



April 2021

## Understanding Therapists' Perceptions of Co-Occurring Substance Use Disorders Using the Model of Human Occupation Screening Tool

Jaimie K. Estreet

*Eastern Kentucky University – USA, Jaimie\_estreet@mymail.eku.edu*

Christine Privott

*Eastern Kentucky University – USA, Christine.Privott@eku.edu*

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### Recommended Citation

Estreet, J. K., & Privott, C. (2021). Understanding Therapists' Perceptions of Co-Occurring Substance Use Disorders Using the Model of Human Occupation Screening Tool. *The Open Journal of Occupational Therapy*, 9(2), 1-8. <https://doi.org/10.15453/2168-6408.1773>

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# Understanding Therapists' Perceptions of Co-Occurring Substance Use Disorders Using the Model of Human Occupation Screening Tool

## Abstract

*Background:* The need for a more community-based occupational therapy approach to clients' addiction recovery is supported by Killeen et al. (2015), who concluded that U.S. health care reform will require the delivery of substance use disorder (SUD) treatment by providers who specifically address addiction as a comorbidity. Stoffel (2013) argued this a few years earlier with a call to action for occupational therapists in behavioral health treatment and recovery. For this study, the Model of Human Occupation Screening Tool (MOHOST) was used to explore therapists' perceptions of competence working with patients diagnosed with co-occurring SUDs. Prior research supports concepts of treatment and recovery for individuals with SUDs and opioid addictions; however, there is little research on the role of occupational therapy for clients with co-occurring SUDs.

*Method:* Data was collected and qualitatively analyzed from four participants in a large metropolitan area in the Northeast who were from multiple occupational therapy clinical settings. Semi-structured interviews were conducted and modeled on the MOHOST. The purpose of this qualitative instrumental case study design was to more fully understand the therapists' perceptions of competence working with patients diagnosed with co-occurring SUDs.

*Results:* Emergent coding resulted in the discovery of three themes: the power of the MOHOST, urban city considerations, and on-the-job training. These themes reflect multiple practice settings and the novel use of the MOHOST with patients co-diagnosed with SUDs.

*Conclusion:* The results indicate that the participants came to realize the value of using the MOHOST, particularly in an urban practice area, to increase awareness of their own competence treating patients with co-occurring SUDs.

## Comments

The authors report no potential conflicts of interest.

## Keywords

occupational therapy and substance use disorder, Model of Human Occupation Screening Tool, occupational therapy and mental health

## Cover Page Footnote

The authors would like to acknowledge Shirley P. O'Brien, Ph.D., OTR/L, FAOTA

## Credentials Display

Jaimie Estreet, OTD, MS, OTR/L, MHA, CLT, U.S.A.

Christine Privott, PhD, OTR/L, U.S.A.

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DOI: 10.15433/2168-6408.1773

Patients who use psychoactive drugs, including prescription drugs, can present with any medical condition that can be found in the general population. Patients diagnosed with substance use disorder (SUD) use “one or more psychoactive substances, which leads to a clinically significant impairment or distress, replacing the earlier diagnostic concepts of abuse, addiction and dependence” (Diagnostic and Statistical Manual [DSM-V], American Psychiatric Association, 2013, p. 534). The management of a medical condition in the patient with SUD often does not differ from that of any other patient; however, the co-occurring SUD can lead to various adverse physical and mental outcomes. Several of the medical conditions most commonly seen in patients who abuse substances are cardiovascular and pulmonary disorders, central and peripheral nervous system diseases, and infectious diseases. When these primary medical conditions co-occur with SUD they are referred to as comorbidities (National Center for Biotechnology Information, 2020). Furthermore, when patients are diagnosed with other mental health diagnoses and SUD, or “co-occurring diagnoses” (COD), it leads to lower levels of engagement in treatment and is linked to “negative health outcomes and life circumstances, like elevated risk of homelessness, trauma, and self-harm” (Substance Abuse and Mental Health Services Administration [SAMHSA], 2020a, p. 10). The most recent data from 2017 estimates that 11.2 million adults 18 years of age or older in the United States were diagnosed with a severe mental illness disorder. Of these, about 4 million people also had a COD of drug or alcohol abuse (Foundations Recovery Network, 2020; National Institute of Mental Health, 2020). Patients with co-occurring SUD need both mental health and SUD systems of care. Subsequently, the presence of SUD and the prior use of services puts patients at risk for increased hospital readmissions (Hutchinson et al., 2018).

