumatic
        - Acute, chronic, or complex
        - Vicarious trauma - working with clients in severe distress, families, communities
        - Trauma and stress of carrying the weight of clients life circumstances/outcomes in their court orders or defense
        - Investigative or on scene of crimes
    - Cumulative stress

- **Acknowledge risks of stress (10 minutes)**
    - Ways stress can damage your career:
        - Burnout / Moral injury

            Dig into the disappointments of the job for folks who go into this field. From not making a difference, to pressures convict/plea deals etc., to mounting SUD cases, to policy changes (or failure to make helpful changes), etc. (Module 2 will offer ways to help.)
        - How unhealthy stress reduction can cause harm: SU/SUD.
        - MH / behavioral health

- Ways stress can damage your personal life
- Suicide (slide on stats of lawyers and suicide rates)

- **Recognize signs & symptoms (10 minutes)**
  - Ways stress affects the body (ABA website has an article on this)
  - Mood/behavioral-type signs & symptoms
  - Signs and symptoms of trauma/PTSD: intrusive or persistent negative thoughts, avoidance and withdrawal, hyperarousal and hypervigilance, or sleep disturbance. Acute: at some sites (like scene of crime)

- **Skills and strategies to alleviate: (10 minutes)**
  - Acknowledge, don't minimize
  - Take a look at how to effectively de-stress, and how some ways are counterproductive.
    - SUD in attorney population- Break the stigma (include slide on SUD and lawyers' stats) and how module 2 will provide information for self and easing workload of SUD cases
  - Recommendations based on resilience research:
    - Individual level- 10 minutes a day of self-care engagement: regular physical activity routine, cognitive reframing, meditation and 3 to 1 positive emotions/experiences.
      - Could include our spectrum of options here
      - Where to look for support and resources
    - Organizational level - higher levels of praise, monitoring work hours (one study and others like it suggest that law firms should consider having alarms built into their billing systems to flag when lawyers are consistently working and billing long hours), sense of belonging and social support (creating teams or team building activities), and meaningful work/opportunities for advocacy.

- Module 1 Summary

(5 MINUTE BREAK)

MODULE 2: HELPING CLIENTS (20 minutes)

- Acknowledge the complicated relationship with SUD crisis and criminal legal system
- Improve occupational stress/burnout and personal health through increasing effectiveness by increasing knowledge on SUD and bring it into their advocacy work
- Context: SUD
  - Despite conventional wisdom and CJS approach, years of research show SUD is not moral failing
  - Intro to various SUD theories/models/views

- Various evidence-based treatment practices for SUD
    - Traditional treatment (pros/cons)
    - MAT/MOUD for OUD, AUD
        - Include Brandon's favorite graphic (this audience can handle it) on drop-off w/o MAT
        - Identify barriers to MAT/MOUD treatment (accessibility- driver's license, transportation, body brokering, etc.)
    - Relationship of EBP with CJS approaches
        - Pros/Cons of drug court
        - Treatment vs. incarceration (public health approach)

- **Outsourcing (10 minutes)**
    - Working with community supervision to help to get real assessments of defendants and to set conditions to include evidence-based approaches/treatment
    - Working with SUD case management/counseling/Peer Support
    - Creating a foundation/allowance to build self-efficacy and hope
    - Referrals
    - Provide resources

- **Stigmatizing language: (5 minutes)**
    - Avoid it as a core aspect of representation (and to support your colleagues with SUD)
    - For DAs, it's about effectiveness, and we should be careful about how we raise the topic
    - For PDs, it's a core aspect of representation

- **Ways to be an advocate for change (5 minutes)**
    - Systemic:
        - Try to get judges & community corrections to understand evidence base, and not be so dependent upon abstinence-only approach
        - Strategies for law and policy change with a public health lens

- Summary/Acknowledgements

3-5 minutes for Post-training Survey

B. RECRUITMENT SCRIPT

Drivers, Facilitators and Practices of SUD stigma within the Criminal Legal System: A mixed methods study

RECRUITMENT SCRIPT

Hello, my name is Garland Gerber. I am a PhD candidate from the University of California, San Diego. Today we are here to invite you to participate in two short surveys that will last approximately 5-10 minutes each, about occupational burnout, substance use disorder and related cases within your work context and an adapted training for legal professionals.

The first survey will happen before the training that you will receive as part of your occupational training, lasting approximately 10 minutes. The second survey will happen after the training, lasting approximately 5 minutes, to assess your opinions about how the training may or may have not helped you.

Participation in this research is entirely voluntary. We will use a combination of the information provided in the demographics section to create your unique identifier. This will be used to link your responses to the post-training evaluation. Our survey site has security features that will be used to mitigate the risk of identifier information: IP addresses will not be collected as Qualtrics is GDPR (General Data Protection Regulation) compliant. No one will have access to your survey responses except for myself.

Not participating in these surveys will have no bearing on your employment/training status.

Separate from the study you are participating in today, if you would like to volunteer to participate in a one-hour interview based on topics of occupational burnout and substance use related cases for this research please submit your contact information when prompted in the survey. Your survey responses will be unidentifiable and will not be linked to your contact information. We will contact you to schedule the interview at a time and day most convenient for you. You will receive a $50 amazon gift card upon completion of the interview as compensation for your time.

Do you have any questions now? Are you interested in participating?

If you want additional information or have questions or research-related problems, you may reach Garland Gerber at 310-855-4090 or ggerber@health.ucsd.edu. and/or Leo Beletsky at l.beletsky@health.ucsd.edu

C. QUALITATIVE INTERVIEW GUIDE

Drivers, Facilitators and Practices of SUD stigma within the Criminal Legal System: A mixed methods study: Interview Protocol

Participant interview structure and facilitation: Each semi-structured interview will be conducted by zoom and will last approximately 60 minutes.

All participants will be read a copy of the informed consent form and will be asked brief demographic information after providing verbal informed consent. Demographic form: age, gender, ethnicity, years of legal experience, and education.

In the context of COVID-19, the interview will be conducted by zoom and will be recorded. The recording will not be started until each participant has given verbal consent.

The interviewer will start the discussion by explaining the purpose of the study:

- Thank you for taking time to meet with me today. Today, I will be talking with you about your experience as a legal professional, workload, self-care practices and your understanding, experience and training on substance use and substance use disorder.
- This is a mixed methods study and may provide a mechanism for further content for larger studies, including content for future curriculum and creation of a quantitative survey.
- While we talk, I will be taking notes and keeping track of major points you make and questions I might want to follow up on.
- There are no right or wrong answers.
- Remember, your participation is voluntary, and you may end this discussion at any time.
- To protect your privacy, you will be asked to avoid using your personal name, naming other people you know, and naming organizations; If you do need to name someone, please try to identify them by their role.
- Do you understand the terms of the informed consent and consent to this interview?
- Do you have any questions before we proceed with the discussion?

Demographic questions:
Age
Gender
Ethnicity
Years of legal experience
Education

This first section of questions will be regarding your legal work and your experiences with the work, the aspects you enjoy, difficulties and the ways in which you cope, self-care practices and what you would like to improve.

What made you interested in becoming an attorney?

What type of law have you practiced?
(Probe for variations and why)

What are your duties and obligations in your practice as a criminal justice related legal professional?

How do you feel about the work you do?

How do you feel about your work environment?

What are some of the biggest hurdles in your work?
(Probe for caseload, overworked, policy frustrations, vicarious trauma, etc.)

What types of cases do you mostly deal with? Are substance use related cases the bulk?

How do you cope with workplace stress?
(Probe for substance use or other forms of coping)

How does burnout manifest for you?

What part does the organization/system play in your occupational burnout?

Please tell me about the programs in your workplace that help with managing stress?

Tell me about your experience with law school and their training of stress management?

What does the term "self-care" mean to you?

How would you bring about improvements in the things you find difficult?

This second section of questions will be regarding substance use, substance use disorder in your work and education context

Can you tell me the areas you feel most prepared to work with regarding defendants with SUD related cases? (Probe for challenges/barriers, beliefs, knowledge, attitudes)

Can you tell me the areas you feel least prepared to work with regarding defendants with SUD related cases? (Probe for challenges/barriers, beliefs, knowledge, attitudes, observations)

What do you know about substance use?

(Probing questions- thoughts, experiences with individuals who use substances? Aware of any theories on SUD?)

Do you believe there are any intersections of SUD and legal profession/professionals and/or the criminal justice system?

(Probe- If so, in what ways?)

Do you have any perceptions or beliefs on people who use substances and incarceration?

(Probe for any thoughts on proposition 36? Drug court?)

What do you feel was the attitude of your peers in law school about substance use (and people who use substances)?

What do you feel is the attitude of your peers in the legal profession about substance use (and people who use substances)?

Are there any terms or language used to refer to these kinds of cases and defendants? (i.e., frequent flyer)

What are the practices most common for these types of cases and defendants?

Stereotypes, prejudices, discrimination?

Please tell me your observations on attorney burnout and how it relates to SUD cases?

Please tell me your observations on attorney burnout and how it relates to interactions with defendants with SUD?

Tell me about your experience of law school and substance use?

Was there training and curriculum regarding SU and SUD related cases?

What did you enjoy about the curriculum?

Is there anything you would add/change?

What types of clients did you feel prepared to work with upon completion?

If there was a SU curriculum introduced, what most would you like to know/learn?

How receptive would peers be to attend a SU workshop or incorporated curriculum?

