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The validity of the Substance Abuse Subtle Screening Inventory-2 (SASSI-2) FAM scale was investigated by examining the family (FAM) scale's ability to distinguish children of alcoholics from children of non-alcoholics. The FAM scale scores and clinical diagnoses were collected for 80 males and separated into four groups ($\underline{n} = 20$): those with both chemical dependency and parental alcoholism, those with chemical dependency and no parental alcoholism, those with chemical dependency and with alcoholic parents, and those with neither chemical dependency nor parental alcoholism.

Results of an analysis of variance indicated the FAM scale was unable to distinguish children of alcoholics from children of non-alcoholics. A significant difference was found in the FAM scores of the chemically dependent versus non-chemically dependent, with the scores of the chemically dependent individuals being significantly lower than their nonchemically dependent counterparts. This confirms the hypothesis that the FAM scale may be biased in detecting co-dependency among the chemically dependent. Additional research was suggested to further investigate the utility and validity of the SASSI-2 FAM scale in identifying co-dependence.

PARENTAL ALCOHOLISM AND THE VALIDITY OF THE SASSI-2 FAMILY SUBSCALE

A Thesis

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CHAPTER 1

INTRODUCTION

As of 1990, there were an estimated 20 million alcoholics in the United States (George, 1990). As individual cases of alcoholism increase in number, so do the number of families suffering the effects of this addiction. An individual's struggle with substance addiction is not an isolated event. Diseases such as alcoholism greatly impact the alcoholic's loved ones, parents, spouses, significant others, and children. It has been reported that there are 28 million family members of alcoholics in the United States (Lyon & Greenberg, 1991). It should be noted that this number is not an accurate representation of this widespread problem, since it only reflects those who have sought help through support groups or treatment agencies. Further, it has been estimated that 80 million Americans are in various relationships with alcoholics, and therefore affected by alcoholism (George, 1990).

The effects of alcoholism on family and friends of an alcoholic has been a focus of concern since 1950. At that time, Al-Anon, a fellowship for family members of alcoholics, was formed (Cermak, 1986; Haaken, 1993). This organization was established following the Twelve Step format of its prototype, Alcoholics Anonymous, but focuses on each family member's contribution to the family's dysfunction (Cermak, 1986) and the "pathogenic effects on family members of living with an alcoholic" (Haaken, 1993, p. 321).

Despite the 45 year history of this self-help group, research into the alcoholic family and its growing problems was scarce until the past two decades. As the chemical dependency field began observing and acknowledging issues of this population, a pattern of characteristics began to

surface. Most prevalent among these characteristics was a pattern of behavior and beliefs known as co-dependency. A strong surge of interest in this area blossomed in the 1980s. Despite the vast amount of research, no single definition of co-dependency was established. Co-dependency is often described using metaphors in a meager attempt to relate the complexity of such issues. Alexander (1985) "stated that 'being co-dependent is like being a lifeguard on a crowded beach, knowing that you cannot swim, and not telling anyone for fear of starting a panic'" (as cited in Cermak, 1986, p. 16). Whitfield (1989) defined co-dependency as "any suffering and /or dysfunction that is associated with or results from focusing on the needs and behavior of others" (p. 19).

Children of alcoholics (COAs) are particularly at risk for developing codependent patterns, given the dependency of the child-parent relationship. As Horney (1942) suggested, "children are so emotionally dependent on the relationship with the parent that should the situation demand, they may deny their own expectations, needs, and desires, even to the point of giving up their own will and taking meaning and worth as individuals from the esteem with which they are held by the parents" (as cited in Lyon & Greenberg, 1991, p. 436). Those raised in an alcoholic environment normalize the abnormal situation of an addicted parent and their responses to this addiction. The formation of this pattern may perpetuate throughout the child's adult life until such issues are confronted and resolved. This repetition of co-dependent cycles can be observed in the romantic lives of COAs. Oftentimes, they unknowingly seek out dysfunctional and destructive relationships, continuing the cycle they learned long ago (Lyon & Greenberg, 1991). In many cases this cycle completes with the COAs developing a chemical dependency of their own. As studies have shown, individuals with one or more chemically dependent parents are at a significantly higher risk of developing a chemical dependency themselves (Cotton, 1979; Goodwin, 1988; Ohannessian & Hesselbrock, 1993; Stabenau & Hesselbrock, 1983). This carry-over has been explained by a genetic predisposition to alcoholism (Goodwin, 1988; Goodwin, Schulsinger, Hermansen, Guze, & Winokur, 1973; Pickens, et al., 1991) as well as a classical example of observational learning.