Brenner et al. (2019) addressed in a population-based cohort study issues of the dual diagnoses of major depressive disorder and SUDs. They found that for patients treated for SUDs, substance-induced major depressive disorder increased the risk of continued use of alcohol, cocaine, and heroin four to six times. In an earlier study, Stoffel and Moyers (2004) found that the impact of SUD on occupational performance negatively influenced prevention and recovery. Stols et al. (2013), in a related but later study, expounded on this and found that patients with SUD comorbidity or COD showed low levels of self-awareness, actualization, and decreased coping techniques. These patients ended up backsliding into substance dependency habits. The patients also demonstrated sensory processing deficits and had difficulty “organizing daily tasks, maintaining relationships and being satisfied with their work or life roles” (p. 33).

Research shows that the use of follow-up care and meaningful occupations in treating patients with SUD can be beneficial in promoting independence. Hutchinson et al. (2018), in a quantitative two-group comparison study, found that a higher utilization of follow-up services for outpatient and/or rehabilitation patients resulted in lower rates of readmissions to SUD facilities. Likewise, Peloquin and Ciro (2013) conducted a retrospective analysis of women undergoing substance use treatment. The women participated in various themed and meaningful occupational treatment groups, and it was found that the participants perceived this treatment as a satisfactory component of their recovery. Sharp et al. (2011) similarly found that healthy leisure activities were linked to lower reoccurrence rates of alcohol and marijuana use for clients diagnosed with SUD comorbidities or COD. When healthy leisure increased over time, the likelihood of using alcohol, tobacco, and marijuana decreased.

Framing this evidence on follow-up care for patients co-diagnosed with SUDs is the Screening, Brief Intervention, and Referral to Treatment (SBIRT) program launched in 2003 by the Substance Abuse and Mental Health Service Administration (SAMHSA). The SBIRT program was created to meet

national mental health objectives and provide appropriate substance treatment for individuals diagnosed with SUD (Bray et al., 2017). This sustaining program provides for the use of substance use screening tools, such as the Model of Human Occupation Screening Tool (MOHOST), in emergency and inpatient hospital areas. The MOHOST is an occupational therapy (OT) standardized assessment used primarily in psychiatric settings to examine occupational performance by observing, objectifying barriers of occupational engagement, and supporting individual treatment (Fan et al., 2016; Maciver et al., 2015). The SBIRT program is part of a \$281 billion spending pattern in recent years for SUD treatment and recovery. Behavioral health diagnoses are predicted to surpass all physical conditions as a major cause of disability worldwide (SAMHSA, 2020a). The rise of behavioral health diagnoses and treatment falls under broader opioid use, and comorbidities/CODs associated with opioid use have led to a higher complexity of patients (Centers for Disease Control and Prevention [CDC], 2020; Hser et al., 2017; U.S. Department of Health and Human Services [DHHS], 2018).

