We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

6,900

186,000

200M

Downloads

154
Countries delivered to

Our authors are among the

TOP 1%

most cited scientists

12.2%

Contributors from top 500 universities



WEB OF SCIENCE

Selection of our books indexed in the Book Citation Index in Web of Science™ Core Collection (BKCI)

Interested in publishing with us? Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.

For more information visit www.intechopen.com



Factors Contributing to Enrollment in Treatment Programs for Adults

Joanne M. Cannavo¹ and Thomas H. Nochajski²
¹Social Work & Sociology Department, Daemen College;
²School of Social Work, University at Buffalo,

1. Introduction

The concept of enrollment can mean different things to different groups. For purposes of the current chapter, it specifically refers to treatment entry only. It does not address treatment retention or completion. In general, treatment tends to refer to formal treatment programs. However, we will also include findings from research on enrollment into drug courts. While enrollment in mental health treatment or mental health courts will be discussed, the extent is limited by the lack of extensive literature on mental health treatment entry. Thus, the major focus of the current chapter will be on enrollment into substance abuse treatment. Furthermore, the chapter focuses on adult entry into treatment; adolescent treatment entry is not discussed.

2. Factors related to enrolling in substance abuse treatment

Overview

While there has been some research into factors that influence whether an individual will enroll into substance abuse treatment programs, there is a need to consider the research in an aggregate form to better understand how we might better serve individuals who might benefit from formal treatment but for various reasons never seek it out. In terms of the current chapter, this is not a meta-analysis, nor is it a critical review; rather, it is a summary of what we know influences treatment entry. As such, we first discuss reasons why individuals may not seek treatment for substance use problems. We then consider factors associated with treatment entry. As we present this information, we will also consider various groups, where factors may differ, including individuals mandated to treatment, injection drug users, and drug court participants. Finally, we propose a model for substance abuse treatment entry.

3. Reasons for not seeking treatment

In general, the main reason that individuals do not seek treatment is that they see no need for it. Within the general population, Schmidt and Weisner (1999) found that many individuals who were identified as problem drinkers did not consider themselves as such. Specifically, Schmidt and Weisner (1999) found that 11.3% of the individuals in a general

population sample met objective problem drinking criteria, whereas only 5.4% of respondents labeled themselves as a problem drinker or alcoholic. Furthermore, Hedden and Gfroerer (2011) point out that only 3.3% of individuals in need of treatment for an alcohol use disorder who did not receive treatment actually perceived a need for treatment. While the percentage increases for drug use disorders to 8.3% and for drug and alcohol disorders combined to 12.5%, the numbers are still very low. Another study that considered illicit stimulant users in rural areas of the United States found that those who had a perceived need for substance abuse treatment were positively associated with enrolling in drug treatment (Carlson et al., 2010). Furthermore, consistent with other research examining one's perception or personal state of readiness, a form of perceived need, opiate-using IDUs recruited from the street who were in the contemplation or determination stage of change were also associated with enrollment in the drug treatment program (Corsi et al., 2007).

Given the large number of individuals who meet criteria for a substance use disorder but see no need for treatment, the next aspect to consider is the reason that might be the case, and what the ramifications of this lack of perceived need are. The one group that has had some research with respect to why the perception of a need for treatment is lacking is the DWI area. A primary problem is that a large portion of DUI offenders do not want to change their substance use behavior, especially if the intended outcome is abstinence. As a result, they are disinclined to admit they have problems (Lapham, C'de Baca, McMillan, & Hunt, 2004; Lapham, C'de Baca, Chang, Hunt, & Berger; 2002; Lincourt, Kuettel, & Bombardier, 2002; Nochajski & Wieczorek, 1998; Nochajski & Stasiewicz, 2001; Vingilis, 1983). Additionally, DUI offenders tend to be angry about the arrest and what has occurred to them; they may be even angrier if referred for an evaluation and fearful of the consequences for failing to comply with the treatment provider's recommendations (Cavaiola & Wuth, 2002; Wieczorek, Callahan, & Morales, 1997). Another potential reason for use of discretion in following treatment referrals or seeking treatment is that many of these individuals do not meet criteria for dependence as determined by a structured interview (Lapham et al., 2001; Stasiewicz & Nochajski, 2003; Stasiewicz, Nochajski, & Homish, 2007). Thus, when mandated for an evaluation and then told to go for treatment, these individuals may remain unconvinced about the necessity of formal treatment.

Stigma is also a major reason that individuals may not seek treatment (Corrigan, 2004; Corrigan, Kuwabara, & O'Shaughnessy, 2009; Corrigan, Larson, & Rusch, 2009; Corrigan & Penn, 1999; Corrigan & Wassel, 2008; Gibbs et al., 2011; McFarling, D'Angelo, & Drain, 2011). There has been a large amount of research on the effects of stigma and a thorough review of this topic is beyond the scope of the current chapter. However, because of the relationship with treatment entry, it is prudent to point out that Corrigan and his colleagues have done extensive work with the stigma of mental health problems showing how it may influence the decision to seek out formal treatment. They suggest that because of the stigma associated with mental illness, individuals may feel shame and guilt, and low self-esteem and self-efficacy towards the ability to change their life. The low self-efficacy can then lead to beliefs that nothing will help them, resulting in a belief that formal treatment will not work; thus, it raises the reasoning of why one would seek out help. Additionally, Gibbs et al. (2011) and McFarling et al. (2011) consider stigma associated with mental health and substance abuse in the military, pointing out that many in need of help never seek it out because of the stigma that the military culture has imposed on these problems.

Another reason for not seeking treatment is a lack of resources, or treatment availability. Appel et al.'s (2007) study with injection drug users (IDU) validated the presence of individual client factors that serve as barriers to enrollment, such as readiness to begin treatment or denial of having a substance problem; however, they also found that treatment accessibility is essential for all addiction treatment clients, suggesting that a larger concentration on accessibility may be more economical and efficient than on individualized treatment motivation interventions. The findings of Appel et al. on treatment accessibility may begin to explain realistic systematic constraints in society instead of solely focusing on individualized limitations, traits or factors of substance abusers seeking treatment. Ravarino et al. (2008) notes that dwindling state and federal budgets have contributed to deficiencies in funds allotted for public health for substance abuse and mental health treatment programs to assist towards recovery from substance abuse. Such decreases in funds have resulted in waiting lists for treatment programs that are subsidized by the government, and when services are finally made available to persons on the lists, many do not appear to receive such services. Limitations in funding, management information systems, and staffing have been the main perceived barriers to the linkage of services (Wenzel, Longshore, Turner, & Ridgely, 2001).

Possibly related to the issue of a lack of resources for treatment is transportation (Evans, Li, & Hser, 2008). This is especially true for rural areas, where the distance to and from the treatment agency may be such that public transportation is unreliable or unavailable. Additionally, even when public transportation is available, the individual may not have sufficient income to allow for use of the transportation system. Furthermore, when the individual has multiple problems, or a dual diagnosis (substance use and mental health), the treatment agencies may be housed in different places, adding further to the transportation issue. As with resources for treatment services, transportation is another area that needs consideration.