Who would you like to learn this material from (professor, therapist, law enforcement, researcher, medical doctor)?

D. INFORMED CONSENT- QUALITATIVE

University of California, San Diego
Consent to Act as a Research Subject
Drivers, Facilitators and Practices of SUD Stigma within the Criminal Justice System: A Mixed Methods Study
IRB #804979

Garland Gerber MA, MFT, who is a PhD candidate under the direction of Principal Investigator on record Leo Beletsky, J.D., MPH at The University of California, San Diego, School of Medicine, Division of Infectious Diseases and Global Public Health is conducting a research study to find out more about your experiences and knowledge about burnout, self-care practices substance use, substance use disorder, stigma, and the trainings on these topics for legal professionals.

If you agree to be in this study, the following will happen to you:
Interview Participants: You will be asked to verbally consent prior to interview questions. You will attend 1 interview lasting approximately 1-1 ½ hour. The study involves answering a set of semi-structured interview questions about your experiences, perceptions and understanding on self-care, burnout, substance use, substance use disorder in your work context and your beliefs, feelings, practices, and knowledge in this area. You are free to exit the study at any time and can skip any questions that you are uncomfortable answering.

Research records will be kept confidential to the extent allowed by law.
Interview Participants: Data will be confidential. To ensure the minimal risk and protection of our participants we will utilize numbers (ex. Participant 01) to identify and conceal your identity. In line with current ethical guidelines, Zoom and digital audio recordings will be destroyed following transcription validation to protect participant identity and information given. For interviews, data are anonymous and no identifying information will be collected.
Garland Gerber has received CITI training for human subjects' research and is bound by similar ethical standards as a clinician. Her training and extensive clinical experience will lend to the utmost importance of protecting participants against risk.

Participation in this research is entirely voluntary. You may refuse to participate or withdraw at any time without penalty or loss of benefits to which you are entitled.
If you want additional information or have questions or research-related problems, you may reach Garland Gerber at 310-855-4090 or ggerber@health.ucsd.edu. and/or Leo Beletsky at l.beletsky@health.ucsd.edu

You will receive a $50 amazon gift card upon completion of the interview as compensation for your time.

E. PRE-TRAINING SURVEY

Pre-training Survey (Tested on key informants- approximately 10 minutes to finish)

Constructs

Burnout- Maslach burnout inventory (Subscales measuring- emotional exhaustion, depersonalization, personal accomplishment) *22 questions total.*

Behavioral intentions (and other TPB based questions) of self-care practices- Based on constructs from the Theory of Planned Behavior *3 questions total.*

Behavioral intention – *1 question*

Behavioral belief strength of self-care practices- *1 question* Inquiry into participants belief that engaging in self-care activities will result in having less occupational stress

Behavioral intentions of self-care and - *1 question* Inquiry into intention to engage in professional self-care practices and factors that create barriers to these practices.

Seeking support and barriers to self-care practices- *2 questions total*

Inquiry into willing ness to seek support from a mental health professional and barriers to engaging in self-care

Regard for people with SUD- Medical Condition Regard Scale (Three themes: The degree to which respondents find clients with SUD enjoyable, treatable, and worthy of resources) *11 questions total.*

Behavioral intentions (and other TPB based questions) of SUD related case practices- Based on constructs from the Theory of Planned Behavior and adapted from SHIELD training for law enforcement *8 questions total.*

Behavioral belief strength of SUD related case practices- Inquiry into belief that their role is to facilitate SUD recovery *4 questions.*

Behavioral intentions of SUD related case practices- Inquiry into intention to refer clients to MAT treatment on a regular basis *1 question.*

Behavioral intentions of SUD related case practices- Inquiry into intention to refer clients to MAT treatment specific medications *3 questions.*

MAT perceptions/knowledge- MAT perceptions and knowledge *10 questions total*

Substance Use among Criminal Legal System Professionals- CAGE-AID**,** (Questions Adapted to Include Drug Use) *4 questions total*

60 construct questions total

ALL SCALES HAVE BEEN ADAPTED FOR CRIMINAL LEGAL SYSTEM

DEMOGRAPHIC

_____BEGIN SURVEY_____

Informed Consent

1. You are invited to participate in this survey because Garland Gerber MA, MFT, who is a PhD candidate under the direction of Principal Investigator on record Leo Beletsky, J.D., MPH at The University of California, San Diego School of Medicine, Division of Infectious Diseases and Global Public Health is conducting a research study to find out more about your experiences and knowledge about substance use, substance use disorder, stigma, burnout, self-care practices and the SHIELD trainings on these topics adapted for legal professionals.

2. As part of your participation in the evaluation, you will be asked to answer survey questions before and after the training related to your demographic characteristics, your knowledge, perceptions and attitudes about people with addiction.

a. The amount of time involved in your participation will be about 5 to 10 minutes for each survey.

3. One risk of participating in this study is that confidential information about you may be accidentally disclosed. However, to mitigate this risk, any data used in evaluation reports or research publications will only be shared in aggregate. Additionally, all electronic data are stored on a password-protected Qualtrics portal, and downloaded data are stored on a password-protected networked drive accessible only to the evaluation team. There are no additional known risks associated with this research other than the potential for boredom or discomfort. If any of the survey questions make you uncomfortable, you may choose not to answer the questions.

4. There are no direct benefits for participating in this study. However, your responses may help us improve the effectiveness of future sessions and allow us to ensure accurate content delivery.

5. We will do everything we can to protect your privacy. As part of this effort, your identity will not be revealed in any publication that may result from this study. In rare instances, a researcher's study must undergo an audit or program evaluation by an oversight agency (such as the Office for Human Research Protection) that would lead to disclosure of your data as well as any other information collected by the researcher. If an audit were to happen, the auditor is held to the same standards as the evaluators and will maintain your privacy.

6. Your participation is voluntary, and you may refuse to participate or withdraw at any time without penalty or loss of benefits to which you are entitled. If you want additional information or have questions or research-related problems, you may reach Garland Gerber at 310-855-4090 or ggerber@health.ucsd.edu. and/or Leo Beletsky at l.beletsky@health.ucsd.edu

7. If you consent to participate in the evaluation, please check the box below.

I have read this consent form and hereby consent to my participation in the research described above.

We will use a combination of the information provided below to create your unique identifier that will be used to link your responses to the post-training evaluation.

First letter of your first name
First letter of your middle name
Day of birth (1-31)
Number representing month of your birth (e.g., December = 12):

To start, we would like to ask you some basic demographic questions to characterize who is taking this survey.

Please enter your age

_____

Which of these responses best reflects you gender identity? Please choose one.

Man
Woman
Transgender Man/Transmasculine
Transgender Woman/Transfeminine
Non-Binary
Another identity best describes me

_____
Prefer not to say

What is your race? Select all that apply

White
Black or African American
Asian
American Indian or Alaska Native
Middle Eastern or North African
Native Hawaiian or Other Pacific Islander
Other race, ethnicity, or origin

What is your ethnicity?

Hispanic, Latin-X
Non-Hispanic, Latin-X

What is your current position?

Attorney
Please specify- Prosecuting Attorney or Defense (Public Defender or contracted Defense)
Paralegal
Investigator

Social worker
Administrative
Other

_____

How many years have you worked within the criminal legal system field in all positions and assignments? If less than one year enter 0

_____

Please indicate the highest academic education completed

High school
Some college
Associate's degree
Bachelor's degree
Master's degree
Doctorate: JD, PhD, EdD, etc.
Prefer not to answer

Year you received your highest degree

What is your average caseload per month?

_____

What would be a manageable caseload per month?

_____

How often do you have contact with people with substance use disorder or substance use-related cases within your work context?
Never
Less than once a month
Once a month
2–3 times a month
Once a week
2–3 times a week
Daily

Please indicate the county where your agency is located

_____

We recognize that interactions with people who use drugs and individuals facing charges within the criminal legal system may be identified by various terms, in the following survey questions we will use the term "defendants" for consistency.

The following questions are a self-assessment on how you feel certain ways about your work:

Burnout

Adapted **Maslach Burnout Inventory**

Emotional Exhaustion
I feel emotionally drained from my work.
I feel used up at the end of my workday.
I feel fatigued when I have to get up in the morning and have to face another day on the job.
Working with people all day is really a strain for me.
I feel burned out from my work.
I feel frustrated by my job.
I feel I'm working too hard on my job.
Working with cases (defendants/victims) directly puts too much stress on me.
I feel like I'm at the end of my rope.

Depersonalization
I feel I treat some cases as if defendants were impersonal objects.
I've become more callous toward people since I took this job.
I worry that this job is hardening me emotionally.
I don't really care what happens to some cases.
I feel my cases (defendants/victims) blame me for some of their problems.

Personal Accomplishment
I can easily understand how defendants feel about things.
I deal very effectively with the problems of my caseloads.
I feel I'm positively influencing other people's lives through my work.
I feel very energetic.
I can easily create a relaxed atmosphere with cases (defendants/victims.
I feel exhilarated after working closely with cases (defendants/victims).
I have accomplished many worthwhile things in this job.
In my work, I deal with emotional problems very calmly.

A psychological assessment instrument comprising 22 symptom items pertaining to occupational burnout. The instrument takes approximately 10 minutes to complete. The MBI items are scored using a 7-point Likert scale from Never (1), a few times a year (2), once a month (3), a few times per month (4), once a week (5), most days (6), Everyday (7)

Maslach, C., Jackson, S. E., & Leiter, M. P. (1997). Maslach Burnout Inventory: Third edition. In C. P. Zalaquett & R. J. Wood (Eds.), *Evaluating stress: A book of resources* (pp. 191–218). Scarecrow Education.

