

## **The Impact of Substance Misuse in Adulthood: Associations with Psychological, Interpersonal, Occupational, and Social Factors.**

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### **Abstract**

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*Substance misuse is a widespread problem throughout society. As drug abuse results in various social and economic costs, researchers have been investigating the impact of drug abuse for several decades. In the past, studies on drug abuse have focused on adolescence. Therefore, we have learned a great deal about the prevalence, predictors, and consequences of drug abuse in this developmental period. Furthermore, various theoretical models have been postulated explaining the relationship between drug abuse in adolescence and into early adulthood. However, in comparison to the empirical knowledge of drug abuse in adolescence, less is known about drug abuse during the developmental period of adulthood. Therefore, in order to get a comprehensive picture of how drug abuse impacts adults, several aspects of adult functioning must be addressed to determine the extent of the psychosocial impact of drug abuse in adulthood. The purpose of this study is to gain a comprehensive understanding of the relationship between drug abuse in an adult's life by examining the association between drug abuse and psychological, interpersonal, occupational, and social factors in adulthood.*

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**Keywords:** Substance abuse, adulthood, factors, research and treatment

### **1.0. Introduction**

Drug abuse has been a widespread problem throughout society. Since there is a belief that drug abuse results in various social and economic costs to our nation, researchers have been investigating the impact of drug abuse for several decades. In the past, studies on drug abuse have focused on adolescence. Therefore, we have learned a great deal about the prevalence, predictors, and consequences of drug abuse in this developmental period (Brunelle, Douglas, Pihl, & Stewart, 2009; Lundholm, Haggard, Moller, Hallqvist, & Thiblin, 2013; Molero, Larsson, Larm, Edlund, & Tengstrom, 2011). Furthermore, various theoretical models have been postulated explaining the relationship between drug abuse in adolescence and into early adulthood (Chesney-Lind & Pasko, 2013; Scott, Grella, Dennis, & Funk, 2014). However, in comparison to the empirical knowledge of drug abuse in adolescence, less is known about drug abuse during the developmental period of adulthood. Few studies have focused on drug abuse in the adult population. Therefore, in order to get a comprehensive picture of how drug abuse impacts adults, several aspects of adult functioning must be addressed to determine the extent of the psychosocial impact of drug abuse in adulthood.

The purpose of this study is to gain a comprehensive understanding of the relationship between drug abuse in an adult's life by examining the association between drug abuse and the following psychological, interpersonal, occupational, and social factors in adulthood: psychological distress, intimacy, work adjustment, and criminal behavior. The current study will expand the body of literature related to drug abuse by examining behavioral patterns of young adults into adulthood associated with stability and change of drug abuse, psychological distress, intimacy, work adjustment, and criminal behavior across the developmental period. Furthermore, the study will explore temporal sequences related to the predictors and consequences of drug abuse from early & middle adulthood. This study will not only investigate polydrug abuse but will also explore predictors and consequences of specific substance abuse as well (alcohol, marijuana, and cocaine).

## 2.0. Literature Review

This review will first discuss the literature relevant to the general developmental issues faced in adulthood. The review of developmental issues will be followed by information related to polydrug abuse and review of literature on the association of drug abuse with psychological distress, intimacy, work adjustment, and criminal behavior will follow.

The transition into adulthood is marked by various psychological and behavioral changes. According to Sharon (2016), the developmental period of adulthood, following adolescence, involves various tasks of personal growth. In adulthood, such growth takes place through a greater commitment to and involvement in social roles and interpersonal relationships, as well as an increased awareness of values and concern for others. Theorists have postulated that love and the development of interpersonal relationships are important aspects of the young adult life (Becker, 2013). In Erickson's (1963) theory of psychosocial development, the attainment of intimacy is the major task to accomplish in young adulthood. Adults begin to form intimate relationships and form commitments that may lead to marriage and family formation.