Type of insurance or whether the individual has insurance coverage is also a factor when looking at treatment enrollment (Lundgren, Amaro, & Ben-Ami, 2005; Schmidt &Weisner, 2005). The relationship between drug court completion and structural-level barriers is particularly strong, ranging from barriers such as 'the system' and insurance requirements (Wolf & Colyer, 2001). When individuals have private insurance or are covered by Medicaid, they are more likely to enter treatment then those covered by Medicare. However, it is also known that dropout from treatment is associated with insurance coverage. Individuals will generally maintain treatment for as long as the insurance they have pays for it. Once the insurance provider will no longer cover treatment, the odds of dropping out increase significantly. The number of sessions covered by private insurance and what Medicaid and Medicare will cover are areas to consider when evaluating how to get more people in need to enroll in treatment.

Summary. In summary, individuals with substance use or mental health problems elect not to seek treatment for a variety of reasons. Some of these, such as lack of availability, transportation, and insurance, are systemic in nature. Having influence in these areas means working within systems to create sufficient resources for individuals in need of treatment. In contrast, perceived need for treatment and stigma can be construed as individually based, although some systemic issues may also play a role in how these factors influence treatment seeking. Nonetheless, individual focused interventions can be utilized to help improve rates

for treatment entry among those in need of treatment. With respect to stigma, In Our Own Voice and Cognitive Behavioral Therapy have been used to decrease the impact of stigma (Corrigan, Rafacz, Hautamaki et al., 2010; Corrigan & Wassel, 2008). For the perceived need for treatment, Motivational Interviewing (Miller & Rollnick, 2002) has shown some promise in helping individuals recognize the severity of their problems and the need for treatment (Wain, Wilbourne, Harris et al., 2011).

4. Factors associated with treatment entry

The information provided in the previous section focused on possible barriers or reasons why individuals may not seek treatment. This section now considers factors that have shown either a positive or negative relationship with treatment entry.

Demographics. A number of characteristics have been associated with entry into substance abuse treatment. These include demographic characteristics. Gender is one element that seems to influence treatment entry. Jakobson, Hensing, and Spak (2008) compared treatment entry factors for men and women. Their findings indicated that women showed greater stigma over substance use problems than men, which hindered their entrance into formal treatment. Additionally, men entered treatment because they had a belief they could change and were looking to the future. In contrast, women entered treatment because of pressure from someone close and a need to talk to someone about their problems. Tuchman (2010) also indicates that stigma of a substance use disorder appears to be greater for women than men. She also goes on to suggest that women are more likely to face greater barriers to treatment access than men, pointing out the differences in biological vulnerabilities as a potential issue for women. Hernandez-Avila, Rounsaville and Kranzler (2004) considered differences in men and women with regard to age of substance use onset and time to treatment entry. Their findings show that women showed less time between onset of substance use and entry into treatment. Likewise, women and men did not differ in severity of substance use problems; however, women reported more severe psychiatric, medical, and employment complications. In addition, Greenfield et al. (2007) noted that the collective evidence related to substance disorders supports that women with substance use disorders have less of a likelihood, across the lifespan, to enroll in treatment, compared to males with substance use disorders. The above information suggests that gender can influence the types of problems experienced, the severity of those problems, as well as self-efficacy and readiness to change.

Age may also influence treatment entry. Shin, Lundgren, and Chassler (2007) considered admissions to all state-licensed drug treatment programs, looking at differences between younger (18-25) and older injection drug users (IDUs). Results showed that the younger IDUs were more likely to use only detoxification and not enter additional treatment. Additionally, they point out that the younger individuals were less likely to use methadone maintenance and more likely to use residential treatment services than the older group of IDUs. These findings might suggest that the younger individuals have different sets of perceived needs and that clinicians may need to consider age as a critical factor when determining treatment.

Ethnicity, race and culture may also influence entry into treatment. Cannavo and Nochajski (2011) found that African Americans were more likely to enroll in a Family Treatment Court

than Caucasians. With regard to AIDS care, findings suggest that African Americans and Latinos were more likely to be highly engaged in services than were Caucasians (Bastaa, Shachamb, and Reecec, 2008). Culture may play a significant role in subsequent treatment seeking behavior. Depending on cultural beliefs with respect to mental illness and substance abuse, individuals may be more or less likely to seek out treatment. While there has been some work on treatment dropout and treatment outcomes, studies are limited for treatment entry. More work in this area could help define interventions for specific subgroups to get people in need to treatment services.

It is also interesting to note that employment at the time of drug court enrollment was found to be predictive of successful completion of the drug court treatment program (Roll, Prendergast, Richardson, Burdon, & Ramirez, 2005); this court was mostly methamphetamine abusers. Logistic regression analysis by Cannavo (2008) for a study of a Family Treatment Court found that unemployment showed a marginal trend for significance to identify those individuals who may be more likely to enroll in the FTC program.

Substance Abuse Behaviors. Various substance use behaviors were also predictors of enrollment. Cannavo & Nochajski (2011) found that substance users who shared needles were less likely to enroll in an FTC; however, as the number of drugs used in the last six months increased, the likelihood of enrolling in the FTC also increased. Prior treatment for substance abuse also led to a greater likelihood of enrolling in an FTC. In addition, Corsi et al. (2007) found that having fewer problems with alcohol yet more problems with opiate drugs were associated with enrolling in drug treatment among IDUs recruited from the street. In a study of illicit stimulant users in rural United States, those who had higher Addiction Severity Index (ASI) legal problem composite scores were positively associated with enrollment into treatment; having had a history of experiencing substance abuse treatment as well as tranquilizer use were also positively associated with enrolling into treatment. Those who did not use crack cocaine or marijuana on a daily basis were less likely to enter treatment (Carlson et al., 2010).

Also among the limited enrollment literature related to substance abuse enrollment, Booth et al. (2004, 1996) studied enrollment in the form of treatment entry and retention on the IDU population. Booth et al. (2004) examined factors associated with methadone maintenance retention, which the authors defined as remaining in treatment for a minimum of 90 days, and the injection drug users (IDUs) was again examined. A sum of 577 IDUs were randomly assigned to either a risk reduction intervention, focusing on safer injection and sex behaviors, or motivational interviewing, addressing more sweeping lifestyle changes including drug treatment. All persons who wanted treatment were given transportation, expedited intake process and a waiver of the intake fee. In addition, 50% were randomly assigned a voucher for ninety days of treatment free of cost. In total, 33% entered treatment and 60% of those who entered treatment remained for at least ninety days. Factors associated with retention that are relevant to enrollment included higher methadone dose, treatment at no cost, as well as greater contacts with the clinic. Interestingly, although desire for treatment, or motivation, was associated in univariate analyses with greater retention, no differences were noted between motivational interviewing and risk reduction interventions (Booth et al., 2004). In addition, in an earlier study, Booth et al. (1996) studied the same population. Factors positively correlated with treatment entry included having had the experience of prior treatment, outreach intervention by community workers, not injecting cocaine, and injecting opiates. Sites where the enhanced intervention included an active referral achieved significantly higher treatment entry rates than sites where the enhanced intervention did not include an active referral. The addition of staff assistance to facilitate clients' entry into treatment and the involvement of community outreach workers were both noted in achieving treatment entry.