LITERATURE REVIEW

Chemical Dependency

Alcoholism and other chemical dependencies have long been a topic of research. Researchers and clinicians alike have sought a definitive measure to identify and assess chemical dependency, specifically alcoholism. Psychologists, psychiatrists, and substance abuse counselors all utilize the diagnostic criteria set forth in the <u>Diagnostic and Statistical Manual of Mental</u> <u>Disorders</u>, Fourth Edition (DSM-IV) to diagnose chemical dependency. According to the <u>DSM-IV</u> (American Psychiatric Association, 1994) substance dependence is defined as:

A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at any time in the same 12-month period:

- (1) tolerance, as defined by either of the following:
 - (a) a need for markedly increased amounts of the substance to achieve intoxication or desired effect
 - (b) markedly diminished effect with continued use of the same

amount of the substance

- (2) withdrawal, as manifested by either of the following:
 - (a) the characteristic withdrawal syndrome for the substance
 - (b) the same (or closely related) substance is taken to relieve or avoid withdrawal symptoms
- (3) the substance is often taken in larger amounts or over a longer period than was intended
- (4) there is a persistent desire or unsuccessful efforts to cut down or control substance use
- (5) a great deal of time is spent in activities necessary to obtain the substance (e.g., visiting multiple doctors or driving long distances), use the substance (e.g., chain-smoking), or recover from its effects
- (6) important social, occupational, or recreational activities are given up or reduced because of substance use
- (7) the substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance (e.g., current cocaine use despite recognition of cocaine-induced depression, or continued drinking despite recognition that an ulcer was made worse by alcohol consumption) (DSM-IV, 1994, p. 181). In contrast, substance abuse is specified as:

A. A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more)

- of the following, occurring within a 12-month period.
- (1) recurrent substance use resulting in a failure to fulfill major

role obligations at work, school, or home (e.g., repeated absences or poor work performance related to substance use; substancerelated absences, suspensions, or expulsions from school; neglect of children or household)

- (2) recurrent substance use in situations in which it is physically hazardous (e.g., driving an automobile or operating a machine when impaired by substance use)
- (3) recurrent substance-related legal problems (e.g., arrests for substance related disorderly conduct)
- (4) continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (e.g., arguments with spouse about consequences of intoxication, physical fights)
- B. The symptoms have never met the criteria for Substance

Dependence for this class of substance (DSM-IV, 1994, p. 183).

Identifying Alcohol Dependence

The nature of alcohol dependence includes an extensive amount of denial. As a defense mechanism, denial is used as an attempt to alter reality. For the alcoholic, "denial is used to block the efforts of those who point out reality to the individual and to justify continued use" (George, 1990, p. 36). As the Alcoholics Anonymous "Big Book" (1976) explained, most individuals are unwilling to admit they are alcoholics; no one likes to think of himself or herself as physically and mentally different from others or simply not in control. This denial frequently serves as an obstacle for diagnosis, recognition, and treatment. Given the commonality of denial within the alcoholic and the alcoholic's family, oftentimes identification only occurs when referred to treatment by the courts or an employer. Even then, the alcoholic's denial often persists.

Numerous scales and measures have been constructed to aid in identification of alcohol dependence. One commonly used indicator for alcohol dependence among driving while intoxicated (DWI) offenders is blood alcohol concentration (BAC) (Wieczorek, Miller, & Nochajski, 1992). This concept was proposed by the National Council on Alcoholism (NCA) as a criterion for diagnosing alcoholism. The use of the BAC for these purposes was perpetuated by the Court Procedures for Identifying Problem Drinkers, more commonly referred to as the Mortimer-Filkins test (Wieczorek et al.). The NCA stipulates that an individual with a 150 mg/dl BAC (commonly written as 0.15 BAC) "without gross evidence of intoxication" must be diagnosed as being alcoholic (as cited in Wieczorek et al., p. 415). The underlying rationale for the NCA interpretation of BACs is that only alcoholics exhibit tolerance to such BAC levels. Although the use of a single criterion to diagnose alcoholism has been called "inappropriate," this BAC criteria continues to be influential (Fine, Steer, & Scoles, 1978). Wieczorek et al. investigated the correlation between BACs and DSM-III-R diagnoses of alcohol dependence and alcohol abuse and found no significant relationship.

Researchers and clinicians have also developed assessment tools to identify alcohol dependence. These tools are typically tests or inventories which utilize either a rational or empirical approach. The rational assessments are content laden and have a variety of advantages (Miller, 1985). First, they are easily constructed from a list of criteria or symptoms. Second, they often correlate highly with the client's self report interview. A serious disadvantage to the rational approach, however, is the face validity or obvious relationship the questions have to the measured characteristic. This is a primary concern when assessing the alcohol dependent population given the high rate of denial. If an individual does not want to appear alcohol dependent, manipulation of the tool is extremely easy.