Modifications:

Emotional Exhaustion

Working with people directly puts too much stress on me.

MODIFIED TO: Working with cases (defendants/victims) directly puts too much stress on me.

Depersonalization:

I feel I treat some recipients as if they were impersonal objects.

MODIFIED TO: I feel I treat some cases as if defendants were impersonal objects.

I don't really care what happens to some recipients.

MODIFIED TO: I don't really care what happens to some cases.

I feel recipients blame me for some of their problems.

MODIFIED TO: I feel my cases (defendants/victims) blame me for some of their problems.

Personal Accomplishment

I can easily understand how recipients feel about things.

MODIFIED TO: I can easily understand how defendants feel about things.

I deal very effectively with the problems of my recipients.

MODIFIED TO: I deal very effectively with the problems of my caseloads.

I can easily create a relaxed atmosphere with my recipients.

MODIFIED TO: I can easily create a relaxed atmosphere with cases(defendants/victims).

I feel exhilarated after working closely with my recipients.

MODIFIED TO: I feel exhilarated after working closely with cases (defendants/victims).

Behavioral Intentions of Self-Care Questions based on Theory of Planned Behavior (Icek Ajzen)

The following questions are about self-care. We define self-care as: "Active participation in enhancing the quality of your health and well-being. Doing small things every day to help manage your physical, mental and emotional wellness" (NAMI, 2020).

While practicing self-care can benefit your health and well-being at any level, health behavior research shows it is most effective for people when they begin to engage in these activities for 10 minutes a day and build upon that.

Please select the answers that best reflect your current beliefs, intentions and barriers in managing occupational stress.

Behavioral intention to engage in self-care to manage occupational stress

I intend to engage in self-care, to manage occupational stress, for at least 10 minutes, per day

Scored using a 5-point Likert-scale ranging from (1) Very unlikely; (2) Not likely; (3) Neutral; (4) Likely; (5) Likely.

Behavioral belief strength
Engaging in self-care activity for at least 10 min, per day, will result in my having less occupational stress.

Scored using a 5-point Likert-scale ranging from (1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; (5) Strongly agree.

Behavioral intention to engage in professional self-care domain to manage occupational stress

I intend to engage in professional self-care (to manage occupational stress) for at least 10 min, per day.

Scored using a 5-point Likert-scale ranging from (1) Very unlikely; (2) Not likely; (3) Neutral; (4) Likely; (5) Very likely.

Seeking support

I intend to seek professional support (such as from a therapist, psychologist, or psychiatrist) to help me build my resilience to occupational stress.
___yes ___no

Barriers to self-care
What is most likely to prevent you from engaging in self-care behaviors
Please rank: 1 = Most likely, 6= Least likely

Workload
Occupational Burnout
Family responsibilities
Fear/Anxiety of change
Economics
Lawyer/office culture

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211.

Regard for people with SUD

Adapted **Medical Condition Regard Scale**

The following questions refer to dealing with and/or prosecuting defendants/cases involving Substance Use Disorder (SUD).
Please rate your level of agreement with the following statements. Please be aware that the response options change on the next several questions.

Working with defendants/cases like this is satisfying
The legal system should facilitate treatment for substance use disorder-related cases to the same degree that it facilitates treatment for mental health-related cases
There is little I can do to help defendants like this (reverse coded)
I feel especially compassionate towards defendants/cases like this
Defendant/cases like this irritate me (reverse coded)
I wouldn't mind going through extra training to prepare for defendants/cases like this
Dealing with defendants/cases like this is a waste of taxpayer dollars (reverse coded)
Defendants/cases like this are particularly difficult for me to work with (reverse coded)
I can usually find strategies that help defendants like this attempt/access recovery
I enjoy giving extra time to defendants/cases like this
I prefer not to work with defendants/on cases like this (reverse coded)

The Medical Condition Regard Scale is utilized to measure negative and positive regard for various aspects of working with people with a diagnosis. The MCRS is scored on a 6-point Likert-scale ranging from (1) Strongly disagree; (2) Disagree; (3) Not sure but probably disagree; (4) Not sure but probably agree; (5) Agree; (6) Strongly agree.

Christison, G. W., Haviland, M. G., & Riggs, M. L. (2002). The Medical Condition Regard
Scale: Measuring reactions to diagnoses. *Academic Medicine, 77*(3), 257–262. https://doi.org/10.1097/00001888-200203000-00017

Modifications:

Working with patients like this is satisfying
MODIFIED TO: Working with defendants/cases like this is satisfying

Insurance plans should cover patients like this to the same degree that they covered patients with other conditions.
MODIFIED TO: The legal system should facilitate treatment for substance use disorder-related cases to the same degree that it facilitates treatment for mental health-related cases.

There is little I can do to help patients like this
MODIFIED TO: There is little I can do to help defendants/cases like this

I feel especially compassionate towards patients like this
MODIFIED TO: I feel especially compassionate towards defendants/cases like this

Patients like this irritate me
MODIFIED TO: Defendants/cases like this irritate me

I would not mind getting up on-call nights to care for patients like this
MODIFIED TO: I wouldn't mind going through extra training to prepare for defendants/cases like this

Treating patients like this as a waste of money
MODIFIED TO: Dealing with defendants/cases like this is a waste of taxpayer dollars

Patients like this are particularly difficult for me to work with
MODIFIED TO: Defendants like this are particularly difficult for me to work with

I can usually find something that helps patience like this feel better
MODIFIED TO: I can usually find strategies that helps defendants like this attempt/access recovery

I enjoy giving extra time to patients like this
MODIFIED TO: I enjoy giving extra time to defendants/cases like this

I prefer not to work with patients like this
MODIFIED TO: I prefer not to work with defendants/on cases like this

Behavioral Intentions Questions based on Theory of Planned Behavior (Icek Ajzen)

Behavioral belief strength

It is my job to facilitate resources for defendants with SUD
It is my professional role to facilitate recovery from SUD
My supervisor is supportive of me exploring various ways that facilitate recovery from SUD
My colleagues are supportive of me exploring various ways that facilitate recovery from SUD

Scored using a 5-point Likert-scale ranging from (1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; (5) Strongly agree.

Behavioral intention to refer defendants to evidence based treatment other than abstinence:

Medications for addiction treatment (MAT) are the FDA-approved medications used for the treatment of Alcohol Use Disorder or Opioid Use Disorder. These medications include Methadone, Buprenorphine (Suboxone), and Vivitrol (Naltrexone).

Please indicate how likely you would be to make the following referrals for defendants with a substance use disorder.

"I intend to refer defendants with substance use disorder to MAT on a regular basis."
Scored using a 5-point Likert-scale ranging from (1) Very unlikely; (2) Not likely; (3) Neutral; (4) Likely; (5) Very likely.

Behavioral intentions to refer clients to specific MAT treatments

I intend to refer defendants with opioid use disorder to Methadone treatment on a regular basis.
Scored using a 5-point Likert-scale ranging from (1) Very unlikely; (2) Not likely; (3) Neutral; (4) Likely; (5) Very likely.

I intend to refer defendants with opioid use disorder to Buprenorphine (Suboxone) treatment on a regular basis.
Scored using a 5-point Likert-scale ranging from (1) Very unlikely; (2) Not likely; (3) Neutral; (4) Likely; (5) Very likely.

I intend to refer defendants with opioid use disorder to Vivitrol (naltrexone) treatment on a regular basis.
Scored using a 5-point Likert-scale ranging from (1) Very unlikely; (2) Not likely; (3) Neutral; (4) Likely; (5) Very likely.

MAT Perceptions and Knowledge

Medications for addiction treatment (MAT) are the FDA-approved medications used for the treatment of Alcohol Use Disorder or Opioid Use Disorder. These medications include Methadone, Buprenorphine (Suboxone), and Vivitrol (Naltrexone).

Please rate your level of agreement with the following statements.

MAT reduces the effects of opioids
MAT should be available as a lifelong treatment option
The goal of MAT is eventual detox and sobriety
MAT is just substituting one addiction for another (reverse coded)
MAT maintenance reduces criminal activities among people who use drugs
MAT maintenance reduces HIV risk among people who use drugs
MAT maintenance reduces risk of dying among people who use drugs
MAT increases chances of using illicit opioids among people who use drugs (reverse coded)
MAT reduces consumption of illicit opioids among people who use drugs.
Do not need MAT after prison because there is no drug use in prison (reverse coded)

The MAT Perceptions and Knowledge items are scored using a 6-point Likert-scale ranging from (1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; (5) Strongly agree (6) Don't know

Friedmann, P. D., Wilson, D., Knudsen, H. K., Ducharme, L. J., Welsh, W. N., Frisman, L., Knight, K., Lin, H.-J., James, A., Albizu-Garcia, C. E., Pankow, J., Hall, E. A., Urbine, T. F., Abdel-Salam, S., Duvall, J. L., & Vocci, F. J. (2015). Effect of an organizational linkage intervention on staff perceptions of medication-assisted treatment and referral intentions in community corrections. *Journal of Substance Abuse Treatment*, *50*, 50–58.