Consistent with such findings related to enrollment and community outreach, Coviello et al. (2006) studied outreach case management for post-discharged methadone patients. Heroin dependence is a chronic relapsing disease often requiring multiple treatment experiences; however, a minimal number of methadone programs follow-up with clients who have been discharged. At 6 months following the start of intervention, 29% of the outreach case management clients had successfully re-enrolled in drug treatment compared to 8% of former participants who had received the standard referral for services. A logistic regression analysis showed that outreach case management clients were almost six times more likely than standard referral clients to re-engage in methadone maintenance treatment. In addition, outreach case management clients had fewer opiate and cocaine positive toxicologies at the 6-month follow-up compared to standard referral participants. The findings demonstrate the significance in engaging former clients in treatment and actively supporting them towards treatment re-entry (Coviello et al., 2006). In addition, support for professional outreach was also found in a study of 491 opiate-using IDUs recruited from the street, where more outreach contacts increased the likelihood of treatment entry (Corsi et al., 2007). There has been much support for outreach case management, as it is a straightforward approach to reduce the number of out-of-treatment drug users. The previous data reinforce the need for active referral processes, good follow-up with referrals, and available resources to allow for timely treatment entry. The issue seems to be one of increasing the load on an individual who may already be at capacity. Asking them to perform another task, or wait for available spots in treatment programs, may push them towards avoiding treatment. These findings also underscore the limited enrollment opportunities due to the often compromised availability of treatment funding (Coviello et al., 2006)

Alcohol Use. In terms of potential predictors of help-seeking for alcohol problems, studies have found that entering treatment is related to various demographic characteristics (Kaskutas, Weisner, & Caetano, 1997; Weisner, Matzger, Tam, & Schmidt, 2002), environmental contexts (Tucker, Vuchinich, & Pukish, 1995), perceived barriers to treatment (Cunningham et al., 1993), and history of prior treatment (Freyer et al., 2007; Weisner & Matzger, 2002; Wieczorek & Nochajski, 2005). Although greater problem severity predicts treatment entry (Bannenberg, Raat, & Plomp, 1992; Freyer et al., 2007; Hingson, Mangione, Meyers, & Scotch, 1982; Weisner & Matzger, 2002; Weisner et al., 2002; Wieczorek & Nochajski, 2005), help-seeking is less influenced by amount of alcohol consumed, and more by the degree to which drinking contributes to adverse health, relationship, and work-related consequences (Beckman & Amaro, 1986; Hingson et al., 1982; Simpson & Tucker, 2002; Tucker & Gladsjo, 1993; Tucker & King, 1999). In one study, individuals who had 3 or more lifetime drinking-related consequences were 4.5 times more likely to seek help during an 8-year follow-up than those who had less than three drinking-related consequences (Kaskutas et al., 1997). In a study looking at treatment engagement and treatment readiness or motivation, Knight, Hiller, Broome,

and Simpson (2000) found that the best predictor of engagement and outcomes was the individual's readiness or motivation for treatment. When comparing individuals entering treatment with individuals in the general population, Storbjork and Room (2008) found that previous treatment, unemployment, age, problem severity, and consumption were related to treatment entry. Finally, in a study involving DUI offenders, Wells-Parker, Dill, Williams and Stoduto (2006) found that depression was related to a willingness to seek treatment.

Therapeutic Courts. A study by Cannavo and Nochajski (2011) on enrollment in a Family Treatment Court found that African Americans were marginally more likely than all others to enroll in the FTC. In addition, if the individuals received more than \$3000 in government assistance over the previous year, they were 2.4 times more likely to refuse to enroll in the FTC. Prior treatment for substance use showed a marginal trend, indicating that individuals who had prior treatment for substance use were over twice as likely to enroll than those who did not have prior treatment for substance use. There was a significant effect for the total number of drugs used in the 6 months prior to the FTC assessment, reflecting that for every unit increase in the number of drugs, there was a 49% increase in the likelihood that the individual would enroll in the FTC. There was also a significant effect for sharing needles, indicating that those who shared needles were approximately 76% less likely to enroll in the FTC than those who did not share needles. Finally, the motivation to change substance use behavior showed a marginal trend reflecting an increase in the likelihood of enrollment of approximately 5% for every unit increase in motivation to change. Regarding aspects of parenting factors, for every unit increase in the number of activities parents engaged in with their children, there was a 21% increase in the likelihood they would enroll in the FTC. Of specific interest, in terms of the activities, were reading and doing chores. Parents who engaged in reading activities with their children, were over 3 times more likely to enroll in the FTC than parents who did not engage in this activity with their children. Those parents who engaged in chores with their children were almost 3 times more likely than parents who did not do so to enroll in the FTC. In regards to recognizing the impact of substance use on parenting, relative to the individuals who did not recognize that drug and alcohol use had an impact on their parenting, those who did recognize this were over twice as likely to enroll in the FTC. While some of the variables noted here play a role in the decision to enroll in the FTC, there are other factors that also contribute to the decisionmaking process that were not included in the study which suggest various other reasons to enroll that exist and supports the needs for further study in this area (Cannavo & Nochajski,

5. Model for treatment entry

The information presented thus far suggests that treatment entry may be a complex issue, with numerous elements to consider if we wish to increase treatment experience for those who need it. However, from a standpoint of actual development of intervention strategies to help increase treatment experience, it would suggest that we need to consider a range of things. In Figure 1, we propose a model of treatment entry that suggests the best point for interventions might be readiness for change. Let's consider the model in that context. Stigma would be represented as psychological distress in the current model. For substance use, we include the type of substance, type of use, severity of the problems, frequency of use, and expectancies related to the primary substances of use. Personal

history would include any childhood or adult victimization, interpersonal relationships, peer-related issues, family-related issues, school-related issues, and work-related issues. For self-efficacy, we are focused on the confidence the individual has that they will be able to remain abstinent, or at a minimum reduce the risky use of substances to a less harmful consumption pattern. Within the mandates we are including only criminal justice and work-related referrals. Family referrals would fall under substance use problem severity.