Marital adjustment, sexual adjustment, and role adjustment take place in young adulthood (Skulborstad and Hermann (2016). It is in the adult period that the individual begins to adopt various roles that include spouse, parent, and worker. Along with interpersonal relationships, work related issues become a major focus in the transition to adulthood (Brzezińska and Piotrowski, 2013). Allen and Williams (2012) proposes five developmental life stages that people go through across the life span. In each life stage, the individual must confront various developmental tasks that are essential in dealing with the developmental tasks of the next life stage. The establishment stage marks the period of adulthood, ages 25 to 45. The young adult begins to choose occupations with more commitment. As the young adult, reaches adulthood in his or her thirties, stabilization into a chosen occupation and consolidation of status are the developmental tasks. Dima and Bucuta (2015) postulates that the early adult stage is a transitional period in which reassessment often takes place. In the early thirties, stabilization and settling down is necessary as the adult commits more deeply to career and family.

## 3.0. Polydrug Abuse

According to the National Household Survey on Drug Abuse (National Institute of Drug Abuse, 2018), Illicit drug use in the United States has been increasing in the last decade. Prevalence of drug use from the Monitoring the Future Study shows that in 2013, an estimated 24.6 million Americans aged 12 or older—9.4 percent of the population—had used an illicit drug in the past month. This number is up from 8.3 percent in 2002. In comparison to cocaine and marijuana, alcohol continues to be the drug used mostly by young adults age 25 to 26 (95.1% lifetime use, 69.9% past month use) and adults age 31 to 32 (96% lifetime use, 66.3% past month use) in the past year. Marijuana use for young adults is estimated at 63.4% lifetime use and 12.4% past month use, while for adults, lifetime use is 72.9% and past month use is 11.7%. Lifetime prevalence and past month use of cocaine is lower for both young adults (24.6%; 1.8%) and adults (36%; 1.7%). However, despite the evidence that drug use may be decreasing, drug abuse in our society continues (Brunelle et al., 2009; Chesney-Lind & Pasko, 2013; DeMatteo et al., 2015; Molero, Larsson, Larm, Edlund, & Tengstrom, 2011) and is qualitatively different from drug use.

Research has noted that the use of one drug increases the likelihood that an individual will use the same drug in the future and that the individual will use other drugs as well (Addiction Center, 2017). Furthermore, the use of drugs can lead to use of harder substances and to abuse (DeMatteo et al., 2015). In a community sample of adults, 18 % of the population was diagnosed with alcohol and drug abuse, while 13% of the adults were alcohol abusers and 3.5% were drug abusers (Aikins, 2015).

According to Aikins (2015), alcohol abuse was prevalent among cannabis abusers (36%) and stimulant abusers (62%). However, cocaine abusers had the highest prevalence of alcohol abuse (84%). Jayne & Valentine, 2016 noted similar polydrug use in a mixed community, clinic, and prison sample.

Cocaine users were found to use alcohol and marijuana, while marijuana users tended to use alcohol (at a lower frequency than the cocaine users). Aikins, (2015) and Edelman, & Fiellin (2016) identified a pattern of polydrug use and abuse. According to the results from a longitudinal sample of young adult, the likelihood of use leading to abuse is impacted by the specific drug. For example, cocaine users had the highest rate of abuse (30%), while only 15% of users of alcohol were dependent as well. Furthermore, abuse of one drug increases the likelihood that other substances will also be abused. Newcomb notes that over half of the individuals abusing cocaine and marijuana also abused alcohol. The following patterns of dual dependencies were found alcohol and cocaine (4.9%); alcohol and marijuana (4.2%); and cocaine and marijuana (2.9%). Cocaine abusers had the highest rate of poly drug abuse with 65% of the cocaine abusers also abusing alcohol and 39% also abusing marijuana. Marijuana abusers had a less degree of polydrug abuse (52% also abused alcohol and 36% also abusing cocaine).

According to Cox, Ketner, and Blow (2013), alcohol abusers had the lowest prevalence of polydrug abuse, 32% of the alcoholics abusing marijuana and 17% abusing cocaine. Therefore, as can be seen by past research, individuals abusing certain substances like cocaine, may have a greater likelihood of a poly drug abuse lifestyle. For other individuals, only specific substances may be abused. However, such distinctions of polydrug abuse versus abuse of specific drugs are not always made in the literature and these patterns are often ignored. This study will investigate the predictors and consequences of polydrug abuse as well as more specific substances.