Modifications:

Added a 6th option of "Don't know"

MAT maintenance reduces addicts' criminal activities
MODIFIED TO: MAT maintenance reduces criminal activities among people who use drugs

MAT maintenance reduces addicts' HIV risk
MODIFIED TO: MAT maintenance reduces HIV risk among people who use drugs

MAT maintenance reduces addicts' risk of dying
MODIFIED TO: MAT maintenance reduces risk of dying among people who use drugs

MAT increases addicts' chances of using illicit opioids

MODIFIED TO: MAT increases chances of using illicit opioids among people who use drugs

MAT reduces addicts' consumption of illicit opioids
MODIFIED TO: MAT maintenance reduces risk of dying among people who use drugs

CAGE for Drugs and alcohol

CAGE Questions Adapted to Include Drug Use (CAGE-AID)

Have you ever felt you ought to cut down on your drinking or drug use?
Have people annoyed you by criticizing your drinking or drug use?
Have you felt bad or guilty about your drinking or drug use?
Have you ever had a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover (eye-opener)?

Scoring: Item responses on the CAGE questions are scored 0 for "no" and 1 for "yes" answers, with a higher score being an indication of alcohol problems.
A total score of two or greater is considered clinically significant.
The normal cutoff for the CAGE is two positive answers, however, the Consensus Panel recommends that the primary care clinicians lower the threshold to one positive answer to cast a wider net and identify more patients who may have substance use disorders.

CAGE is derived from the four questions of the tool: Cut down, Annoyed, Guilty, and Eye-opener
CAGE Source: Ewing 1984

Brown RL, Leonard T, Saunders LA, Papasouliotis O. The prevalence and detection of substance use disorder among inpatients ages 18 to 49: an opportunity for prevention. Preventive Medicine. 1998;27:101-110.

OPTIONAL

Adapted Drug Problems Perceptions Questionnaire

Factor 1 (Capture knowledge about substance use disorders as well as the importance of public funding and efforts to address such conditions.)

Substance use is a chronic disease.
Progress is possible after substance use relapses.

Addressing substance use disorder should be a goal of the criminal legal system.
Public funding should be increased to address substance use disorder services for ex-offenders.

Factor 2 (capture items regarding acceptability of personal contact or social proximity to offenders with substance use disorders; "Social Distance")

I am willing to have a person with a substance use disorder marry into my family.
I am willing to have a person with a substance use disorder start working closely with me on a job.
Employers should be allowed to deny employment to a person with a substance use disorder.
Landlords should be able to deny housing to a person with a substance use disorder.

Factor 3 (capture items regarding willingness to work with offenders with substance use disorders and overall self-confidence in this regard; "Self-Efficacy"

I feel there is little I can do to help offenders with a substance use disorder.
I feel I am able to work with offenders with a substance use disorder as well as others.
All in all, I am inclined to feel I am a failure with offenders with a substance use disorder.
In general, I have less respect for those offenders with a substance use disorder than most others I work with.
At times I feel I am no good at all with offenders with a substance use disorder
I feel I do not have much to be proud of when serving offenders with a substance use disorder.
On the whole, I am satisfied with the way I work with persons with a substance use disorder.
I often feel uncomfortable serving those with a substance use disorder.

Coded on a 5-point Likert-scale ranging from (1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; (5) Strongly agree.

Lowder, E. M., Ray, B. R., & Gruenewald, J. A. (2019). Criminal Justice Professionals' Attitudes Toward Mental Illness and Substance Use. *Community Mental Health Journal*, *55*(3), 428–439.

_____END SURVEY_____

F. POST-TRAINING SURVEY

Post-training Survey (Tested on key informants- approximately 5 minutes to finish)

Constructs

Behavioral intentions (and other TPB based questions) of self-care practices- Based on constructs from the Theory of Planned Behavior *3 questions total.*

Behavioral intention – *1 question*

Behavioral belief strength of self-care practices- *1 question* Inquiry into participants belief that engaging in self-care activities will result in having less occupational stress

Behavioral intentions of self-care and - *1 question* Inquiry into intention to engage in professional self-care practices and factors that create barriers to these practices.

Seeking support - *1 question total*

Inquiry into willing ness to seek support from a mental health professional

Regard for people with SUD- Medical Condition Regard Scale (Three themes: The degree to which respondents find clients with SUD enjoyable, treatable, and worthy of resources) *11 questions total*

Behavioral intentions (and other TPB based questions) of SUD related case practices- Based on constructs from the Theory of Planned Behavior and adapted from SHIELD training for law enforcement *8 questions total.*

Behavioral belief strength of SUD related case practices- Inquiry into belief that their role is to facilitate SUD recovery *4 questions.*

Behavioral intentions of SUD related case practices- Inquiry into intention to refer clients to MAT treatment on a regular basis *1 question.*

Behavioral intentions of SUD related case practices- Inquiry into intention to refer clients to MAT treatment specific medications *3 questions.*

MAT perceptions/knowledge- MAT perceptions and knowledge *10 questions total*

Behavioral intentions (and other TPB based questions) of SUD related case practices- Based on constructs from the Theory of Planned Behavior and adapted from SHIELD training for law enforcement *3 questions total*

Discretion of SUD related case practices- consequences- Inquiry into intention to refer clients to treatment vs incarceration *1 question*

Discretion of SUD related case practices- expectations- Inquiry into intention to refer clients to treatment vs incarceration *1 question*

Discretion of SUD related case practices- individual- Inquiry into intention to refer clients to treatment vs incarceration *1 question*

Assessment/Feedback on training and survey- *2 questions*

36 *construct questions total*

ALL SCALES HAVE BEEN ADAPTED FOR CRIMINAL LEGAL SYSTEM

DEMOGRAPHIC

BEGIN SURVEY

We will use a combination of the information provided below to create your unique identifier that will be used to link your responses to the post-training evaluation

First letter of your first name
First letter of your middle name
Day of birth (1-31)
Number representing month of your birth (e.g., December = 12):

Behavioral Intentions of Self-Care Questions based on Theory of Planned Behavior (Icek Ajzen)

The following questions are about self-care. We define self-care as: "Active participation in enhancing the quality of your health and well-being. Doing small things every day to help manage your physical, mental and emotional wellness" (NAMI, 2020).

While practicing self-care can benefit your health and well-being at any level, health behavior research shows it is most effective for people when they begin to engage in these activities for 10 minutes a day and build upon that.

Please select the answers that best reflect your current beliefs, intentions and barriers in managing occupational stress.

Behavioral intention to engage in self-care to manage occupational stress

I intend to engage in self-care, to manage occupational stress, for at least 10 minutes, per day

Scored using a 5-point Likert-scale ranging from (1) Very unlikely; (2) Not likely; (3) Neutral; (4) Likely; (5) Likely.

Behavioral belief strength
Engaging in self-care activity for at least 10 min, per day, will result in my having less occupational stress.

Scored using a 5-point Likert-scale ranging from (1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; (5) Strongly agree.

Behavioral intention to engage in professional self-care domain to manage occupational stress

I intend to engage in professional self-care (to manage occupational stress) for at least 10 min, per day.

Scored using a 5-point Likert-scale ranging from (1) Very unlikely; (2) Not likely; (3) Neutral; (4) Likely; (5) Very likely.

Seeking support

I intend to seek professional support (such as from a therapist, psychologist, or psychiatrist) to help me build my resilience to occupational stress.
___yes ___no

Regard for people with SUD

Adapted **Medical Condition Regard Scale**

The following questions refer to dealing with and/or prosecuting defendants/cases involving Substance Use Disorder (SUD).
Please rate your level of agreement with the following statements. Please be aware that the response options change on the next several questions.

Working with defendants/cases like this is satisfying
The legal system should facilitate treatment for substance use disorder-related cases to the same degree that it facilitates treatment for mental health-related cases
There is little I can do to help defendants like this (reverse coded)
I feel especially compassionate towards defendants/cases like this
Defendant/cases like this irritate me (reverse coded)
I wouldn't mind going through extra training to prepare for defendants/cases like this
Dealing with defendants/cases like this is a waste of taxpayer dollars (reverse coded)
Defendants/cases like this are particularly difficult for me to work with (reverse coded)
I can usually find strategies that help defendants like this attempt/access recovery
I enjoy giving extra time to defendants/cases like this
I prefer not to work with defendants/on cases like this (reverse coded)

The Medical Condition Regard Scale is utilized to measure negative and positive regard for various aspects of working with people with a diagnosis. The MCRS is scored on a 6-point Likert-scale ranging from (1) Strongly disagree; (2) Disagree; (3) Not sure but probably disagree; (4) Not sure but probably agree; (5) Agree; (6) Strongly agree.

Christison, G. W., Haviland, M. G., & Riggs, M. L. (2002). The Medical Condition Regard
Scale: Measuring reactions to diagnoses. *Academic Medicine, 77*(3), 257–262. https://doi.org/10.1097/00001888-200203000-00017

Modifications:

Working with patients like this is satisfying
MODIFIED TO: Working with defendants/cases like this is satisfying

Insurance plans should cover patients like this to the same degree that they covered patients with other conditions.
MODIFIED TO: The legal system should facilitate treatment for substance use disorder-related cases to the same degree that it facilitates treatment for mental health-related cases.