The most commonly used rational assessment for alcohol dependence is the Michigan Alcoholism Screening Test (MAST) (Miller, 1985). The MAST consists of 29 yes/no items and is scored by totaling the specified values. A number of studies have highlighted the effectiveness of the MAST in distinguishing alcoholics from non-alcoholics (Miller, 1976; Ross, Gavin, & Skinner, 1990; Searles, et al., 1990). Ross et al. found the MAST to have 88% accuracy of classification by diagnosis (alcohol abuse vs. dependence) among 500 patients in alcohol or drug treatment. Searles et al. found similar results with the MAST exhibiting an 80% classification accuracy. It should be noted, however, the populations sampled in these previous studies were in alcohol and drug treatment at the time of the assessment. It is possible the MAST's ability to detect alcohol dependence is contingent upon the individual's acceptance of his/her problem. Chan, Pristach, and Welte (1994) found the MAST is highly accurate in identifying alcohol dependence among those already in treatment, but much less sensitive in detecting heavy drinkers from general population samples. Similarly, Svanum and McGrew (1995) found the MAST to have limited predictive validity among college students, possibly because the MAST items assess more advanced features of alcoholism, features that are less common among college students. As

previously mentioned, alcohol dependence is frequently accompanied by intense denial. Alcoholics in denial would most likely not be detected by utilizing rational measurements such as the MAST. Goldberg (1974) reported that the MAST "appears to work wonders at detecting those who admit to drinking a great deal" (p. 360). Subsequent reviewers applied this view to other measures by observing, "it is questionable whether the MAST, or any screening instruments that rely on the patient to provide valid information, will detect alcoholics denying their condition or those who have not fully confronted the implication of their behavior" (Fisher, Mason, & Fisher, 1976, p. 1254).

In comparison, empirically based assessment tools are designed to overcome the obstacle of denial. The items utilized by empirical tools are not obviously related to alcohol dependence and are selected by their ability to discriminate between alcoholics and non-alcoholics. The most frequently used empirically derived scale in the addiction field has been the MacAndrew Alcoholism Scale (MAC) (MacAndrew, 1965). The MAC is a 49 item scale derived from the Minnesota Multiphasic Personality Inventory (MMPI). It is composed of items from the MMPI that differentiated alcoholics from general psychiatric outpatients (MacAndrew, 1965). Despite its popularity among clinicians and chemical dependency counselors, many research studies fail to support the validity of the MAC (Searles et al., 1990). Searles et al. found the overall accuracy of the MAC in distinguishing alcohol dependence from abuse to be 56%.

It was in this empirical fashion that the Substance Abuse Subtle Screening Inventory (SASSI) (Miller, 1985) and its replacement, the SASSI-2 (Miller, 1994) were constructed. The present study is utilizing the latest version, the SASSI-2. This inventory was created to replace the original SASSI as of July 15, 1994 (Miller, 1994). Given the recent development of this scale, published research on this revision is non-existent. To understand the premise and the utilization of the SASSI-2, a review of its predecessor is necessary.

The SASSI and the SASSI-2

The SASSI was introduced to the market in 1988 and quickly came into favor by clinicians and practitioners (Creager, 1989). As of 1993, approximately 2 million of the SASSI were used by over 12,000 assessment programs (Svanum & McGrew, 1995). This widespread popularity is not only due to "its accuracy and 'ability' to identify a large proportion of the chemical abusers but in its brevity and ease of use" (Creager, 1989, p. 65).

Klikunas (1989) investigated the construct validity of the SASSI and compared the SASSI, MAC, and MAST in their ability to detect alcohol dependence. The participants consisted of 238 individuals including 50 alcoholics, 50 normals, 50 psychiatric outpatients, 50 co-dependent family members, and 38 non-alcoholic drug addicts so classified by clinical diagnosis. The results were obtained by both the five-group criterion (alcoholics, normals, psychiatric outpatients, co-dependents, and non-alcoholic drug addicts) and a two-group criterion (abuser and non-abuser). The results varied according to the criterion group. Within the five-group criterion, the MAST was significantly superior to both the MAC and the SASSI in correctly classifying alcoholics; the MAST and MAC were both significantly superior to the SASSI in classifying normals; the MAC was significantly superior in

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classifying psychiatric outpatients; the SASSI and the MAC were significantly superior to the MAST in classifying non-alcoholic drug addicts; and no significant difference was found in identifying co-dependents. Among the two-group criterion, the validity of the SASSI increased. Again, the MAST was significantly superior to the MAC and SASSI in classifying alcoholics; the SASSI was significantly superior to both the MAST and MAC in classifying normals; the SASSI and the MAC were significantly superior to the MAST in classifying psychiatric outpatients; the MAST was significantly superior in classifying non-alcoholic drug addicts; and the SASSI was significantly superior to both the MAST in correctly classifying co-dependents.