#### **4.0. Drug Abuse and Psychological Distress**

The relationship between psychological distress and alcohol and drug abuse has been noted by various researchers. Numerous theoretical models have been postulated to explain the association between drug abuse and psychological variables. This review will present several of the theoretical models proposed, followed by a review of the psychological variables associated with drug abuse. Finally, a summary of the methodological problems encountered in the literature will be discussed (National Institute of Drug Abuse, 2018).

##### ***4.1. Theoretical Models of Drug Abuse and Psychological Distress***

Among the numerous theories that have attempted to explain the association between drug abuse and psychological distress, the direction of their explanatory model differentiates whether the theory accounts for the etiology of drug abuse or for the role of drug abuse in the etiology of psychological distress. Theories postulating the etiology of drug abuse as stemming from an individual's psychological functioning include the self-medication hypothesis and self-derogation theory (Crowley & Kirschner, 2015).

The self-medication hypothesis is a theory most often cited by researchers (Cooper, 2012). It postulates that drug abuse is a response to an individual's emotional state of affective disturbance, dysphoria, and stress (Becker, 2013). For example, according to Kraanen, Scholing, and Emmelkamp (2012), cocaine may be used to medicate various symptoms, as "cocaine can produce significant but brief relief from severe depression, or it can be used as a pharmacological switch to produce a manic blast in a bipolar or cyclothymic patient" (p. 30). Depending on the specific emotional problem faced by an individual, the individual will choose a drug based on its pharmacological action for reducing the specific undesirable or intolerable psychological state. Therefore, psychological distress precipitates drug abuse as drug abuse is used as a means of alleviating symptoms of distress. This proposed causal direction of emotional states predicting drug abuse is similar to the tension reduction hypothesis proposed by Aikins (2015).

According to Aikins, drug use is a response to tension and stress, whereby the drug is used for its ameliorating effects. Further postulating the precipitating consequences of psychological states and drug use is Kaplan's (1975) self-derogation theory. Kaplan asserts that drug abuse is caused by an individual's self-esteem motive. According to Kaplan, an individual participates in activities and behaviors that are socially deviant as a means of restoring a sense of self that has been damaged by devaluing experiences. Along with theories postulating that psychological distress leads to drug abuse, drug abuse is also theorized to cause psychological distress.

The impaired functioning theory (Newcomb & Bentler, 1988a) proposes that "use of various substances interferes with or impairs physical, psychological, or emotional functioning" (p. 25). The impairment is caused by the pharmacological effects of the substances on various processes and sensory and neurological functions.

For example, cocaine-induced psychiatric symptoms in healthy individuals occurs in four stages, beginning with cocaine euphoria, followed by cocaine dysphoria, cocaine hallucinosis, and cocaine psychosis (Sahker, Acion, & Arndt, 2015).

#### ***4.2. Empirical Associations between Drug Abuse and Psychological Distress***

Drug abuse has been associated with various psychological characteristics, including depression, anxiety, personality disorders, psychotic disorders, suicidality, and other emotional states. Bahrke (2012) found that men responded to depression and low self-esteem through use of alcohol and drugs, while women used alcohol and drugs in response to lack of purpose in life or feelings of meaninglessness. Similarly, Becker (2013) found that men and women in the general population use drugs differently in response to emotional distress. Anxiety was associated with alcohol and cannabis use in women and hard drug use in men.

Women used cocaine in response to hostility and suicidal ideation, while hostility was associated with cannabis frequency in men. According to DeMatteo et al. (2015) drug use had differing effects on emotional states between men and women. For women, alcohol decreased depression while, men had many more emotional responses to drug use: cannabis increased depression, cigarette frequency decreased anxiety, cocaine frequency increased anxiety, polydrug use increased hostility, hard drug use decreased hostility, and cannabis increased suicidal ideation.