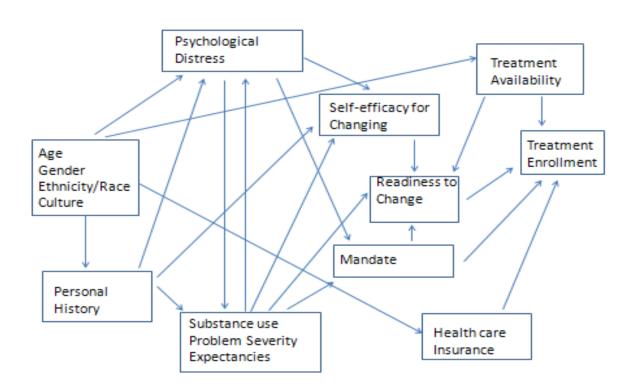


Fig. 1. Model for treatment enrollment in substance abuse treatment agencies.

With respect to readiness to change, there are two forms, readiness to change risky behavior, and readiness to enter treatment. While the readiness to enter treatment may reflect a readiness to change, that may not always be the case; as such, we have chosen to focus on treatment readiness. However, we use the Transtheoretical Model of Change for the purposes of this chapter, even though progression and tasks might differ between the two forms of readiness. The Transtheoretical Model of Change views motivation or readiness to change behavior as a multidimensional series of tasks or stages that are part of intentional behavior change processes (DiClemente, 2003; Prochaska & DiClemente, 1984). While the literature is mixed on the idea of whether intentional behavior change follows discrete stages or is more continuous in nature, the stage approach provides a good mechanism for understanding the underlying mechanisms for change that are needed to be in play as the person moves towards recovery or a better quality of life. The model proposes five stages that move from problem non-recognition to problem resolved and behavior change attained and stable. The first stage is that of precontemplation. This stage can be construed in two ways. One is when the individual does not see a need for changing their behaviors because

they may not perceive sufficient evidence to suggest that change is necessary. A second group may know they have problems but elect not to change their behaviors for various reasons. Within the context of information we have presented thus far, stigma might result in the latter, where individuals recognize they have a problem but see no way to change their behavior. Likewise, individuals may recognize they have problems but not have the resources for formal treatment entry. As such, we need to consider these elements as we look at readiness to change.

The second stage is that of contemplation. In this stage, the individuals have recognized their vulnerability but are not yet completely swayed that they need treatment or that treatment will be effective in reducing their problems. Self-efficacy may enter into this decision process, as a lack of belief in the ability to successfully change behavior could result in a decision not to enter treatment and a move back to precontemplation status. Another way that self-efficacy may enter into the decision is when it is actually very high, where the individual may believe that 'I can quit anytime I want to,' which would lead to non-entry into treatment. However, Davey-Rothwell, Frydl, and Latkin (2009) showed that individuals who engaged in attempts at trying to change their behavior were more likely to engage in treatment. The authors suggested that it may have been due to the social networks they formed when attempting to quit, pointing out that research suggests that if the social network contains more individuals who are in treatment or attending AA or NA, the individual is more likely to engage in treatment. What this means is that the issue of self-efficacy is complex and needs to be understood within the context of other elements in the model.

The next stage in the process is preparation. If the individual moves towards making the behavioral change, they next need to make a commitment to the change and develop a plan. Here we might see the individual begin the process of making some of the changes that Davey-Rothwell and colleagues indicated in their study but from a treatment entry perspective. They may begin to think about how they will get to the treatment agency, and what they need to take care of prior to entry, especially if it is an inpatient or residential treatment setting. If they stay committed, they will then move into the action stage and begin to take the actual steps of entering treatment. The dynamic nature of the model allows for set-backs, such that individuals may return to prior stages for various reasons. If there is a wait list for treatment, the individuals' readiness may lessen and they may end up not entering treatment. Likewise, if something happens in the person's life, the individual may shift again towards an earlier stage where treatment entry is not an option. If the individual has a dual diagnosis, this may be a significant factor. How is the mental health treatment being handled? Is it in a different agency from that where the substance abuse is being treated? If yes, there may be a chance for the individual to not enroll in one or the other treatment programs, increasing the likelihood for relapse. Insurance payments, or lack of economic ability to pay for treatment, is another factor that may result in relapse, as the individual may drop out of treatment before the positive benefits have been attained.

The final stage is that of maintenance, where the task is to sustain the behavior change. Here the individual should normalize the new behavior so that it becomes second nature. However, as with the other stages, the dynamic nature of the model allows for regression to occur. Until the individual has completely incorporated the new behavior into his/her

lifestyle, there is always the potential for a relapse. Considering the model, this may occur if new life events unfold that result in trauma for the individual, which may trigger old cues for substance use, which result in the increase of use until it becomes hazardous, increasing the psychological distress, decreasing the belief that change can occur, and deflating the readiness to change the risky behavior which they make an everyday experience. Thus, the model we propose has the flexibility to handle the varied situations that may arise concerning treatment entry.

Summary. In summary, the model recognizes that demographic factors such as age, gender, race/ethnicity, education, income, employment and culture can influence the personal history of the individual, as well as the development of psychiatric problems and substance use issues, and treatment availability. We also recognize that personal characteristics like childhood sex abuse or other forms of traumatic exposure can result in psychological distress that persists into adulthood. Similarly, we also recognize that trauma of any type may influence the psychological distress of the individual. Additionally, we recognize that personal factors like family relations, interpersonal relations, and work relations, may result in specific mental health or substance use patterns. The model also recognizes that psychological distress both influences and is influenced by substance use. Personal history also shows a relationship with self-efficacy, as patterns of substance use in the family, family history of mental illness, family functioning, and interpersonal relationships may all influence the development of self-efficacy.

Mandates show both a direct path to treatment entry, as well as an indirect pathway through readiness to change. This gives recognition to the fact that many individuals may be mandated to treatment but not all enroll and many who do enroll never fully engage in the process, suggesting that readiness to change may be low. We expect a similar effect for treatment entry. In the model that is presented (Figure 1), we also show direct paths to treatment entry for insurance and treatment availability. For treatment availability we show an indirect path through readiness to change. This reflects the effects of time delays on an individual's motivation level for treatment entry. The longer the period of time between the initial attempt at treatment entry, or the more energy an individual needs to expend to enter treatment, the less likely they are to enroll in treatment.

In essence, the model gives credence to all the factors that have shown a relationship with treatment entry but places them in a context where potential associations between factors may be identified. While placing emphasis on readiness to change, the model gives recognition to all factors of importance; but basically it is suggesting that when we consider how to increase treatment entry for those in need, an area that may provide more cost-effective outcomes is readiness to change. Within that context we can consider the influence of gender on personal history, psychological distress, and substance use and how those factors may interact to produce specific levels of readiness to enter treatment, which will inform the approaches used to increase the motivation to change of the individual. Similar statements can be made for ethnicity and culture.

The underlying point is that one can consider how all other factors may relate to readiness to enter treatment and then develop a plan to increase the entry into treatment for those who are in need.