There is little I can do to help patients like this
MODIFIED TO: There is little I can do to help defendants/cases like this

I feel especially compassionate towards patients like this
MODIFIED TO: I feel especially compassionate towards defendants/cases like this

Patients like this irritate me
MODIFIED TO: Defendants/cases like this irritate me

I would not mind getting up on-call nights to care for patients like this
MODIFIED TO: I wouldn't mind going through extra training to prepare for defendants/cases like this

Treating patients like this as a waste of money
MODIFIED TO: Dealing with defendants/cases like this is a waste of taxpayer dollars

Patients like this are particularly difficult for me to work with
MODIFIED TO: Defendants like this are particularly difficult for me to work with

I can usually find something that helps patience like this feel better
MODIFIED TO: I can usually find strategies that helps defendants like this attempt/access recovery

I enjoy giving extra time to patients like this
MODIFIED TO: I enjoy giving extra time to defendants/cases like this

I prefer not to work with patients like this
MODIFIED TO: I prefer not to work with defendants/on cases like this

Behavioral Intentions Questions based on Theory of Planned Behavior (Icek Ajzen)

Behavioral belief strength

It is my job to facilitate resources for defendants with SUD
It is my professional role to facilitate recovery from SUD
My supervisor is supportive of me exploring various ways that facilitate recovery from SUD
My colleagues are supportive of me exploring various ways that facilitate recovery from SUD

Scored using a 5-point Likert-scale ranging from (1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; (5) Strongly agree.

Behavioral intention to refer defendants to evidence based treatment other than abstinence:

Medications for addiction treatment (MAT) are the FDA-approved medications used for the treatment of Alcohol Use Disorder or Opioid Use Disorder. These medications include Methadone, Buprenorphine (Suboxone), and Vivitrol (Naltrexone).

Please indicate how likely you would be to make the following referrals for defendants with a substance use disorder.

"I intend to refer defendants with substance use disorder to MAT on a regular basis."
Scored using a 5-point Likert-scale ranging from (1) Very unlikely; (2) Not likely; (3) Neutral; (4) Likely; (5) Very likely.

Behavioral intentions to refer clients to specific MAT treatments

I intend to refer defendants with opioid use disorder to Methadone treatment on a regular basis.
Scored using a 5-point Likert-scale ranging from (1) Very unlikely; (2) Not likely; (3) Neutral; (4) Likely; (5) Very likely.

I intend to refer defendants with opioid use disorder to Buprenorphine (Suboxone) treatment on a regular basis.
Scored using a 5-point Likert-scale ranging from (1) Very unlikely; (2) Not likely; (3) Neutral; (4) Likely; (5) Very likely.

I intend to refer defendants with opioid use disorder to Vivitrol (naltrexone) treatment on a regular basis.
Scored using a 5-point Likert-scale ranging from (1) Very unlikely; (2) Not likely; (3) Neutral; (4) Likely; (5) Very likely.

MAT Perceptions and Knowledge

Medications for addiction treatment (MAT) are the FDA-approved medications used for the treatment of Alcohol Use Disorder or Opioid Use Disorder. These medications include Methadone, Buprenorphine (Suboxone), and Vivitrol (Naltrexone).

Please rate your level of agreement with the following statements.

MAT reduces the effects of opioids
MAT should be available as a lifelong treatment option
The goal of MAT is eventual detox and sobriety
MAT is just substituting one addiction for another (reverse coded)
MAT maintenance reduces criminal activities among people who use drugs
MAT maintenance reduces HIV risk among people who use drugs
MAT maintenance reduces risk of dying among people who use drugs
MAT increases chances of using illicit opioids among people who use drugs (reverse coded)
MAT reduces consumption of illicit opioids among people who use drugs.
Do not need MAT after prison because there is no drug use in prison (reverse coded)

The MAT Perceptions and Knowledge items are scored using a 6-point Likert-scale ranging from (1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; (5) Strongly agree (6) Don't know

Friedmann, P. D., Wilson, D., Knudsen, H. K., Ducharme, L. J., Welsh, W. N., Frisman, L., Knight, K., Lin, H.-J., James, A., Albizu-Garcia, C. E., Pankow, J., Hall, E. A., Urbine, T. F., Abdel-Salam, S., Duvall, J. L., & Vocci, F. J. (2015). Effect of an organizational linkage intervention on staff perceptions of medication-assisted treatment and referral intentions in community corrections. *Journal of Substance Abuse Treatment*, *50*, 50–58.

Modifications:

Added a 6th option of "Don't know"

MAT maintenance reduces addicts' criminal activities
MODIFIED TO: MAT maintenance reduces criminal activities among people who use drugs

MAT maintenance reduces addicts' HIV risk
MODIFIED TO: MAT maintenance reduces HIV risk among people who use drugs

MAT maintenance reduces addicts' risk of dying
MODIFIED TO: MAT maintenance reduces risk of dying among people who use drugs

MAT increases addicts' chances of using illicit opioids

MODIFIED TO: MAT increases chances of using illicit opioids among people who use drugs

MAT reduces addicts' consumption of illicit opioids
MODIFIED TO: MAT maintenance reduces risk of dying among people who use drugs

OPTIONAL

The following questions are about cases involving substance use/addiction in which you have the discretion to advocate for or recommend treatment rather than incarceration.

Please move your cursor to slide the options to your personal ranking. (Please rank: 1 = Most likely to influence your decision to 4 = Least likely to influence your decision).

1 = Most likely to influence your decision, 4 = Least likely to influence your decision
_____The need for there to be consequences
_____Seriousness of the offense
_____When a law is broken, incarceration should result
_____If effective alternatives exist

When you have discretion to advocate for or recommend substance use treatment rather than incarceration, which of the following factors are most likely to influence your decision?

Please move your cursor to slide the options to your personal ranking. (Please rank: 1 = Most likely to influence your decision to 5 = Least likely to influence your decision).

1 = Most likely to influence your decision, 5 = Least likely to influence your decision
_____Expectations of colleagues/peers
_____Expectations of supervisor(s)
_____Expectations of elected official/head of office
_____Expectations of friends and family
_____Expectations of community

When you have discretion to advocate for or recommend substance use treatment rather than incarceration, which of the following factors are most likely to influence your decision?

Please move your cursor to slide the options to your personal ranking. (Please rank: 1 = Most likely to influence your decision to 5 = Least likely to influence your decision).

1 = Most likely to influence your decision, 5 = Least likely to influence your decision

_____Attitude of the defendant

_____Defendant hasn't learned their lesson yet

_____Personal factors (overtime/work schedule)

_____Personal sense of right and wrong

Please tell us your assessment (including recommendations for changes or additions) of this training

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Please tell us your assessment and recommendations for this survey

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_____END SURVEY_____

G. INFORMED CONSENT - QUANTITATIVE

University of California, San Diego
Consent to Act as a Research Subject

Drivers, Facilitators and Practices of SUD Stigma within the Criminal Legal System: A Mixed Methods Study

IRB #804979

Quantitative Survey

Introduction
Garland Gerber MA, MFT, who is a PhD student under the direction of Principal Investigator on record Leo Beletsky, J.D., MPH at The University of California, San Diego Division of Infectious Diseases and Global Public Health is conducting a research study via web-based survey's to find out more about your experiences with burnout, attitudes, perceptions and knowledge about substance use disorder, substance use disorder case practices, self-care practices and the training on these topics for legal professionals.

In this work we hope to learn more about the complex relationship between the criminal legal system, criminal legal system professionals, substance use, and substance use disorder related cases. We would like to learn about the difficulties and overload, experiences you have in working in this field and how you may engage in activities that encourage occupational and overall wellness. We would like to gain data on your understanding of substance use disorder evidence-based treatment and how this training may affect your views on substance use and substance use disorder. With this data, we hope to identify potential opportunities to create collaboration through future public health and community programming and workplace and law/policy development. Before you decide whether to participate in these web-based surveys, we would like to let you know about the study's purpose, how it may or may not help you, any risks to you, and what is expected of you. This process is called informed consent.

- Research is voluntary - whether or not you join is your decision. You can discuss your decision with others (such as family or friends).
- You can say yes but change your mind later.
- If you say no, we will not hold your decision against you.
- Your decision will not be reported to any employer.
- No identifying information related to your participation or role will be communicated on any reports without your explicit permission.
- Please ask questions or mention concerns before, during, or after the research.

The purpose of this study is to gather data on the difficulties and overload, experiences you have in working in this field and how you may engage in activities that encourage occupational and overall wellness. We would like to gain data on your attitudes and perceptions on people with substance use disorder, knowledge of substance use disorder evidence-based treatments and how this training may affect your views on substance use and substance use disorder related case practices, and self-care practices.

You have been asked to participate in this study because you are over 18 years of age, you are a criminal legal professional and/or work in a criminal justice involved organization or office. The pre-training survey will be administered before the training. We will give approximately 10 minutes before the training to complete the web-based survey. The post-training survey will be administered after the training. We will give approximately 5 minutes after the training to complete the web-based survey. The study plans to collect up to 120-150 surveys. If you agree to be in this study, your participation will last around 15-20 minutes total for both survey's completion.

This study does not involve any treatment and the alternative is not to participate. Additional, detailed information about this research is provided below. Please feel free to ask questions before signing this consent.