### **Opioids**

The most recent 2017–2018 data reveals that opioid use and recovery continues to affect more than 8.4% of U.S. adults. Nearly 19.4% of people used illicit drugs, and “if alcohol and tobacco are included, the number of Americans who were current substance users in 2018 climbs to 60.2%, or 165 million people” (National Center for Drug Abuse Statistics, 2020, para. 3). Moreover, the most recent SAMHSA data denotes that opioid addiction and overdose are a public health crisis. Of the 2 million US adults with opioid use disorder, 77% had another SUD, 64% had a COD of mental illness, and 27% had a severe mental illness disorder in the past year (National Institute on Drug Abuse, 2020). The increase in prescription opioid overdose deaths, the rise in heroin overdoses, and death rates tripling from synthetic opioids such as fentanyl have contributed to the opioid crisis (CDC, 2020). Accordingly, “a collaborative model of care offers patients who overdose on opioids with immediate access to admission for treatment” (Burton & Martin, 2020, p. 350). One such community-based study by Burton and Martin (2020) found that through a multi-agency collaboration (police, fire, health department, and a publically funded recovery center), more opioid addicted patients were able to engage in treatment and move toward recovery. Less than a decade earlier, in 2011–2012, the American Occupational Therapy Association (AOTA) led efforts to amend the Public Health Service Act of 1944 (Pub. L. 78–410) to include occupational therapists as behavioral and mental health professionals (Stoffel, 2013). Stoffel (2013) asserted that collaborative models of community health care at the center of the opioid epidemic will allow health care providers, like occupational therapists, to address the difficulties between recovery and daily living. The need for a more community OT approach to patients’ addiction recovery is supported by Killeen et al. (2015), who concluded that US health care reform will require the delivery of SUD treatment to include clinicians and services that address addiction and mental health COD using standardized and scientifically sound treatments. Occupational therapists who work in behavioral health and in the community can offer recovery supports and services in collaboration with other providers.

There appears to be a limited number of studies that address behavioral health care strategies for treating comorbidities and COD (Hser et al., 2017). Prior research supports concepts of treatment and recovery for individuals with SUD and opioid addictions; however, it is not clear what the role of OT is in providing services for clients with SUD as a comorbidity or COD. Ironically, Thompson, as early as 2007, concluded that occupational therapists are generally not informed about evaluation and intervention processes with individuals and co-occurring SUDs and are challenged to provide more holistic treatment (Thompson, 2007). This gap in the general and OT literature addressing recovery and

treatment for patients co-diagnosed with SUD does not appear to immediately align with the AOTA definition of OT as a profession that “maximizes health, well-being, and quality of life for all people, populations, and communities through effective solutions that facilitate participation in everyday living” (AOTA, 2017, p. 1). Therefore, the purpose of this qualitative instrumental case study design (Baškarada, 2014; Stake, 1995) was to illustrate and more fully understand occupational therapists' perceptions of competence when working with patients diagnosed with SUDs as a comorbidity or COD. The two overarching research questions were:

1. Does this study allow us to better understand occupational therapists' perceptions of competence when working with clients who have co-occurring SUDs?
2. Does the use of the MOHOST contribute to therapists' perceptions of competence when working with patients who have co-occurring SUDs?

Specifically, the MOHOST was used to explore occupational therapists' knowledge about SUD as a comorbidity or COD for evaluation and treatment. Stoffel (2013) called occupational therapists to action for behavioral health treatment and recovery, and this study contributes to that mandate.

### **Method**

This qualitative instrumental case study (Baškarada, 2014; Stake, 1995) used the MOHOST to illustrate occupational therapists' perceptions of competence treating patients with co-occurring SUD. The Eastern Kentucky University Institutional Review Board approved this study in spring 2019. The participants were recruited from a large metropolitan area in the Northeast and practiced OT in hospital inpatient, outpatient, skilled nursing, and behavioral health settings. Inclusion criteria included occupational therapists who (a) were registered and state licensed, (b) were employed in one of the settings above, (c) worked in the metropolitan area a minimum of 3 years, (d) were willing to use the MOHOST, and (e) could identify workplace clients with co-occurring SUD. Multiple social media platforms and hashtags were employed for participant recruitment. Ultimately, four participants met the criteria and committed to the study. The participants were female between 30–40 years of age and they each signed informed consents.