6. References

- Appel , P.W., Ellison, B.S., Jansky, M.A. & Oldak, R. (2004). Barriers to enrollment in drug abuse treatment and suggestions for reducing them: Opinions of drug injecting street outreach clients and other system stakeholders. *The American Journal of Drug and Alcohol Abuse*, 30 (1), 129-153.
- Appel, P.W., & Oldak, R. (2007). A preliminary comparison to enrolling in substance abuse treatment (AOD) reported by injecting street outreach clients and other stakeholders. *The American Journal of Drug and Alcohol Abuse*, 33, 699-705.
- Ashford, J. (2004). Treating substance-abusing parents: A study of the Pima County family drug court approach. *Juvenile and Family Court Journal*, 55(4):27-37.
- Bastaa, T. Shachamb, E., and Reecec, M. (2008). Psychological distress and engagement in HIV-related services among individuals seeking mental health care. *Aids Care*, 20, 969-976.
- Ball, S. A., Martino, S., Nich, C., Frankenforter, T. L., Van Horn, D., Crits-Christoph, P., Woody, G. E., Obert, J. L., Farentinos, C., & Carroll, K. M. (2007). Site matters: Multisite randomized trial of motivational enhancement therapy in community drug abuse clinics. *Journal of Consulting and Clinical Psychology*, 75, 556-567.
- Bandura, A. (1977). Social Learning Theory. Englewood Cliffs, N.J: Prentice-Hall.
- Bandura, A. (1998). Health promotion from the perspective of social cognitive theory. *Psychology and Health, 13, 623-649.*
- Bannenberg, A. F. I., Ratt, H., & Plomp, H. N. (1992). Demand for alcohol treatment by problem drinkers. *Journal of Substance Abuse Treatment*, 9, 59-62.
- Beckman, L. J. & Amaro, H. (1986). Personal and social difficulties faced by women and men entering alcoholism treatment. *Journal of Studies on Alcohol*, 47, 135-145.
- Boles, S., & Young, N.K. (2006). Sacramento County dependency drug court: Year three summary report. Sacramento County Juvenile Drug Court Committee: Children and Family Futures, Irvine, CA.
- Booth, R.E., Crowley, T.J., Zhang, Y. (1996). Substance abuse treatment entry, retention, and effectiveness: Out-of-treatment opiate injection drug users. *Drug Alcohol Dependence* (*Ireland*), 42 (1), 11-20.
- Booth, R.E. Corsi, K.F., & Mikulich-Gilbertson, S.K. (2004). Factors associated with methadone maintenance treatment retention among street-recruited injection drug users. *Drug and Alcohol Dependence*, 74 (2), 177-185.
- Brisbane, F., Marmo, R., Cohen, S., Nichol, P., Finch, J., Golbin, J., Vidal, C., McKay, A., Graziano, F. (2000). Evaluation of the Suffolk County Family Treatment Court. Child Welfare Training Program: SUNY Stony Brook School of Social Welfare, Stony Brook, NY.
- C'de Baca, J., Miller, W. R., & Lapham, S.C, (2001). A multiple risk factor approach for predicting DWI recidivism. *Journal of Substance Abuse Treatment*, 21(4), 207-215.
- Cannavo, J.M. (2008). Evaluation of the Erie County Family Treatment Court. Dissertation Abstracts International Section A: Humanities and Social Sciences; 68(9-A):4068.
- Cannavo, J.M., & Nochajski, T.H. (2011). Factors contributing to enrollment in a family treatment court. *The American Journal of Drug and Alcohol Abuse*, 37, 54-61.

- Carey, K. B., Purnine, D. M., Maisto, S. A., & Carey, M. P. (1999). Assessing readiness to change substance abuse: A critical review of instruments. *Clinical Psychology: Science and Practice*, 6(3), 245-266.
- Carlson, R.G., Sexton, R., Wang, J., Falck, R., Leukefeld, C.G., & Booth, B.M. (2010). Predictors of substance abuse treatment entry among rural illicit stimulant users in Ohio, Arkansas, and Kentucky. *Substance Abuse*, 31, 1-7.
- Carroll, K. M., Ball, S. A., Nich, C., Martino, S., Frankforter, T. L., Farentinos, C., Kunkel, L. E., Mikulich-Gilbertson, S. K., Morgenstern, J., Obert, J.L., Polcin, D., Snead, N, & Woody, G. (2006). Motivational interviewing to improve treatment engagement and outcome in individuals seeking treatment for substance abuse: A multisite effectiveness study. *Drug and Alcohol Dependence*, 81, 301-312.
- Cavaiola, A. A., Strohmetz, D. B., Wolf, J. M., & Lavender, N. J. (2003). Comparison of DWI offenders with non-DWI individuals on the MMPI-2 and the Michigan Alcoholism Screening Test. *Addictive Behaviors*, 28, 971–977.
- Cavaiola, A., & Wuth, C. (2002). Assessment and treatment of the DWI offender. New York: Haworth Press.
- Chang, I., & Lapham, S. C. (1996). Validity of self-reported criminal offences and traffic violations in screening of driving-while-intoxicated offenders. *Alcohol and Alcoholism*, 31, 583–590.
- Corrigan, P.W. (2004). How stigma interferes with mental health care. *American Psychologist*, 69, 614-625.
- Corrigan, P. W., Kuwabara, S. A., & O'Shaughnessy, J. (2009). The public stigma of mental illness and drug addiction: Findings from a stratified random sample. *Journal of Social Work*, 9, 139–147.
- Corrigan, P. W., Larson, J. E., & Rusch, N. (2009). Self stigma and the "why try" effect: Impact on life goals and evidence-based practices. *World Psychiatry* 8, 75–81.
- Corrigan, P. W., & Penn, D. L. (1999). Lessons from social psychology on discrediting psychiatric stigma. *American Psychologist*, 54(9), 765–776.
- Corrigan, P.W., Rafacz, J.D., Hautamaki, J., Walton, J., Rusch, N., Rao, D., Doyle, P., Obrien, S., Pryor, J., & Reeder, G. (2010). Changing stigmatizing perceptions and recollections about mental illness: The effects of NAMI's In Our Own Voice. *Journal of Community Mental Health*, 46, 517–522.
- Corrigan, P.W. & Wassel, A.(2008). Understanding and influencing the stigma of mental illness. *Journal of Psychosocial Nursing*, 46 (1), 42-48.
- Coviello, D.M., Zanis, D.A., Wesnoski, S.A., & Alternam, A.I. (2006). The effectiveness of outreach case management in re-enrolling discharged methadone patients. *Drug and Alcohol Dependence*, 85 (1), 56-65.
- Cunningham, J. A., Sobell, L. C., Sobell, M. B., Agrawal, S., & Toneatto, T. (1993). Barriers to treatment: Why alcohol and drug abusers delay or never seek treatment. *Addictive Behaviors*, *18*, 347-353.
- Davey-Rothwell, M., Frydl, A., &Latkin, C. (2009). Does taking steps to control one's drug use predict entry into treatment? *The American Journal of Drug and Alcohol Abuse*, 35, 279–283.