Cooper and Robinson (1987) explored the use of the SASSI with a college population. This study administered the SASSI to 376 college students. The results of this study indicated that the SASSI may be a useful assessment tool for detecting chemical dependency in a college population if norms appropriate to that population were utilized. Overall, Cooper and Robinson (1987) concluded that the SASSI "shows definite potential as a short, inexpensive assessment tool that can differentiate among chemical abusers, social drinkers, and general psychiatric clients, independent of the respondent's level of honesty in answering the questions" (p. 183).

DiNitto and Schwab (1993) investigated the accuracy of the SASSI in detecting substance abuse and dependence among vocational rehabilitation clients. This study compared the SASSI classification to the diagnosis given by the Texas Rehabilitation Commission (TRC). Of 138 participants, the SASSI and TRC agreed on 99 classifications (27 as chemically dependent and 72 as non-chemically dependent). The SASSI identified an additional 35 individuals as chemically dependent, which the TRC had not diagnosed with a substance use disorder. This discrepancy may be attributed to denial and an unwillingness to share substance use openly with the counselors. Only 4 clients were identified by the TRC and not the SASSI as having a substance use disorder. Upon investigation, two of those individuals were deeply involved in recovery, the third exhibited a high level of defensiveness which may cause the SASSI to be inaccurate, and the fourth was unexplained.

Svanum and McGrew (1995) reported different results. They evaluated the ability of several screening scales to identify <u>DSM-III-R</u> defined substance dependence among a university population. Of the 495 participants, 57 met the criteria for a substance dependent disorder. Following the SASSI decision rules, 77 participants were classified as chemically dependent. Statistically, the diagnosis of dependence and the SASSI classification were weakly associated. Using the SASSI, only 19 of the 57 substance dependent individuals were correctly identified as chemically dependent and 58 nondependent persons were misidentified as chemically dependent. This study concluded that the SASSI demonstrated a statistically reliable ability to differentiate chemically dependent from non-chemically dependent, however the extent of this relationship was not practically significant as a screening instrument. In this university population, the SASSI identified one third of the dependent population and produced a large number of misclassifications.

Other studies have utilized the SASSI in detecting chemical dependency among specialized populations. Fisher and Harrison (1992) used the SASSI to investigate the rate of adolescent substance dependency and to highlight the need for a detection tool within school systems. Karacosta and Fisher (1993) explored the rate of dependency among the learning disabled and noted that students with learning disabilities seem to be at high risk for chemical dependency. Both Fisher and Harrison (1992) and Karacosta and Fisher (1993) studies have prevention, assessment, and intervention implications for educators as well as clinicians.

The SASSI-2 differs from the original SASSI in four ways (Miller, 1994). First , the Correctional (COR) scale was added to predict the risk of repeated contact with the criminal justice system. Second, the Random Answering Pattern (RAP) scale was included to detect random response sets. Third, the Supplemental Addiction Measure (SAM) scale replaced the original DEF2 scale. Fourth, the Alcohol vs. Drug (ALD) scale was dropped due to inappropriateness for most populations and lack of validity. Other than these four changes, the SASSI-2 is a smooth transition from the original SASSI. <u>Children of Alcoholics</u>

According to the Children of Alcoholics Foundation (1987), one out of every eight Americans is a COA. There is a vast amount of evidence suggesting that offspring of alcoholics have a substantially increased probability of developing alcoholism in comparison to offspring of nonalcoholics (Cotton, 1979; Goodwin, 1988; Ohannessian & Hesselbrock, 1995; Stabenau & Hesselbrock, 1983). Prior research has concluded that the predisposition of COAs is partially due to the individual's genetic makeup (Goodwin, 1988; Goodwin et al., 1973; Pickens et al., 1991). Schuckit (1987) noted that the biological sons and daughters of alcoholics are four times more likely to become alcoholics than the general population. Familial alcoholism has an earlier onset and poorer prognosis than environmental alcoholism (Frances, Bucky, & Alexopoulos, 1984). It has been estimated that 3 out of 10 sons and 1 out of 10 daughters of alcoholic fathers become dependent on alcohol (Goodwin et al., 1973). Although these numbers are larger than the general population average, the majority of individuals with a familial history of alcoholism do not become alcoholics themselves (Ohannessian & Hesselbrock, 1993).