### **5.0. Drug Abuse and Intimacy**

During the period of young adulthood (mid-twenties) to adulthood (early thirties), marriage, intimate relationships, and family formation are very important. However, alcohol and drug use has been associated with various aspects of intimacy dysfunctions (Becker, 2013). This section will review theoretical models and the literature on the relationship of drug abuse and intimacy. Methodological problems inherent in the literature will also be presented.

#### **5.1. Theoretical Models of Drug Abuse and Intimacy**

Various theoretical models have been proposed to explain the relationship between drug abuse and intimacy. These include the role incompatibility theory, problem behavior, and the self-medication hypothesis (Cox, Ketner, & Blow, 2013). Kraanen et al. (2012), assert that traditional roles, such as family formation and marriage are incompatible with nontraditional deviant behaviors, such as alcohol and drug use. When role incompatibility arises, the individual seeks to resolve the incompatibility through the processes of role selection and role socialization.

According to Kraanen et al. (2012), since conventional family roles and drug use are incompatible, an individual may attempt to resolve the conflict in two ways. Either an individual will commit to roles that are consistent with drug use (role selection), or the individual will change the drug use in order to make the behavior compatible with the responsibilities of the social roles (role socialization). Therefore, adults conforming to more traditional standards by becoming married and forming intimate relationships would be less likely to engage in drug abuse or would discontinue such use. On the other hand, adults who engage in a norm violating behavior such as drug abuse, would be less likely to engage in family role formation and marriage, or if a traditional family role was entered (such as marriage or an intimate relationship), continued drug use would increase the likelihood that the individual would leave the traditional family role.

Another theory explaining the association between drug abuse and intimacy functioning is problem behavior theory (Nordstrom & Dackis, 2011). Problem behavior theory asserts that individuals may have an underlying syndrome of general deviance that accounts for behaviors that violate social norms. Drug abuse and intimacy difficulties are not caused by one another, instead they are the product of a general tendency towards deviance and nonconventionality (Rossegger, Wetli, Urbaniok, Elbert, Cortoni, & Endrass, 2009). It is hypothesized that the participation in one deviant behavior may lead to the participation in other behaviors considered deviant as well (Kraanen et al., 2012). Therefore, individuals prone towards deviance would be more likely to engage in drug abuse and less likely to engage in traditional behaviors related to intimacy and family roles.

Along with the role incompatibility and problem behavior theory, the self-medication hypothesis has also been applied to explain the relationship between drug abuse and problems with intimacy. According to Cox, Ketner, and Blow, (2013) drug abuse may be a result of family intimacy dysfunction. Similar to the way in which drug abuse may be used as a means of self-medicating psychological distress, drug abuse may also be a means of alleviating the pressures, strains, and emotional pain resulting from problems with family intimacy, therefore, drug misuse becomes a coping mechanism for family intimacy dysfunction.

According to Bahrke (2012) and Cooper (2012) self-medication by drug use may cause further difficulties in family intimacy dysfunction. In explaining the causal direction of intimacy problems as precipitating drug use, Bahrke (2012) assert that a long-standing pattern of boundary inadequacy in a family may lead to various forms of intimacy dysfunction. Such intimacy dysfunction, in turn, causes drug use. However, use of drugs then causes further problems related to intimacy functioning as the drug dependence leads to continued dysfunctional family dynamics and the process begins again, handing down this family pattern from generation to generation.

### ***5.2. Empirical Associations between Drug Abuse and Intimacy***

The relationship between drug abuse and intimacy has been investigated by various researchers using both treatment and non-treatment samples. Aspects involved in the association of drug abuse and intimate relationships includes marriage status and stability, marital conflict, and sexual adjustment.

In Becker (2013) study of adolescents from their early to mid-twenties, drug use was found to have various destructive effects on the intimate relationships of both men and women. For example, the results indicate that drug use among women predicted later divorce, decreased relationship satisfaction, and increased relationship trouble. Alcohol use among women predicted sexual dissatisfaction, while cannabis use resulted in less perceived support from partners and decreased relationship satisfaction. Among men, polydrug use and cocaine use was associated with increased relationship troubles. Becker concludes that the evolving developmental capacity of young adult women and men to engage in satisfying and stable intimate relationships is more affected by earlier drug use than vice versa.