- Davey, M. A., Latkin, C.A., Hua, W., Tobin, K.E., Strathdee, S. (2007). Individual and social network factors that predict entry to drug treatment. *American Journal of Addiction*, 16(1), 38–45.
- Dill, P.L., Wells-Parker, E., Cross, G.W., Williams, M., Mann, R. E., Stoduto, G., & Shuggi, G. (2007). The relationship between depressed mood, self-efficacy and affective states during the drinking driving sequence. *Addictive Behaviors*, 32, 1714-1718.
- Evans, E., Li, L., & Hser, Y. (2008). Treatment entry barriers among California's Proposition 36 offenders. *Journal of Substance Abuse Treatment*, 35, 410-418.
- Freyer, J., Coder, B., Bischof, G., Baumeister, D. E., Rumpf, H., John, U., & Hapke, U. (2007). Intention to utilize formal help in a sample with alcohol problems: A prospective study. *Drug and Alcohol Dependence*, 87, 210-216.
- Fromme, K. & Corbin, W. (2004). Prevention of heavy drinking and associated negative consequences among mandated and voluntary students. *Journal of Consulting and Clinical Psychology*, 72(6), 1038-1049.
- Gentilello, L.M., Rivara, F. P., Donovan, D. M., Jurkovich, G. J., Daranciang, E., Dunn, C. W., Villaveces, A., Copass, M., & Ries, R. R. (1999). Alcohol interventions in a trauma center as a means of reducing the risk of injury recurrence. *Annals of Surgery*, 230, 473-483.
- Gibbs, D.A., Olmsted, K.L.R., Brown, J.B., Clinton-Sherrod, A.M. (2011). Dynamics of stigma for alcohol and mental health treatment among army soldiers. *Military Psychology*, 23(1), 36-51
- Ginsburg, J. I. D., Mann, R. E., Rotgers, F., & Weekes, J. R. (2002). Using motivational interviewing with criminal justice populations. In W. R. Miller & S. Rollnick (Eds.), *Motivational interviewing: Preparing people for change* (pp. 333-346). New York: Guilford Press.
- Gossop, M., Stewart, D. & Marsden, J. (2006). Readiness for change and drug use outcomes after treatment. *Addiction*, 102, 301-308.
- Green, B.L., Furrer, C., Worcel, S., Burrus, S., & Finigan, M.W. (2007) How effective are family treatment drug courts? Outcomes from a four-site national study. *Child Maltreatment*. 12(1):43-59.
- Green-Hennessy, S. (2002). Factors associated with receipt of behavioral health services among persons with substance dependence. *Psychiatric Services*, *53*, 1592–1598.
- Greenfield, S.F., Brooks, A.J., Gordon, S.M., Green, C.A., Kropp, F., McHugh, R.K., Lincoln, M., Hein, D., & Miele, G.M. (2007). Substance abuse treatment entry, retention, and outcome in women: A review of the literature. *Drug and Alcohol Dependence*, 86, 1-21.
- Haack, M., Alemi, F., Nemes, S., & Cohen, J.B. (2004). Experience with family drug courts in three cities. *Substance Abuse*, 25(4), 17-25.
- Hedden, S.L. &Gfroerer, J.C. (2011). Correlates of perceiving a need for treatment among adults with substance use disorders: Results from a national survey. *Addictive Behaviors*, 36, 1213-1222.
- Hernandez-Avila, Rounsaville, & Kranzler (2004). Opioid-, cannabis- and alcohol-dependent women show more rapid progression to substance abuse treatment. *Drug and Alcohol Dependence*, 74, 265–272.

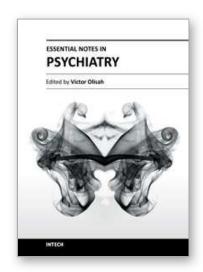
- Hiller, M. L., Knight, K., Broome, K. M., & Simpson, D. D. (1998). Legal pressure and treatment retention in a national sample of long-term residential programs. *Criminal Justice and Behavior*, 25, 463-481.
- Hingson, R., Scotch, N., Day, N., & Culbert, A. (1980). Recognizing and seeking help for drinking problems: A study in the Boston metropolitan area. *Journal of Studies on Alcohol*, 41, 1102-1117.
- Hingson, R., Mangione, T., Meyers, A., & Scotch, N. (1982). Seeking help for drinking problems: A study in the Boston metropolitan area. *Journal of Studies on Alcohol*, 43, 273-288.
- Hoffman, N. G., Ninonuevo, F., Mozey, J., & Luxenberg, M. G. (1987). Comparison of court-referred DWI arrestees with other outpatients in substance abuse treatment. *Journal of Studies on Alcohol*, 48, 591-594.
- Innovation Research & Training, Inc. Durham family treatment court process evaluation report. Durham, NC, 2005.
- Jakobsson, A., Hensing, G., and Spak, F. (2008). The role of gendered conceptions in treatment seeking for alcohol problems. *Scandinavian Journal of Caring Sciences*, 22, 196-202.
- Kaskutas, L. A., Weisner, C., & Caetano, R. (1997). Predictors of help seeking among a longitudinal sample of the general population, 1984-1992. *Journal of Studies on Alcohol*, 58, 155-161.
- Kirchner, J. E., Booth, B. M., Owen, R. R., Lancaster, A. E., & Smith, G. R. (2000). Predictors of patient entry into alcohol treatment after initial diagnosis. *Journal of Behavioral Health Services & Research*, 27, 339–346.
- Knight, K., Hiller, M. L., Broome, K. M., & Simpson, D. D. (2000). Legal pressure, treatment readiness, and engagement in long-term residential programs. *Journal of Offender Rehabilitation*, 37, 101-115.
- Lapham, S. C., C'deBaca, J., McMillan, G. P., & Hunt, W.C. (2004). Accuracy of alcohol diagnosis among DWI offenders referred for screening. *Drug and Alcohol Dependence*, 76(2), 135-141.
- Lapham, S. C., C'de Baca, J., Chang, I., Hunt, W. C., & Berger, L. R. (2002). Are drunk-driving offenders referred for screening accurately reporting their drug use? *Drug and Alcohol Dependence*, 66, 243–253.
- Litell, J. H. & Girvin, H. (2002). Stages of change: A critique. *Behavior Modification*, 26, 223-273.
- Lincourt, P., Keuttel, T. J., & Bombardier, C. H. (2002). Motivational interviewing in a group setting with mandated clients: A pilot study. *Addictive Behaviors*, 27, 381-391.
- Lundgren, L.M., Amaro, H., & Ben-Ami, L. (2005). Factors associated with drug treatment entry patterns among Hispanic women injection drug users seeking treatment. *Journal of Social Work Practice in the Addictions*, *5*(1-2), 157-174.
- MacDonald, S., DeSouza, A., Mann, R., & Chipman, M. (2004). Driving behavior of alcohol, cannabis, and cocaine abuse treatment clients and population controls. *American Journal of Drug and Alcohol Abuse*, 30, 429-444.
- McCammon, K. (2001). Alcohol-related motor vehicle crashes: Deterrence and intervention. *Annals of Emergency Medicine*, *38*, 415-422.