A plethora of studies have been conducted, exploring the differences or lack thereof between COAs and non-COAs. The results from such studies continue to be mixed. In 1983, Woititz outlined the characteristics which reportedly differentiate children of alcoholics from children of nonalcoholics. These characteristics were used to described the Adult Children of Alcoholic (ACOA) "syndrome," initially thought to affect all children of alcoholics. Later, studies revealed the ACOA pattern was not limited to children of alcoholics and described a more extensive symptomology and distress. For that reason, this study will avoid the ACOA "syndrome" and focus on individual studies attempting to distinguish COAs from non-COAs.

A number of researchers have noted and concluded that COAs are significantly different than their non-COA counterparts beyond their increased risk for chemical dependency (Rodney, 1995). Coleman and Frick (1994) examined the MMPI-2 profiles of 69 college students who were COAs and compared them to 30 control college students. They investigated whether the COAs can be distinguished from the control group on the MMPI-2 clinical scales and the supplemental MAC scale. The results indicated significant differences on the Depression, Psychopathic Deviant, Psychasthenia, and Hypomania scales. In addition, the COAs exhibited higher elevations on other scales, which Coleman and Frick (1994) suggested may indicate further adjustment difficulties.

A variety of other traits have been hypothesized to distinguish children of alcoholics. Clinical studies suggest that COAs experience difficulties with trust and intimacy (Woititz, 1983) as well as in establishing and maintaining personal relationships (Rodney, 1995). Cermak (1988) identified several patterns among COAs, including depression, apathy, and a sense of a lack of direction in life. McNeill and Gilbert (1991) explored the relationship between locus of control and parental alcoholism. Their results indicated that having a parent who drank heavily was significantly correlated with an external locus of control orientation. In addition, an external locus of control was positively correlated with depression and negatively correlated with self esteem. Roosa, Sandler, Beals, and Short (1988) found more depression, lower self-esteem, and more anxiety among children of alcoholics. In this study, however, the sample consisted of children selfselected into a program to alleviate concern about a parent's substance use, therefore more psychological concerns would be expected (Roosa et al., 1988). Additional characteristics associated with COAs are cognitive deficiencies, higher rates of conduct disorder, and attention deficit disorder (Jacobs, 1991). Although earlier studies have suggested that COAs possess lower cognitive functioning, Johnson and Rolf (1988) reported that the cognitive functioning of COAs did not differ from that of non-COAs. Additionally, Slavkin, Heimberg, Winning, and McCaffrey (1992) found that college-age COAs possessed more effective problem-solving behavior than did non-COAs.

Many researchers have examined the effects of parental alcoholism in

conjunction with other stressors. Ohannessian and Hesselbrock (1993) investigated whether the increase in alcohol dependence among COAs was due to a lack of social support rather than parental alcoholism. The pattern their study revealed suggested that subjects who had both a family history of alcoholism and low overall perceived social support were at the greatest risk for the development of alcohol problems.

El-Guedbaly, Walker, Ross, and Currie (1990) examined the differences between COAs and non-COAs within an urban community. Their findings identified differences between the COAs and the non-COAs in regards to parental marital breakdown, personal marital breakdown, and heavy alcohol consumption, with COAs indicating higher rates in all areas. El-Guedbaly et al. also noted that no differences in rates of mood disturbances between the COAs and non-COAs. They noted, however, that in this study more COAs have sought professional help for stress and anxiety problems and in coping with their parent's and/or their own alcohol and drug dependency. The authors interpreted this finding as a readiness to seek assistance. In addition, this study revealed no functioning differences based on the severity of their parental alcoholism. Overall, these results are testimony to the resiliency of COAs on many of the psychosocial variables considered.

Ohannessian and Hesselbrock (1995) replicated a previous study which hypothesized that the genetic predisposition identified in COAs may be expressed through an individual's temperament. This study examined the clusters of temperament and personality attributes that are hypothetically transmitted from an alcoholic parent to his or her offspring. The findings did not support the hypothesis. While the identified cluster of temperament and personality traits were replicated in this study, they were not limited to the COA population. Both the COAs and non-COAs exhibited this typology.

Havey and Dodd (1995) explored the relationship between parental alcoholism, negative life events, and early experimentation with substances. Their findings indicated that COAs were more likely than non-COAs to have tried tobacco, but that no significant difference existed in regards to alcohol. Difference existed in the family environment of COAs and non-COAs. The COAs reported family environments that included more bad events, fewer good events, greater conflict, and less family cohesion than non-COAs. COAs were also more likely to have experienced parental marital breakdown. Havey and Dodd (1995) concluded the COAs in this population "seemed to be surviving relatively stressful environments without a seriously heightened propensity to experiment with drugs or to experience social or academical dysfunction" (p. 313).