Who is conducting the study, why you have been asked to participate, how you were selected, and what is the approximate number of participants in the study?
Garland Gerber MA, MFT, who is a PhD student under the direction of Principal Investigator on record Leo Beletsky, J.D., MPH and Dr. Laramie Smith at The University of California, San Diego Division of Infectious Diseases and Global Public Health is conducting a research study to find out more about your experiences with burnout, attitudes, perceptions and knowledge about substance use disorder, substance use disorder case practices, self-care practices and the training on these topics for legal professionals. These findings will inform future trainings, opportunities to create collaborations on future public health, community supervision, workplace and law/policy development. With this data we plan to make recommendations on policy and community-based programming to reduce the burden on the criminal legal system and improve the complex relationship between the criminal legal system, criminal legal system professionals and people with substance use related cases. You have been asked to participate because you are over 18 years of age, you are a criminal legal professional and/or work in a criminal justice involved organization or office which brings valuable insight. Up to 120-150 individuals involved in the criminal legal system work will be part of these surveys.

There is no funding for this study.

Research Team
Co-investigator, Garland Gerber, MA, MFT, CADC-II (Pre-Doctoral Student) is a 4th year doctoral student of the Joint Doctoral Program in Interdisciplinary Research on Substance Use at San Diego State University and University of California, San Diego. will be responsible for managing the timeline, updating the research team, liaising with investigators in meetings, and ensuring adequate protection of human subjects. She will monitor and be responsible for study recruitment and data collection activities, and lead the analysis, interpretation, and dissemination

of scientific findings through peer -reviewed meetings, manuscripts, and subsequent studies. Garland's research has focused on substance use disorder related stigma, primarily within the criminal legal system. Ms. Gerber holds a master's degree in Clinical Psychology specializing in addictive disorders and has worked as a clinician for 15 years in substance use disorder treatment programs and mental health in LA and SF County.

Principal Investigator and Garland Gerber's committee co-chair Leo Beletsky J.D., MPH, Associate Adjunct Professor at the UC San Diego School of Medicine will serve as co-chair, providing guidance on aspects of the criminal legal system, adaptations of his original SHIELD training for law enforcement, and facilitating vital connections with various legal offices throughout the country for training and survey participants. Mr. Beletsky's expertise is in the public health impact of laws and their enforcement, with special focus on drug overdose, infectious disease transmission, and criminal justice system as a structural determinant of health.

Co-investigator and Garland Gerber's dissertation committee chair, Laramie Smith, PhD, Assistant Professor at UC San Diego in the Department of Medicine, Division of Infectious Diseases and Global Public Health and the Co-Director of the SDSU-UCSD Joint Doctoral Program in Interdisciplinary Research on Substance Use (IRSU) will provide guidance on the proposed study and overall dissertation process. Dr. Smith's area of research is in identifying ways stigma, discrimination, and other socio-structural factors (e.g., social support, transportation- and access-related barriers) can be intervened on to improve treatment environments in resource-constrained settings.

Why is this study being done?

We are collecting 120-150 web-based surveys from individuals' who are criminal legal professionals and/or work in a criminal justice involved organization or office which brings valuable insight. You are knowledgeable about the criminal legal system and can provide valuable information on your experiences and knowledge about substance use, substance use disorder, substance use related cases in your work context, burnout, self-care practices and the trainings on these topics for legal professionals. These findings will inform future trainings, recommendations on policy and community-based programming to reduce the burden on the criminal legal system and improve the complex relationship between the criminal legal system, their professionals and people with substance use related cases.

What will happen to you in this study?

If you agree to be in this study, you will read a consent and click agree to continue with survey questions.

You will answer a pre-training web-based survey questionnaire that will take approximately 10 minutes. Following the training you will answer a post-training web-based survey questionnaire that will take approximately 5 minutes.

The study involves answering a set of questions about your experiences, perceptions and understanding on self-care, burnout, substance use, substance use disorder and your knowledge in this area. You are free to exit the study at any time and can skip any questions that you are uncomfortable answering.

After providing your consent, you will start the survey and answer questions on the following topics.

- Demographic questions such as age, gender identity, ethnicity, your role related to the criminal legal system, your legal work and caseload (if applicable)

- A series of questions on occupational burnout
- Substance use, attitudes, and perceptions on people with substance use disorder and your feeling of efficacy in providing sufficient services to people with substance use disorder related cases in and training in your work/training context.
- Your knowledge on evidence-based treatments, intended practices of substance use disorder related cases and your own self-care practices.

How much time will each study procedure take, what is your total time commitment, and how long will the study last?

If you agree to be in this study, you will be asked to consent by clicking agree to continue with the web-based survey questions. You will answer a pre-training survey questionnaire that will take approximately 10 minutes. Following the training you will answer a post-training survey questionnaire that will take approximately 5 minutes. Your participation will last around 15-20 minutes total for both survey's completion.

What risks are associated with this study?

Some possible risks and discomforts to you from participating in this study include:

- Emotional: There may be some questions on the interview that you might find unpleasant or hard to answer. Some of the questions might make you feel upset or uncomfortable. You don't have to answer any questions that you do not wish to. Other emotional risks of the study visits could be boredom or fatigue. To minimize these risks, you can ask to take a break and discontinue your participation in the interview. In addition, you can withdraw from the study at any time.
- Confidentiality: As a research team, we are taking precautions to protect you and other participants from other risks, such as threats to confidentiality. This includes secure storage of any information you share, to prevent others from accessing it. Research records will be kept confidential to the extent allowed by law.
- Employment Risk: For criminal legal professionals' who work at an organization or office, qualitative interview includes questions that could pose a potential risk to a subject's employment if they were to respond negatively about their organization. While there are provisions to maintain confidentiality, the organizations involved may inadvertently become aware of comments made and if they know who participated may be able to identify individual subjects.

Because this is a research study, there may be some unknown risks that are currently unforeseeable.

What are the alternatives to participating in this study?
The alternative to participation in this study is not to participate. Participation in research is voluntary. You may refuse to participate or withdraw or refuse to answer any specific questions

in the interview at any time without penalty.

What benefits can be reasonably expected?
There may be no direct benefits of taking part in this study. By taking part in this study, you will be helping to inform researchers in various interventions and recommendations for a criminal legal system policies and procedures regarding substance use disorder related cases. You will have the opportunity to participate in sharing by way of survey, your experiences, perceptions, knowledge, and practices which may lead to change for criminal legal professionals, improving work environment, understanding both wellness strategies and SUD topics that may apply to your own lives or towards SUD related cases.

Can you choose to not participate or withdraw from the study without penalty or loss of benefits? Participation in research is voluntary. You may refuse to participate or withdraw at any time without penalty or loss of benefits to which you are entitled. If you decide that you no longer wish to continue in this study, you are asked to: Inform the staff that you are no longer interested in continuing in the study.

Can you be withdrawn from the study without your consent?
You may be withdrawn from the study for the following reasons: The research team feels it is in your best interest or the best interest of the study. You may also be withdrawn from the study if you miss the opportunity to take the surveys (one or both).

Will you be compensated for participating in this study?
You will not be financially compensated for your time participating in this interview, but we are offering 1 month-free membership to zoom meditations classes upon completion of the surveys.

Are there any costs associated with participating in this study?
There will be no costs to you for participating in this study.

What if you are injured as a direct result of being in this study?
We do not anticipate any injuries will occur as a direct result of your participation in this study. The University of California, San Diego will not provide any form of compensation to you if you are injured. You can call the study investigator, Garland Gerber, at +1-310-855-4090 for more information. You may also call the UCSD Human Research Protections Program Office at +1-858-246-4777 to inquire about your rights as a research subject or to report research-related problems.

What about your confidentiality?
Research records will be kept confidential to the extent allowed by law. This includes secure storage of any information you share, to prevent others from accessing it.

Every effort will be made to keep all study records secure and will only be accessible to Garland Gerber, and to those entities listed above.

- No documents will contain your name.
- We will use a combination of demographic information provided in beginning of the survey

to create your unique identifier that will be used to link your responses to the post-training evaluation.

- Any de-identified hard copies of study documents will be stored in a secure double locked location and will be destroyed three years after the end of the study.
- All electronic copies of your answers to the participant demographic questions and survey questions are entered directly onto a password-protected computer and will be stored on a password protected server.
- We will not document your name on any of our study files. Web-based survey responses will be stored on a password- protected server at UCSD that is only accessible by Garland Gerber and authorized study investigators.
- If any data collected as part of this study is transferred via the internet, the following data security procedures will be followed. Data transfer and all Web-based utilities use secure access (user and server authentication, 128- bit SSL encryption). This type of encryption is the same as is used for Web-based transactions that involve credit cards or Web banking.

Who can you call if you have questions?
Garland Gerber has explained this study to you and answered your questions. If you ever have questions about this research study, you may reach Garland Gerber at +1-310-855-4090.

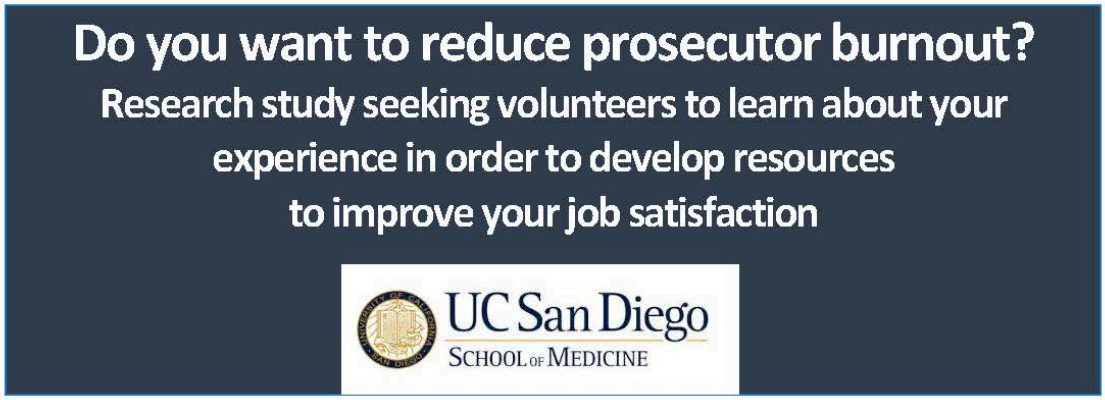
The University of California, San Diego is the coordinating center for all study activities and serve as the central Institutional Review Board (IRB) through the Human Research Protections Programs Office.