- McConnaughy, E. A., Prochaska, J. O., & Velicer, W. F. (1983). Stages of change in psychotherapy: Measurement and sample profiles. *Psychotherapy: Theory, Research, and Practice, 20,* 368-375.
- McFarling, L., D'Angelo, M., & Drain, M. (2011). Stigma as a barrier to Substance Abuse and mental health treatment. *Military Psychology*, 23, 1-5.
- McMillian, H.E. (2008). Process and outcome evaluation of the Spokane County Meth Family Treatment Court, 2003-2005. Dissertation Abstracts International Section A: Humanities and Social Sciences, 69 (2-A): 767.
- Miller, W.M. & Rollnick, S. (2002). *Motivational interviewing: Preparing people for change* (2nd ed.). New York, NY, US: Guilford Press.
- Monti, P. M., Colby, S. M., Barnett, N. P., Spirito, A., Rohsenow, D. J., Myers, M., Woolard, R., & Lewander, W. (1999). Brief intervention for harm reduction with alcoholpositive older adolescents in a hospital emergency department. *Journal of Consulting and Clinical Psychology*, 67, 989-994.
- Nochajski, T. H. (1999). Alcohol program completion: Does it matter for DWI recidivism? *Alcoholism: Clinical and Experimental Research*, 23(5), 239.
- Nochajski, T. (2006). The Research Institute on Addictions Self Inventory: A screening instrument for convicted drinking-drivers. Unpublished revised manual.
- Nochajski, T. H., & Stasiewicz, P. R. (2001). Under-reporting by DWI offenders: Implications for motivational interviewing. *Alcoholism: Clinical and Experimental Research*, 25, 277.
- Nochajski, T. H. & Stasiewicz, P. (2005). Assessing stages of change in DUI offenders: A comparison of two measures. *Journal of Addictions Nursing*, 16, 57-67.
- Nochajski, T. H. & Stasiewicz, P. R. (2006). Relapse to driving under the influence (DUI): A review. *Clinical Psychology Review*, 26, 179-195.
- Nochajski, T. H. & Wieczorek, W. F. (1998). Identifying potential drinking-driving recidivists: Do non-obvious indicators help? *Journal of Prevention and Intervention in the Community*, 17, 69-83.
- Nochajski, T. H. & Wieczorek, W. F. (2000). Driver characteristics as a function of DWI history. In H. Laurell & F. Schlyter (Eds.), Alcohol, drugs and traffic safety. Stockholm: Ekonomi.
- Peck, R. C., Arstein-Kerslake, G. W., & Helander, C. J. (1994). Psychometric and biographical correlates of drunk-driving recidivism and treatment program compliance. *Journal of Studies on Alcohol*, 55, 667-678.
- Prochaska, J. O. & DiClemente, C. C. (1982). Transtheoretical therapy: Toward a more integrative model of change. *Psychotherapy: Theory, Research, and Practice, 19, 276-288*
- Prochaska, J. O. and DiClemente, C. C. (1984). The transtheoretical approach: Crossing traditional boundaries of therapy. Homewood, Ill., Dow Jones-Irwin.
- Prochaska, J.O., DiClemente, C.C., & Norcross, J. (1992). In search of how people change: Applications to addictive behaviors. *American Psychologist*, 47, 1102-1114.
- Roll, J.M., Prendergast, M., Richardson, K., Burdon, W., & Ramirez, A. (2005). Identifying predictors of treatment outcome in a drug court program. *The American Journal of Drug and Alcohol Abuse*, 31, 641-656.

- Saunders, S.M., Zygowicz, K. M., and D'Angelo, B. R. (2006). Person-related and treatment-related barriers to alcohol treatment. *Journal of Substance Abuse treatment*, 30, 261-270.
- Schmidt, L.A. &Weisner, C.M. (2005). Private insurance and the utilization of chemical dependency treatment. *Journal of Substance Abuse Treatment*, 28, 67-76.
- Schmidt, L. A. & Weisner, C. M. (1999). Public health perspectives on access and need for substance abuse treatment. In J.A.Tucker, D. M. Donovan, & G. A. Marlatt (Eds.), *Changing addictive behavior: Bridging clinical and public health strategies* (pp. 67-96). New York: Guilford.
- Shin, S.H., Lundgren, L., & Chassler, D. (2007). Examining drug treatment entry patterns among young injection drug users. *The American Journal of Drug and Alcohol Abuse*, 33, 217-225.
- Simpson, C. A. & Tucker, J. A. (2002). Temporal sequencing of alcohol-related problems, problem recognition, and help-seeking episodes. *Addictive Behaviors*, 27, 659-674.
- Stasiewicz, P., Herrman, D. H., Nochajski, T. H., & Dermen, K. (2006). Motivational interviewing engaging highly resistant clients in treatment. *Counselor*, *7*(1), 26-32.
- Stasiewicz, P. R. & Nochajski, T. H. (2003). Determining alcohol use disorders in DWI offenders. *Alcoholism: Clinical and Experimental Research*, 27(5), 432.
- Stasiewicz, P., Nochajski, T. H., Smith, K., & Bradizza, C. (2000, November). *Assessment of alcohol problems in DWI offenders: The sooner the better?* Presented at The Association for Advancement of Behavior Therapy annual convention in New Orleans, LA..
- Stasiewicz, P. R., Nochajski, T. H., & Homish, D. L. (2007). Assessment of alcohol use disorders among court-mandated DWI offenders. *Journal of Addiction and Offender Counseling*, 27(2), 102-112.
- Stein, L. A. R. & Lebeau-Craven, R. (2002). Motivational interviewing and relapse prevention for DWI: A pilot study. *Journal of Drug Issues*, 32(4), 1051-1070.
- Storbjork, J. & Room, R. (2008). The two worlds of alcohol problems: Who is in treatment? *Addiction Research Theory*, 16(1), 67-84.
- Tucker, J. A. & Gladsjo, J. A. (1993). Help-seeking and recovery by problem drinkers: Characteristics of drinkers who attended alcoholics anonymous or formal treatment or who recovered without assistance. *Addictive Behaviors*, 18, 529-542.
- Tucker, J.A. & King, M. P. (1999). Resolving addictive behavior problems: influences on addictive behavior change and help-seeking processes. In J.A. Tucker, D. M. Donovan, & G. A. Marlatt (Eds.), *Changing addictive behavior: Bridging clinical and public health strategies (pp. 96-126)*. New York: Guilford Press.
- Tucker, J. A., Vuchinich, R. E., & Pukish, M. M. (1995). Molar environmental contexts surrounding recovery from alcohol problems by treated and untreated problem drinkers. *Experimental and Clinical Pharmacology*, *3*, 195-204.
- Tuchman, E. (2010). The importance of gender issues in substance abuse research. *Journal of Addictive Diseases*, 29, 127–138.
- Vingilis, E. (1983). Drinking drivers and alcoholics: Are they from the same population? In R. G. Smart, F. B. Glaser, Y. Israel, H. Kalant, R. E. Popham, & W. W. Schmidt (Eds.), Research advances in alcohol and drug problems. Vol. 7 (pp. 299–342). New York: Plenum Press.