## **6.0. Drug Abuse and Work Adjustment**

Like intimacy and family formation, occupational functioning is an important aspect in the developmental period of an adult's life. The establishment of careers for adults in their mid-twenties and early thirties is crucial as both men and women are taking on the role of providers. Similar to the association between drug abuse and other aspects of the adult's life (psychological functioning and intimacy), drug abuse has also been associated with work adjustment as work related difficulties have been observed among drug abusing adults. This review will present theoretical models proposed to explain the association between drug abuse and work problems. A review of the literature presenting the relationship of drug abuse and work adjustment will follow. Finally, a summary of the methodological problems in the literature will be presented.

### ***6.1. Theoretical Models of Drug Abuse and Work Adjustment***

Several theoretical models have been proposed to explain the causal association between drug use and work adjustment. Some theories assert that drug abuse causes difficulties in work related functions (impaired functioning theory, importation theory), while others propose that work-related aspects cause drug problems (work-related strain theory). Finally, problem behavior theory proposes underlying factors within the individual that cause both drug problems and work adjustment difficulties.

Theories asserting that work adjustment difficulties are a result of alcohol and drug abuse include the impaired functioning theory and the importation perspective. According to the impaired functioning theory, work related difficulties are a result of the psychoactive effects of drug use on various aspects of the individual's functioning (Newcomb & Bentler, 1988a). Newcomb and Bentler explain:

“the psychoactive effects of various drugs can create changes and distortions in perception, sensory awareness, cognitive processing, affect, attentional control, and directed behavior, which may interfere with appropriate or adaptive coping or response to environmental tasks or demands (such as job performance or operating a vehicle)” (p.25).

Similarly, the importation theory (Hollinger, 1988) asserts that work intoxication and work-related difficulties stem from the individual's “importing” (p. 441) substance abuse problems into the workplace.

The work-related strain theory (Allen and Williams 2012) posits that alcohol and drug problems are caused by stress and strain related to the work environment. According to Allen and Williams (2012) the following factors inherent in the work environment are considered internal risk factors that can produce increases in drug use: feeling alienated and powerless, work stress, drinking as an escape, conflicting demands, and feeling left out.

Finally, Allen and Williams suggest that work environments may have administrative subcultures that may encourage abusive drinking, these norms can encompass individual formal units within the organization, or even the entire organization and poorly implemented alcohol intervention policies. According to Allen and Williams (2012), the perspective of work stress recognizes that various conditions in the work environment can cause psychological and physiological distress which may be sought to be alleviated through substances.

Another theory explaining the association between drug abuse and work adjustment difficulties is problem behavior theory (Jessor & Jessor, 1977; Donovan & Jessor, 1985). Similarly, to the application of the association of drug abuse and intimacy functioning, problem behavior theory can be applied to the relationship between drug abuse and work adjustment. The underlying syndrome of general deviance accounts for behaviors that violate social norms, therefore, drug abuse and work adjustment difficulties are the result of a general tendency towards deviance and nonconventionality (Jessor, 1991). Since individuals may be prone to engaging in various deviant activities, they would be more likely to engage in drug abuse and less likely to conform to the social expectations of a stable career.

### **6.2. Empirical Associations between Drug Abuse and Work Adjustment**

Society's concern regarding drug abuse and work functioning has resulted in program developments (Employee Assistance Programs and drug testing) that address the widespread belief that drug use is a serious problem among employed individuals (Substance Abuse and Mental Health Services Administration 2018). Researchers have stated that drugs and alcohol are used on the job by 5 to 10% of employees (Levola, Kaskela, Holopainen, Sabariego, Tourunen, Cieza, & Pitkänen, 2014). Furthermore, since financial costs of drug use on the job have been estimated to cost billions, it is asserted that the financial benefits from programs, such as drug testing, outweigh the costs of drug use on the job (Substance Abuse and Mental Health Services Administration 2018). Jayne and Valentine (2016) asserts that the increase in alcohol problems may be due to the fact that prevention and intervention in the workplace has been given a low priority.