You may call the UCSD Human Research Protections Program Office at +1-858-246-4777 to inquire about your rights as a research subject or to report research-related problems.

You volunteer to take part in this research. You have had a chance to ask questions and have them answered. Your decision to be in this study, to drop out of the study, or to refuse to answer any question, will not influence your present or future status as a patient, student, or employee at UCSD, or any other participating institution now or in the future. You have received a copy of this consent form to keep for your records. You have also received a copy of "The Experimental Subject's Bill of Rights" to keep.

"Do you have any questions about this research? Do you agree to participate? If so, let us begin…."

H. FLYERS FOR QUALITATIVE RECRUITMENT



UCSD IRB Protocol #804979

You May Qualify If You Are:

- An attorney or staff currently working in a criminal prosecutor's office
- Over the age of 18

Potential Benefits:

There is surprisingly little existing research on burnout and its sources for prosecuting attorneys and personnel. This doctoral research project is intended to fill that gap. It will (1) provide basis for a training program for prosecutors and staff to reduce burnout and improve quality of life, (2) build evidence base, and (3) provide a foundation of data to use in developing future interventions to alleviate burnout and improve retention, effectiveness, and job satisfaction, and reduce recidivism in substance use disorder related cases.

Participation Involves:

- 1 hour interview via secured UCSD Zoom account at a location and time convenient for participants
- $50 Amazon gift card remuneration for your time

Location: Secured UCSD Zoom account or in person for participants in Southern California who prefer live interview.

FOR MORE INFORMATION: Please contact PhD candidate Garland Gerber MA, MFT at 310-855-4090, email ggerber@health.ucsd.edu or ggerber@ucsd.edu

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UC San Diego, School of Medicine, Division of Global Public Health | 9500 Gilman Drive, San Diego, CA 92093

Volunteers Needed for Research Study on Exploring Legal Professionals Burnout, Substance Use Topics, and Substance Use Disorder Related Cases

UC San Diego
SCHOOL OF MEDICINE

UCSD IRB Protocol #804979

You May Qualify If You:

- You are a criminal legal professional (Public Defender or Prosecutor)
- You practice in a criminal justice involved law organization or office
- You are over the age of 18

Potential Benefits:

By joining this study, you are contributing to behavioral science and training, improving the field of legal practice, and helping to create more literature on the complex relationship between legal professionals, substance use disorder and the criminal legal system. This will create more data for further studies on possible interventions to alleviate burnout, workload, trainings, and discussion on research to practice gaps.

Participation Involves:

- 1 hour interview via secured UCSD Zoom account at a location and time convenient for participants
- $50 amazon gift card remuneration for your time

Location: Secured UCSD zoom account or in person for participants in Southern California who prefer live interviews

FOR MORE INFORMATION

Please contact PhD candidate Garland Gerber MA, MFT at 310-855-4090, email ggerber@health.ucsd.edu or ggerber@ucsd.edu

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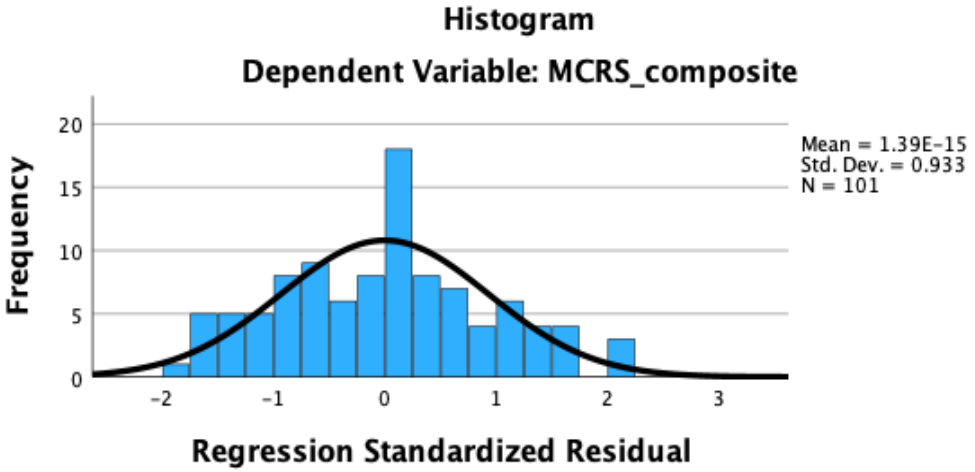
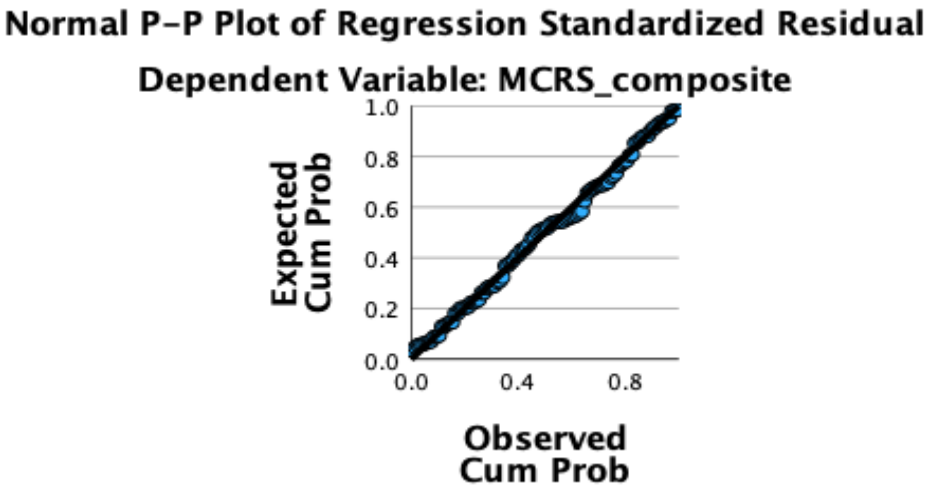
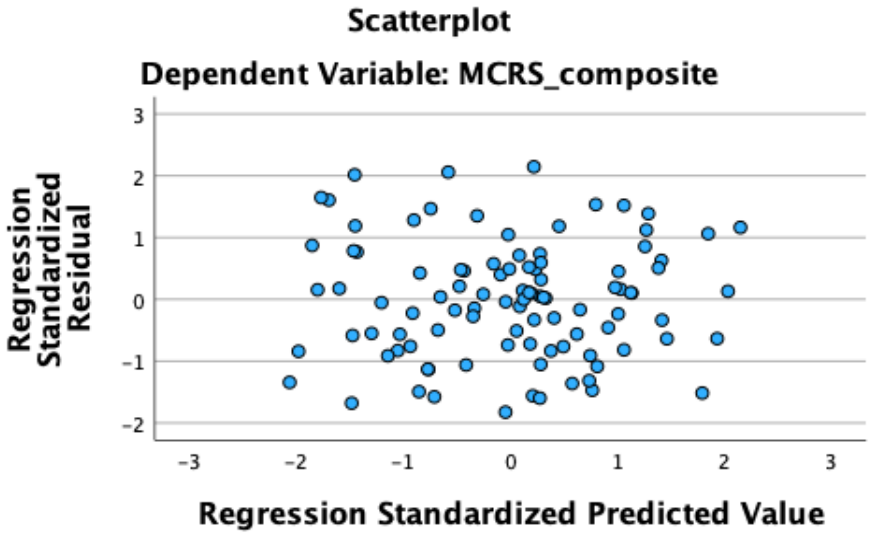
UC San Diego, School of Medicine, Division of Global Public Health | 9500 Gilman Drive, San Diego, CA 92093