Nastasi (1995) strongly disagreed with Havey and Dodd's (1995) conclusions. It was suggested that their conclusions completely ignored the number of earlier studies confirming a difference between COAs and non-COAs. Serrins, Edmundson, and Laflin (1995) conducted an extensive review of the literature from 1988 to 1992, and noted earlier studies have many methodological and theoretical weakness and researchers should focus on more recent, methodologically sound studies.

Contrary to many studies, some researchers have cited evidence of resilience among COAs. Woodside (1983) pointed out that a large number of COAs appear to have resiliency skills. Resiliency is usually described as "the ability of the child to avoid negative outcomes commonly assumed to result from parental alcoholism" (Serrins et al., 1995, p. 173) Researchers have found that one-quarter of the COAs averaged lower on depression, anxiousness, and levels of drinking and higher on self-esteem than the average non-COA (Serrins et al.). Markowitz and Craig (1992) reported COAs have significantly more behavioral problems than non-COAs, but exhibited the highest self-esteem of all groups (as cited in Serrins et al.). Similarly, Berkowitz and Perkins (1988) indicated in their study of college age COAs, COAs had normal scores regarding psychological variables and were highly resilient.

One way in which parental alcoholism can impact children is by teaching them maladaptive behaviors and beliefs. Such maladaptive behavior, common to members of families with addict members, is codependency. The term co-dependence evolved from the term "co-alcoholic" (Morgan, 1991). This concept arose within the chemical dependency field to describe the pattern of ineffective coping strategies seen in alcoholic families (Cermak, 1990). Today, co-dependence has expanded to refer to both the kinds of interactions which govern alcoholic family systems, and to the way family members see themselves and interact with others outside the family (Cermak, 1990). While co-dependence is not restricted to alcoholic families, it somehow manifests itself most clearly in this setting (Morgan, 1991). <u>Co-dependency</u>

Schaef (1986) suggested that both alcoholism and co-dependency are diseases which grow out of the addictive process. The addictive process is "an unhealthy and abnormal disease process, whose assumptions, beliefs, behaviors, and lack of spirituality lead to a process of nonliving that is progressively death-oriented" (Schaef, 1986, p. 25). The co-dependent's psychological stance is virtually indistinguishable from that of an alcoholic during active stages of addiction (Harper & Capdevila, 1990). According to Wegscheider (1981), co-dependency parallels the disease process of chemical dependency in three ways. First, the co-dependent is self-deluded, as is the chemically dependent person. Second, both the co-dependent and the chemically dependent experience loss during recovery; the co-dependent loses a role, just as the chemically dependent person loses a chemical. Third, both may result in death, as the co-dependent "risks death" and his/her death may occur from physical abuse or physical complications associated with stress, such as gastrointestinal problems or ulcers. (Schaeff, 1986). Miller (1994) noted the co-dependent spouses exhibit an increased "tolerance" of unacceptable behaviors and a "loss of control" over emotions that paralleled the chemically dependent's increased "tolerance" to alcohol and "loss of control" over his/her drinking.

Although co-dependency is not a formal diagnosis specified in the <u>DSM-IV</u>, researchers and clinicians have expressed the need for a single definition and diagnostic criteria (Cermak, 1986). The concept of co-dependency clearly has much in common with many traditional personality disorders (Cermak, 1990). The <u>DSM-IV</u> (APA, 1994) defines a personality disorder as

an enduring pattern of inner experience and behavior that deviates markedly from the expectations of the individuals culture, is pervasive and inflexible, has an onset in adolescence or early adulthood, is stable over time, and leads to distress or impairment. (p. 629) Similarly, co-dependence is a pervasive, underlying stance toward the self and others which is expressed in every attitude and action. Co-dependency most closely resembles the Dependent Personality Disorder. This diagnosis, however, would be a grave oversimplification that does not adequately address the multifaceted issues of co-dependency (Cermak, 1986). There are two primary differences between co-dependency and the Dependent Personality Disorder (Morgan, 1991). First, the co-dependents believe they can control the feelings and behaviors of others by sheer will. Second, the codependent experiences a confusion of identities because their self worth is based on the chemically dependent individual. In fact, co-dependency can best be described as a combination of Alcoholism, Dependent Personality Disorder, Borderline Personality Disorder, and Histrionic Personality Disorder (Cermak, 1986).