### **Data Collection**

The primary data collection tool was a semi-structured interview protocol modeled conceptually on the MOHOST Single Observation Form, which, when administered to patients, captures information on their activities of daily living via the following items: (a) motivation for occupation, (b) patterns for occupation, (c) communication and interaction skills, (d) process skills, (e) motor skills, and (f) environment (Parkinson et al., 2008). The interview protocol was designed with open-ended questions to elicit the participants', not the patients', understandings of the use and purpose of the MOHOST and SUDs. For example, “please describe your familiarity and experience(s) using the MOHOST,” and “in your experience, describe the areas of client activities of daily living functioning and/or dysfunction you identify as impacted by SUD.” The primary investigator (PI) arranged for mutually agreed upon schedules for the initial and 5-week follow-up telephone interviews. The participants were interviewed 5 weeks post initial interview to allow them time to practice administering the MOHOST and to treat their patients who had SUD. All interviews were recorded on a cell phone voice record app. Each initial interview lasted approximately 15 min and each follow-up interview took about 25 min. Eight participant interviews were transcribed using the voice record app (password protected) and the participants were assigned anonymous identifiers to prepare for data analysis.

## Data Analysis

Data analysis involved multiple within-transcript and across-transcripts reviews. First, open coding was conducted with attention to words and phrases repeated throughout each transcript, then all transcripts, and then the most occurring words and phrases mutually agreed upon by the researchers. Axial coding followed in the same manner with the intent and resulting meanings attached to the open codes. Themes emerged from the axial coding, and all eight transcripts were reviewed again for a total review of transcripts seven times to meet measures of transparency and validity. The researchers also employed methods of trustworthiness by maintaining field notes, conducting member checking, reflexive journaling, and ethical coding.

## Results

Across all eight interviews, three primary themes emerged: the “power” of the MOHOST, urban city considerations, and on-the-job training. For Theme 1, the power of the MOHOST, the participants meant they were quick to recall the MOHOST principles from their educational and fieldwork experiences, but prior to this study, they did not perceive the MOHOST as an important assessment for patients with SUD as a comorbidity or COD. The second major theme, urban city considerations, spoke to the participants’ perceptions of their practice environments as negatively impacting their ability to treat patients for SUD, and as they came to understand SUD through the MOHOST. The third theme, on-the-job training, involved the informal learning opportunities that contributed to the participants’ perceptions of competency treating SUD, including the use of resources like the MOHOST.

## Themes

### *The “Power” of the Model of Human Occupation Screening Tool (MOHOST)*

The word power refers to the participants’ descriptions of how the MOHOST, after using it for 5 weeks during the study and while working with their SUD patients, allowed them to further coordinate treatment and services, specifically for patients with SUD. They felt the MOHOST was an easy, flexible, and effective assessment tool to frame their treatment goals, since they were challenged in predicting the patients’ discharge plans. For Ciara and Jeanette, the MOHOST became a rather powerful standardized assessment to increase awareness of daily occupations for patients with SUD. Jeannette comments:

I have become more familiar with the MOHOST since you first gave it to me to look at it. I didn’t [always] administer it formally like the manual states. I did read over the basic sections, and it turned a light bulb on as to what I could look at within homecare and my [SUD] patients and how they might present themselves . . . I mean, I did not know what questions to ask or what to look for before. Now, I can see myself integrating it into functional observations or subjective information related to substance disorders.

While Jeannette connected her first-time use of the MOHOST during the study with patient outcomes, Kathryn became more aware of the MOHOST as a tool that validated her understanding that “[SUD] is a pertinent comorbidity that they’re presenting with . . . almost like a secondary diagnosis to the primary diagnosis that they were referred to OT services.” The MOHOST was consistently viewed by all of the participants as a tool that helped them initiate novice evaluation and treatment ideas for patients with SUD who otherwise may have gone unnoticed.