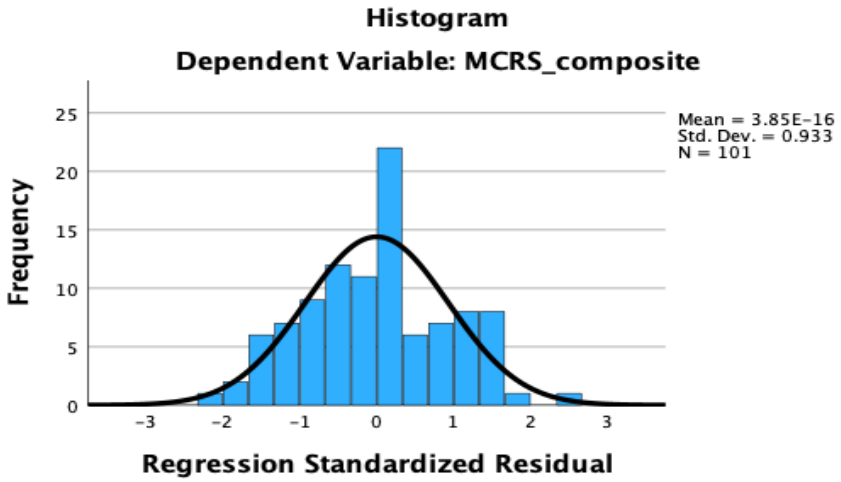
Chapter 2, Hypothesis 1 assumptions

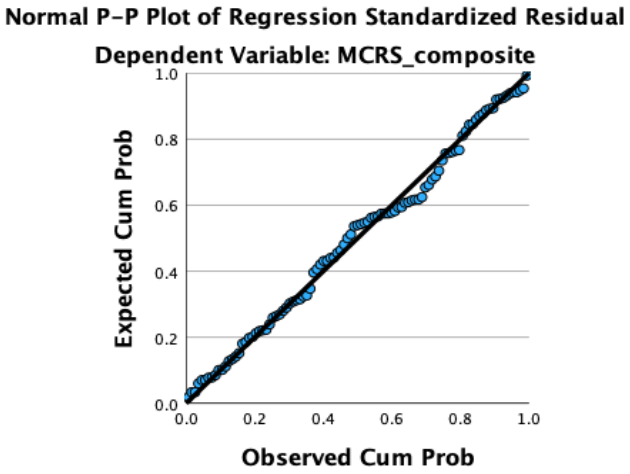


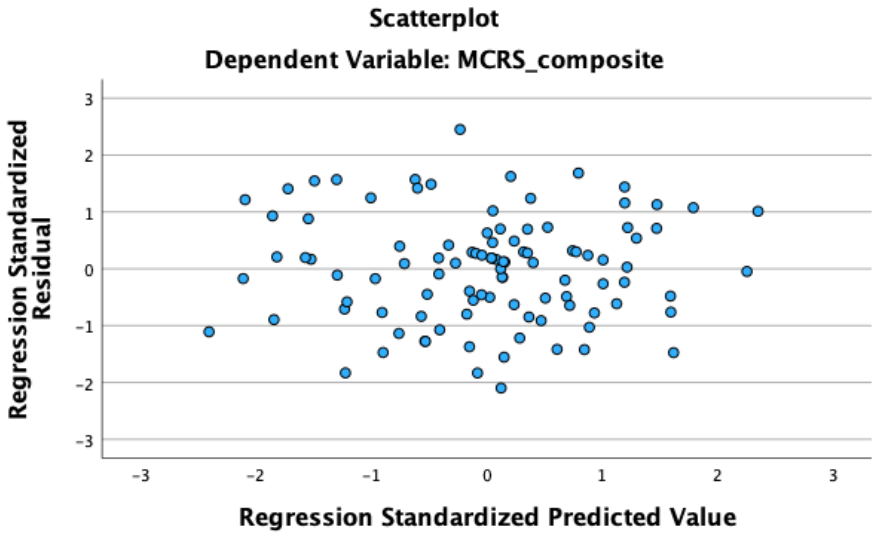




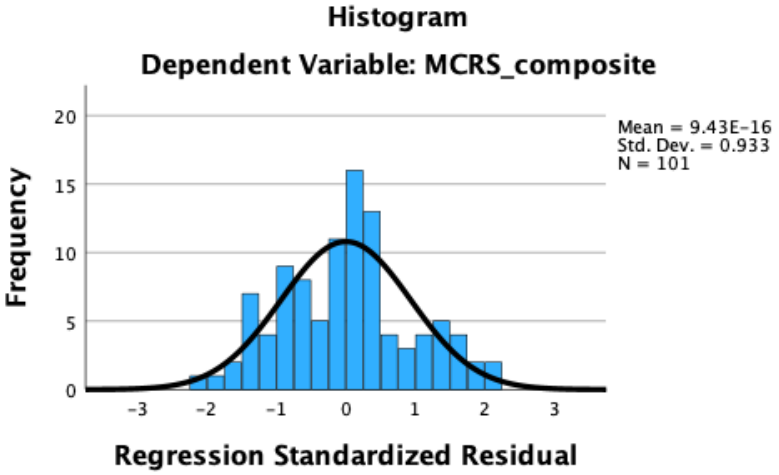
Chapter 2, Hypothesis 2 assumptions

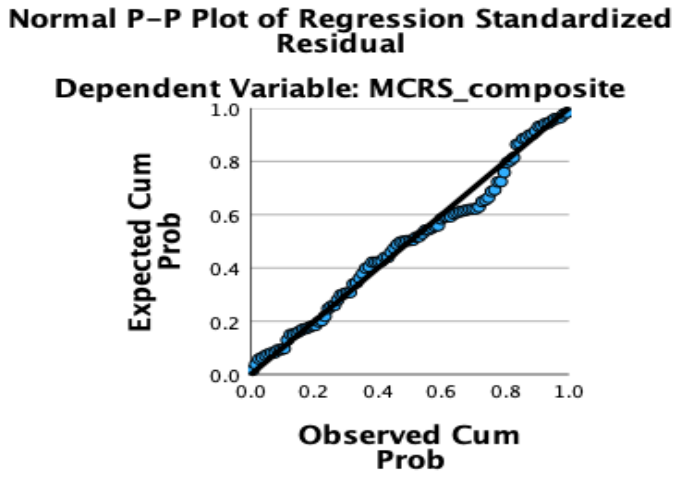


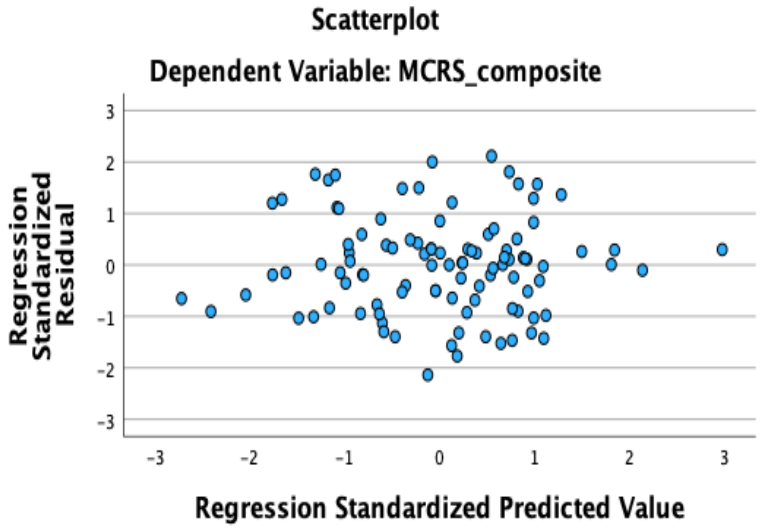




Chapter 2, Hypothesis 3 assumptions

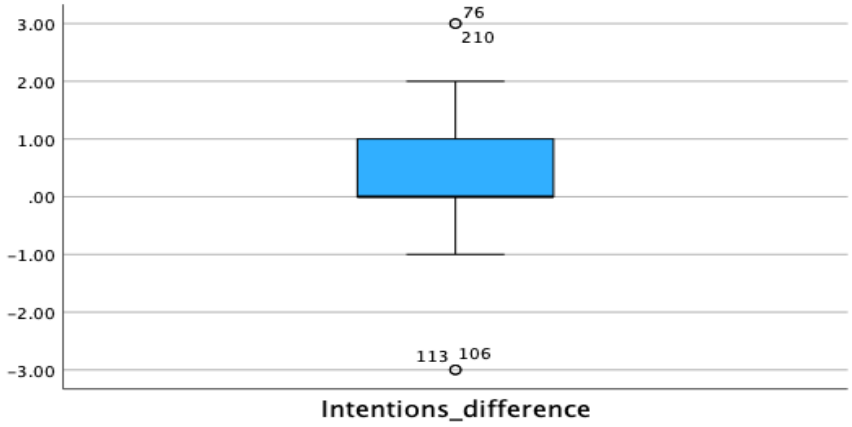




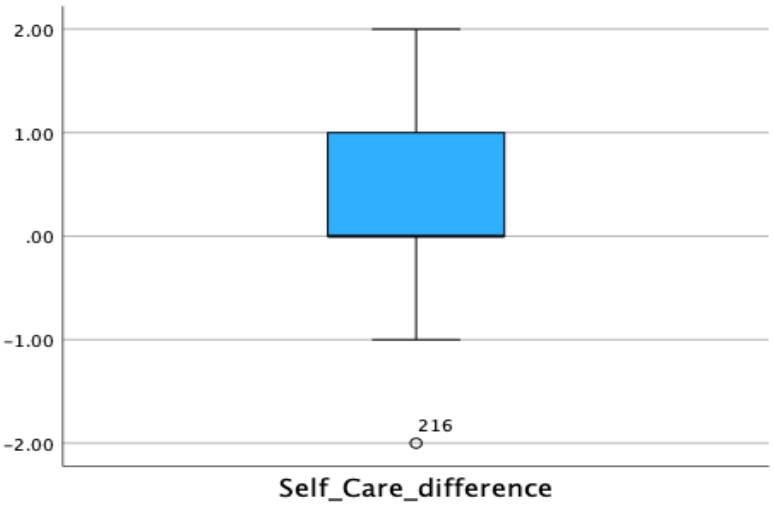


Chapter 3 Assumptions

Intentions to refer to MAT for SUD-related cases



Intentions of self-care behavior to manage occupational stress



Attitudes towards defendants with substance use disorder (MCRS)