Cermak (1986) offered the following criteria for co-dependent personality disorder:

- A. Continued investment of self-esteem in the ability to influence/control feelings and behavior in self and others in the face of serious adverse consequences.
- B. Assumption of responsibility for meeting others' needs to the exclusion of acknowledging one's own needs.
- C. Anxiety and boundary distortions in situations of intimacy and separation.
- D. Enmeshment in relationships with personality disordered, chemically dependent, and/or impulse disordered individuals.
- E. Exhibits (in any combination of three of more):

- 1. Excessive reliance on denial
- Constriction of emotions (with or without dramatic outbursts)
- 3. Depression
- 4. Hypervigilance
- 5. Compulsions
- 6. Anxiety
- 7. Substance Abuse
- 8. Has been (or is) the victim of recurrent physical or sexual abuse
- 9. Stress-related medical illnesses
- 10. Has remained in a primary relationship with an active substance abuser for at least two years without seeking outside help (p. 16).

Beattie (1987) thoroughly explored the characteristics of co-dependency. Such characteristics included: caretaking, low self worth, repression, obsession, controlling, denial, dependency, poor communication, weak boundaries, lack of trust, anger, and sexual problems. In the final stages of codependency, Beattie (1987) suggested a progression similar to suicide, including withdrawal, isolation, lethargic, depression, violence, abuse, and suicidal ideation.

Various studies have investigated the relationship of co-dependency to many variables. O'Brien and Gaborit (1992) assessed 115 college students for co-dependency, depression, and a chemically dependent significant-other. Contrary to other studies, no relationship was found between co-dependency and depression. Similarly, co-dependency was not significantly related to the chemically dependent significant other. Depression, however, was correlated with having a chemically dependent significant other.

Walfish, Stenmark, Shealy, and Krone (1992) interpreted the MMPI profiles of 73 females seeking inpatient treatment for co-dependency. Their results indicated 50% of the participants produced a clinically significant elevation on 5 or more scales. No specific profile emerged. The results are not surprising given the participants are only those seeking inpatient treatment, therefore the profiles may not be representative of co-dependents in general.

Fisher and Crawford (1992) investigated the relationship between codependency and perceived parenting styles. This study was based on the idea that co-dependency is not limited to families of the chemically dependent and may be a symptom of general family dysfunction. Among the 175 college students, a relationship between co-dependency and paternal authoritarian parenting style. The maternal parenting style was not significantly correlated.

Hawk, Bahr, and Wang (1994) explored the correlation of adolescent substance use and parental co-dependence. The findings indicated a positive correlation between adolescent use and parental co-dependence. The question of causation was raised: Did the adolescents use substances because their parents were co-dependent, or were the parents co-dependent because the adolescents used?

A study by Lyon and Greenberg (1991) investigated whether women of alcoholic parents would be more helpful to an experimenter portrayed as exploitive that to one portrayed as nurturing. This scenario clearly parallels co-dependent behavior. The findings indicated that the female offspring of an alcoholic parent will offer more help to an experimenter presented as exploitive than to an experimenter portrayed as nurturant. In addition, the co-dependent group liked the exploitive experimenter more than the control group.

Treatment for co-dependents continues to be as varied as the definitions of co-dependency. LoVern and Zohn (1982) note that overall, the goals for the co-dependent are the same as for the chemically dependent-"cessation of denial and acceptance/participation in a recovery program" (as cited in Harper & Capdevila, 1990, p. 289). Recovery programs can include, but are not limited to Al-Anon, ACOA, couple's therapy, family therapy, and inpatient treatment (Harper & Capdevila, 1990). An integrative approach is strongly recommended, as to combine an understanding of the addiction process and the familial, cognitive, and psychodynamic factors which contribute and maintain co-dependent functioning (Morgan, 1991). Unfortunately, a stigma is attached to co-dependency and a reluctance from the mental health and chemical dependency field to treat such problems is prevalent. As Beattie (1987) stated, many clinicians think, "those crazy co-dependents are sicker than the alcoholics" (p. 3).

Given the relationship between parental alcoholism and the development of chemical dependency as well as the relationship between parental alcoholism and co-dependent personality traits, identifying those individuals with alcoholic parents is crucial to treatment and prevention. For this reason, various scales have attempted to identify COAs and codependent patterns. Such scales include the Children of Alcoholics Screening Test (CAST), the CAST-6 (a shortened version of the CAST) (Hodgins, Maticka-Tyndale, El-Guebaly, & West, 1993), the Minnesota Multiphasic Personality Inventory (MMPI), the Short Michigan Alcoholism Screening Test for Mother (M-SMAST) and Father (F-SMAST) (Sher & Descutner, 1986), Substance Abuse Subtle Screening Inventory (SASSI) (Miller, 1985) and the SASSI-2 (Miller, 1994). The SASSI-2 is an inventory which includes a co-dependency subscale (FAM) that reportedly identifies codependent patterns. Overall, this inventory is new with little published research available. Despite the recency of the SASSI scale, it has been greeted enthusiastically by mental health centers, university student health centers, and court-ordered substance abuse centers (Creager, 1989). For this reason, further investigation into this subscale is warranted. The purpose of this study is to explore the validity of the Substance Abuse Subtle Screening Inventory-2 (SASSI-2) FAM scale in identifying COAs. In addition, the SASSI-2 manual predicts an inverse relationship between chemical dependency and the FAM scale scores which was also investigated.