On the other hand, some researchers dispute the belief that drug use is a serious problem in the workplace (Addiction Center, 2017). In a review of the prevalence data for drug use on the job, Newcomb (1994b) concludes that "there is little justification for the widespread concern if not hysteria regarding the abuse of drugs during working hours. Such occurrences are relatively uncommon, although even occasional instances can have tragic consequences" (p. 413).

### **7.0. Drug Abuse and Criminal Behavior**

Similar to the literature demonstrating a relationship between drug abuse and the psychological, interpersonal, and occupational aspects of an adult's life, drug abuse has also been associated with an adult's social behavior. Drug abuse has been linked to criminal behavior by past research. The following review will present the explanatory models, the literature based on the relationship between drug abuse and criminal behavior, and a summary of the methodological problems in the literature.

#### **7.1. Theoretical Models of Drug Abuse and Criminal Behavior**

Similar to some of the explanatory models applied for the association between drug abuse and intimacy and work adjustment, these models can be used to explain drug abuse and criminal behavior. Specifically, the impaired functioning theory (Graham, 1980; Newcomb & Bentler, 1988a) and problem behavior theory (Donovan & Jessor, 1985). Another theory more specific to drug abuse and criminal behavior is the enslavement theory of addiction (Inciardi & McBride, 1989).

The impaired functioning theory applied to the relationship between drug abuse and criminal behavior assumes that the physiologic effects of alcohol and drugs can result in changes in thought and input processing that may involve increased risk taking and impaired ability to use coping mechanisms (Chesney-Lind & Pasko, 2013). Chesney-Lind and Pasko proposes that disinhibition of socially violating behavior may result from alcohol and drug effects that can either enhance an individual's impulsivity or impair the individual's impulse control. Furthermore, changes in cognitive processing can result in an impaired ability to be aware of and interpret situations appropriately, as well as an impaired ability to recognize and anticipate consequences of behaviors.

On the other hand, a general proneness towards deviance may also explain the relationship between drug abuse and criminal behavior. Jessor and Jessor (1977) identified a problem behavior syndrome in adolescence that may also be applied to the understanding of drug abuse and criminality in adults. Therefore, a variety of deviant and social violating behaviors can be accounted for by an underlying general syndrome of deviance. Furthermore, Kopak and Smith-Ruiz (2014) assert that participation in one deviant behavior increases the likelihood of engaging in other deviant behaviors as well.

Another theory explaining the relationship between drug abuse and criminal behavior is the enslavement theory of addiction (Inciardi & McBride, 1989). This theory posits a causal direction of criminality resulting from drug abuse. The assertion is that criminal behavior is a result of an economic motivation to finance an existing drug habit. Therefore, since drug users need to obtain money to buy drugs, drug use results in the individual committing various crimes in order to support the drug use (Kopak and Smith-Ruiz, 2014).

### ***7.2. Empirical Associations between Drug Abuse and Criminal Behavior***

The cost of drug related crime on society has been estimated to cost over eight billion dollars in drug enforcement and over two billion dollars each year in imprisonment costs (Chesney-Lind & Pasko, 2013). For several decades, researchers have been investigating the association between drug use and criminal behavior. There has been consistent empirical evidence that drug abuse is associated to criminal behavior. However, whether drug use precedes criminality or if criminal behavior precedes drug use continues to be debated (DeMatteo et al., 2015; Cropp, 2012).

Criminal behavior and drug use are social issues that have profound negative effects on the United States as a whole. According to the Unified Crime Report (Federal Bureau of Investigation, 2013) there were nearly 1.2 million violent crimes, or roughly 386 violent crimes per 100,000 inhabitants in the United States, in 2011. Closely related to criminal behavior, illicit drug use in America has contributed to an estimated \$193 billion in crime, health, and lost productivity costs in 2007 (National Drug Intelligence Center, 2011).