### ***Urban City Considerations***

All of the participants practiced in a large, urban area. Most of their patients also lived nearby, and as the participants best understood, their patients lived in neighborhoods beset by drug use, unemployment, and a lack of physical and social supports. The participants' referred to this urban environment as the inner city, and they felt this was a primary barrier for treating patients with SUDs. Melody stated, "I work in [an inner city] . . . with a lot of clients with substance use and mental health diagnoses, but then a lot of the other therapists are in that same environment." She was primarily referring to challenges associated with clients' motivations and social skills as evidenced by the MOHOST. Melody was also referring to other urban area therapists who were equally challenged in practicing and managing occupational barriers for clients co-diagnosed with SUDs. Ciara noted similarly that in her workplace, "[focus on SUD] it's kind of like the inner-city population, which has all substance abuse disorders." Both of the participants described several environmental barriers that became clearer to them while participating in the study and that made them more aware of the challenges to addressing sobriety and healthy activities in treatment. Likewise, Kathryn referred to the "revolving door" treatment culture that she attributes to high readmission rates of patients with SUD, and how this may not gain attention when SUD is a comorbidity or COD. "I mean they get discharged back into the same environment that brought them in here, the city." All of the participants referred to the fact that using the MOHOST brought to their attention patients' occupational deficits, specifically because of SUDs. They were reminded that practicing in an urban environment has specific limitations for their clients' treatment and recovery for SUD.

### ***On-the-Job Training***

On-the-job-training is conventionally thought of as a way to increase workers' knowledge and performance in a workplace. All of the participants shared that prior to the use of the MOHOST as a treatment tool for this study, and given the complexity of their patients co-diagnosed with SUD, they did not receive formalized training for SUD, but it was still expected. For example, Ciara and Melody respectively mentioned "you just get on-the-job experience, there wasn't a lot of specific instruction for SUD," and "you just kind of observe behaviors and patterns of behaviors that you learn, what to expect and maybe how to teach people." Equally, Kathryn noted "I haven't attended a class or anything where I would've gotten specific training [SUD], and that might actually be nice [to do], working in all the different types of hospital settings." Jeanette perceived a lack of formal training but felt that the nature of her clinical setting allowed for informal training opportunities: "There's the behavioral health unit and just in those, in general, you get more on the job experience working with patients."

Overall, the participants recognized that they obtained the majority of training for working with SUD patients as an informal train-the-trainer model in their workplaces. This became evident, and perceived as not ideal, when, as study participants, they had the opportunity to use the MOHOST as a standardized assessment to plan evaluation and treatment for patients.

### ***Summary***

The results show that all of the participants were cognizant of the use of the MOHOST as an important tool for working with their patients co-diagnosed with SUDs. Armed with this knowledge, the participants valued the opportunity to administer the MOHOST in the allotted 5 weeks of the study in order to generate treatment ideas for patients with SUD as a comorbidity or COD. They also revealed that because they work in an urban environment and treat patients whose primary diagnoses is not SUD,

the MOHOST allowed them to consider aspects of SUD treatment that they may have otherwise not considered.

In addition, the theme of on-the-job training was problematic for all of the participants; they recognized a lack of professional training for working with patients diagnosed with co-occurring SUD “after” they were introduced to the MOHOST during the study.