- Wain, R.M., Wilbourne, P.L., Harris, K.W., Pierson, H., Teleki, J., Burling, Lovett. S. (2011). Motivational interview improves treatment entry in homeless veterans. *Drug and Alcohol Dependence*, 115, 113–119.
- Washousky, R., & Pirowski, H. (2003). Erie County Family Treatment Court Evaluation. Erie Community College: Department of Alcohol and Substance Abuse.
- Weisner, C. & Matzger, H. (2002). A prospective study of the factors influencing entry to alcohol and drug treatment. *Journal of Behavioral Health Services and Research*, 29, 126-137.
- Weisner, C., Matzger, H., Tam, T., & Schmidt, L. (2002). Who goes to alcohol and drug treatment? Understanding utilization within the context of insurance. *Journal of Studies on Alcohol*, 63, 673-682.
- Wells-Parker, E., Bangert-Drowns, R., McMillen, R., & Williams, M. (1995). Final results from a meta-analysis of remedial interventions with drink/drive offenders. *Addiction*, 90, 907-926.
- Wells-Parker, E., Dill, P., Williams, M., & Stoduto, G. (2006). Are depressed driving/driving offenders more receptive to brief intervention? *Addictive Behaviors*, *31*, 339-350.
- Wells-Parker, E., Dill, P., Cross, G, Mann, R.E., Stoduto, G, & Nochajski, T.H. (2007). An integrated theoretical model for matching DUI offenders to intervention options: Negative cognitive/affective patterns, dissonance, and motivation. In B. Logan, D. Isenschmid, J. Walsh, D. Beirness, & J. Morland (Eds.), *Alcohol, drugs and traffic safety*, Seattle, Washington.
- Wells-Parker, E., Kenne, D., Spratke, K. L., and Williams, M. (2000). Self-Efficacy and motivation for controlling drinking and drinking/driving: An investigation of changes across a driving under the influence (DUI) intervention program and of recidivism prediction. *Addictive Behaviors*, 25(2), 229-238.
- Wells-Parker, E. and Williams, M. (2002). Enhancing the effectiveness of traditional interventions with drinking drivers by adding brief individual components. *Journal of Studies on Alcohol*, 63, 655-664.
- Wells-Parker, E., Williams, M., Dill, P., & Kenne, D. (1998). Stages of change and self-efficacy for controlling drinking and driving: A psychometric analysis. *Addictive Behaviors*, 23 (3), 361-363.
- Wenzel, S.L., Longshore, D., Turner, S., Ridgely, M.S. (2001). Drug courts: A bridge between criminal justice and health services. *Journal of Criminal Justice*, 29, 241-253.
- Wieczorek, W. F., Callahan, C. P., & Morales, M. A. (1997). Motivation for change among DWI offenders. In C. Mercier-Guyon (Ed.), *Alcohol, drugs and traffic safety.* (pp. 1069–1075). Annecy, France: CERMT.
- Wieczorek, W. F., & Nochajski, T. H. (2005). Characteristics of persistent drinking drivers: comparisons of first, second and multiple offenders. In D. A. Hennessey & D. L. Wiesenthal (Eds.), Contemporary issues in traffic research and road user safety. Hauppauge, NY: Nova Science.
- Williams, D. J., Simmons, P. and Thomas, A. (2000). Predicting DUI recidivism following an alcohol safety action program. *Journal of Offender Rehabilitation*, 32(1/2), 129-145.
- Worcel, S., Furrer, C., Green, B.L., Rhodes, B. (2006). Family treatment drug court evaluation final phase I study report. NPC Research: Portland, OR.

- Young, D. & Belenko, S. (2002). Program retention and perceived coercion in three models of mandatory drug treatment. *Journal of Drug Issues*, 32, 297-328.
- Yu, J. & Williford, W. R. (1993). Alcohol and risk/sensation seeking: Specifying a causal model on high-risk driving. *Journal of Addictive Diseases*, 12, 79-96.
- Yu, J. & Williford, W. R. (1995). Drunk-Driving recidivism: Predicting factors from arrest and case disposition. *Journal of Studies on Alcohol*, *56*, 60-66.
- Zweben, A. & Fleming, M. F. (1999). Brief interventions for alcohol and drug problems. In J. A. Tucker, D. M. Donovan, & G. A. Marlatt (Eds.), *Changing addictive behaviors* (pp. 251–282). New York: Guilford Press



Essential Notes in Psychiatry

Edited by Dr. Victor Olisah

ISBN 978-953-51-0574-9
Hard cover, 580 pages
Publisher InTech
Published online 27, April, 2012
Published in print edition April, 2012

Psychiatry is one of the major specialties of medicine, and is concerned with the study and treatment of mental disorders. In recent times the field is growing with the discovery of effective therapies and interventions that alleviate suffering in people with mental disorders. This book of psychiatry is concise and clearly written so that it is usable for doctors in training, students and clinicians dealing with psychiatric illness in everyday practice. The book is a primer for those beginning to learn about emotional disorders and psychosocial consequences of severe physical and psychological trauma; and violence. Emphasis is placed on effective therapies and interventions for selected conditions such as dementia and suicide among others and the consequences of stress in the workplace. The book also highlights important causes of mental disorders in children.

How to reference

In order to correctly reference this scholarly work, feel free to copy and paste the following:

Joanne M. Cannavo and Thomas H. Nochajski (2012). Factors Contributing to Enrollment in Treatment Programs for Adults, Essential Notes in Psychiatry, Dr. Victor Olisah (Ed.), ISBN: 978-953-51-0574-9, InTech, Available from: http://www.intechopen.com/books/essential-notes-in-psychiatry/factors-contributing-to-enrollment-in-treatment-programs-for-adults



InTech Europe

University Campus STeP Ri Slavka Krautzeka 83/A 51000 Rijeka, Croatia Phone: +385 (51) 770 447

Fax: +385 (51) 686 166 www.intechopen.com

InTech China

Unit 405, Office Block, Hotel Equatorial Shanghai No.65, Yan An Road (West), Shanghai, 200040, China 中国上海市延安西路65号上海国际贵都大饭店办公楼405单元

Phone: +86-21-62489820 Fax: +86-21-62489821 © 2012 The Author(s). Licensee IntechOpen. This is an open access article distributed under the terms of the <u>Creative Commons Attribution 3.0</u> <u>License</u>, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.