The relationship between drugs and prison are frequently cited in the same sentence because of the close link that exists among the two. Individuals are sent to prison because of their involvement in drugs in some way or another. Evidence has shown that a large amount of crimes is committed under the influence of some form of drugs, whether legal or illegal. More than 85 percent of the estimated 2.3 million prison inmates have had serious drug abuse history (Chesney-Lind & Pasko, 2013).

## **8.0. Summary and Conclusions**

In sum, based on empirical evidence from past research, it is evident that alcohol and drug abuse is associated with psychological distress, intimacy, work adjustment, and criminal behavior. Therefore, it is clear that drug abuse has an impact on various aspects of adult functioning and that it can interfere with developmental issues faced in this adult period, such as family formation and career development. Furthermore, it is also clear that these psychological, interpersonal, occupational, and social aspects of the adult's life can also impact drug use. The literature suggests that drug abuse has a detrimental effect on psychological distress, intimacy, work adjustment, and criminal behavior. However, it is also suggested that psychological distress, problems with intimate relationships, work difficulties, and criminality may also lead to problems with alcohol and drugs.

## **9.0. Implications for Practice**

Various clinical implications can be made based on the results of the present study. Drug abuse was determined to have a reciprocal relationship with several areas of adult functioning. Therefore, various diagnostic, prevention, and treatment issues are raised. The first issue raised by this study is related to assessment and diagnosis. Since this study has found that drug abuse predicts various problems with psychological functioning, intimacy, work adjustment, and criminal behavior and vice versa, it is important to properly assess an individual for the possibility of various forms of dual diagnoses. A thorough assessment would include an evaluation of the various areas of adult functioning so that treatment may be more individually tailored.

Furthermore, reevaluation and reassessment on a continuing basis can aid clinicians in detecting the development of further problems in the psychosocial spheres or with drug abuse. Since drug abuse was a consequence of psychological distress, intimacy problems, work adjustment, and criminal behavior, clinicians must be prepared to not only treat the presenting problems related to these psychosocial areas of adult functioning, but also to use preventive strategies for the increased probability that drug abuse may develop at a later time.

For example, clinicians treating individuals with psychiatric problems need to be acutely aware that such problems may lead to later drug abuse through self-medication. Also, family counselors and career counselors dealing with individuals experiencing problems with intimacy and or work adjustment need to be aware of the association with later drug abuse. In doing so, more appropriate treatment strategies can be implemented. Coping skills is one example.

Since drug abuse may be turned to as a means of self-medicating problems, alternative coping mechanisms to aid the individual manage the various aspects of their adult functioning should be taught. Similarly, clinicians that treat drug abuse must also take into account the association of drug abuse with later psychological, intimate, work, and criminal problems. For example, patients entering drug abuse treatment programs may need rehabilitative treatment to restore the impairment that may have already developed in these psychosocial areas.

This study has found that drug abuse impairs satisfaction with jobs and intimate relationships, as well as an individual's sense of social responsibility. Therefore, such impairment should be worked on to prevent the later difficulties. The treatment and prevention implications discussed raises an issue related to the way in which clinical treatment is structured in our society. Often, substance abuse is treated through substance abuse programs that are separate from programs treating psychiatric difficulties. Furthermore, career difficulties are often the focus for career counselors, while problems with intimate relationships are often treated by family counselors. In such a divided structure, it is difficult to treat an individual who may experience difficulties in various areas of functioning.

Therefore, since drug abuse was both a predictor and an outcome of psychological distress, intimacy, work adjustment, and criminal behavior, clinicians must be prepared and skilled in treating several clinical areas. Therefore, based on these conclusions, it is important that clinical practice interrelate both treatment and prevention of drug abuse when working with adults presenting with psychosocial difficulties. Furthermore, based on the results that social support through friends, family, and agencies can significantly reduce problems with later drug abuse, work adjustment, and intimacy, it is important that clinicians emphasize and help clients identify and/or develop such networks. For example, the criminal justice system should be aware that crimes related to drugs may decrease if individuals receive more support for drug problems. Such support also decreases drug abuse. Therefore, economically, support programs for drug abuse yield beneficial results for substance abuse as well as for lowering crime.

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