### **Discussion**

The participants found that by using the MOHOST as a tool for evaluation and treatment for their patients with SUDs, they perceived their own professional competence working with this population for the better. While on the surface this may seem of little consequence, the participants felt they gained more knowledge, or personal power, in leading treatment and recovery efforts with their patients. The relative ease with which the participants used the MOHOST within the parameters of the study signals that treatment for patients with SUD as a comorbidity or COD, at least for these participants, may not be as complicated as they once believed. The participants also did not integrate the MOHOST, or other standardized mental health assessment tools for that matter, for patients with COD in their own practice prior to joining this study. The idea that the MOHOST items of motivation, communication, and environment, for example, encouraged the participants to consider patients’ choices, social relationships, and living arrangements (Parkinson et al., 2008) outside of treatment answers both research questions. The first research question was, Does this study allow us to better understand occupational therapists’ perceptions of competence when working with clients who have co-occurring SUD? The answer is a partial yes, if we consider that the participants acknowledged their personal power in using the MOHOST, which led to a greater awareness of patients with SUD risk factors in treatment planning and discharge. The second research question was, Does the use of the MOHOST contribute to therapists’ perceptions of competence when working with patients who have co-occurring SUD? Here the results show that while the participants did not attach importance to the MOHOST items of motor and process skills, the items of motivation, communication, and environment were highly regarded. This is aligned with broader health care initiatives to engage patients with SUD in treatment that is meaningful (SAMHSA, 2020b). Given that there is a lack of awareness among health care practitioners and primary care physicians in screening and treating patients with SUDs (DHHS, 2018), the participants’ understandings of motivation, communication, and environment as defined in the MOHOST brought about their feelings of competency.

### **Implications for Practice**

In the wake of the Affordable Care Act (Baumgartner et al., 2020) and renewed attention to universal mental health coverage, this study also backs recent lobbying initiatives by AOTA to include OT in legislation focusing on the opioid epidemic and non-pharmacological management and treatment options. The non-pharmacological methods could include using the MOHOST, especially with patients co-diagnosed with SUDs, to increase therapists’ perceptions of competence in both evaluation and treatment of this patient population. The participants in this study made this evident when they described the value of the MOHOST, previously not considered, as a tool that positively impacted their own perceptions of competence. The MOHOST apportions 24 factors relating to a person’s volition, habituation, performance, and environment for therapists to bear in mind about occupational participation (Parkinson et al., 2008). Recognizing the important role of OT bridging physical and behavioral health care service (including through the use of behavioral assessments like the MOHOST), SAMHSA, in 2015, awarded OT as an approved provider for Certified Community Behavioral Health



Clinics (CCBHC) programs (AOTA, 2020). It is logical to think, based on the positive results of SAMHSA initiatives and this study, for example, that occupational therapists could use the MOHOST for patients co-diagnosed with other mental health conditions, too. The key is that it becomes imperative for occupational therapists to consider their own clinical competence working with comorbidities and CODs. The ability of occupational therapists to use theoretically driven assessment tools to foster greater understandings of patients co-diagnosed with SUDs is paramount to meeting AOTA and SAMHSA strategic goals in behavioral health. It is incumbent on the profession of OT to try to close the treatment gaps and ensure that people with SUD as a comorbidity or COD achieve long-term recovery; the evidence-based prevalence and seriousness of a diagnosis of SUD warrants this.

### Limitations

The small purposeful sample size of four participants allowed the PI to conduct one-to-one, semi-structured interviews which permitted freedom of expression; however, the PI experienced difficulty recruiting additional participants because of their self-reported decreased level of comfort working with the SUD population in their own practice settings. An additional limitation was the PI's conflict of interest and potential researcher bias. The PI had practiced, at some point, in all of the clinical settings for this study and was familiar with treating clients with SUDs as a comorbidity or COD. Finally, this qualitative study is not generalizable because of the small number of participants, although it could inform future qualitative and quantitative studies.

### Conclusion

This study was undertaken, in part, because of the researchers' beliefs that OT can play a greater role in meeting AOTA's call for more integrated services in behavioral health. Therapists' perspectives on the MOHOST have been systematically gathered in other settings; however, there appears to be little scholarship on therapists' perceptions of competence in treating patients for co-occurring SUDs. In this study, the therapists found the MOHOST quick to administer, useful, and, most important, a reminder of what they could learn about patients' occupational functioning when they attend to a comorbidity or COD of SUD. In the future, the profession of OT could continue drawing on data generated through the use and effectiveness of the MOHOST but focus on patients who present with mental health comorbidities or COD.

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