This study was designed to contribute to the research base on the SASSI-2. The findings will hopefully assist clinical psychologists, substance abuse counselors, and their clients. Only through understanding the complexity of alcoholism and chemical dependency can clinicians and counselors even begin to tackle the laborious task of chemical dependency treatment. Since the disease of alcoholism is filtered throughout the family, the treatment needs to address the entire family unit as well (Erekson & Perkins, 1989). For those COAs understanding the imposed roles and scripts of co-dependency can be crucial for pursuing a healthy, fulfilling life. In addition, the current study will serve as a foundation for further research into the utility of the SASSI-2 FAM scale.

CHAPTER 2 METHOD

Participants

The participants consisted of 80 male adults, ranging in age from 18 to 49 years, referred to Alcohol and Drug Services of the Mental Health Center of East Central Kansas for evaluation and/or treatment. These participants completed a number of assessment and personal history instruments prior to evaluation and/or treatment. In addition, each participant had been evaluated by a Registered Masters Level Psychologist and given a clincial diagnosis of substance dependence or substance abuse by which the population was divided into four groups; 20 substance dependent (SD) COAs, 20 substance abusive (SA) COAs, 20 SD non-COAs, and 20 SA non-COAs. Given the general clientele of Alcohol and Drug Services, this study was restricted to male participants only.

<u>Instrument</u>

The SASSI-2 has 62 true/false empirically derived items and 26 substance related items. The SASSI-2 is designed to provide clinical information and guide the administrator in determining dependence. The SASSI-2 profile is obtained by scoring the questionnaire with a scoring template. Scoring is easy and estimated to take approximately one minute (Kerr, 1995).

The SASSI-2 profile consists of nine subscales. The first two scales are the face valid alcohol (FVA) and face valid other drug (FVOD) scales. These scores are obtained from the 26 substance-related items and indicate the client's past and current substance usage. The Obvious Attribute Scale (OAT) items represent characteristics which are often associated with substance dependence (i.e. impulsivity, resentment). The Subtle Attribute Scale (SAT) is capable of detecting substance dependence even when the client is "faking good." The Defensive (DEF) scale is designed to detect resistance and "faking good." The Supplemental Addiction Measure (SAM) is designed to detect chemical dependency, even when extremely guarded or attempting to "fake good." This scale is only interpreted if the DEF score is elevated. The Random Answering Pattern (RAP) scale was developed to identify random responding. Upon scoring the clinical scales, the SASSI-2 provides a series of decision rules to determine chemical dependency. According to the SASSI-2 newsletter (1996), 88% of the individuals with a substance dependence disorder will by classified chemically dependent by the SASSI-2. Also, approximately 88% of the individuals without a substance dependence disorder will be classified as non-chemically dependent.

The SASSI-2 also has two supplemental scales that are not used in the decision rules. The Correctional (COR) scale is new to the SASSI-2 and was developed to identify those at high risk for legal difficulties. This scale was developed by examining the SASSI responses of criminals and non-criminals and selecting those items which differentiate between the two. This scale is designed to assist in treatment planning, by identifying those who are at high risk for legal complications so prevention can be implemented. The other supplemental scale, the Family (FAM) scale directly applies to the study at hand.

The FAM scale was not designed to aid in identifying chemical dependents. Rather, the FAM scale was developed to identify co-dependents

(Miller, 1988). The FAM scale consists of 14 true-false items, 4 keyed true and 10 keyed false. Ideally, this scale would have been developed by comparing the SASSI profiles of a clearly co-dependent and a clearly non-co-dependent group. This, however, was not the case. The FAM scale was validated using non-chemically dependent family members of chemical dependents involved in an Intensive Outpatient Program (IOP). The co-dependents used are unlikely to be representative of all co-dependents and children of alcoholics (Miller, 1985). The IOP co-dependent group consisted of non-chemically dependent invididuals that were involved with chemical abusers who were identified and involved in a family treatment program for addiction. No specific non-co-dependent control group was available.

As the SASSI manual suggests, "if the FAM is a general measure of codependency, it appears reasonable to expect those individuals . . .who were adult children of chemically dependent parents to score higher on FAM than those whose parents were not chemical abusers" (p. 4-31). A rough study was conducted using those clients the IOP staff could recall as being children of alcoholics. The number of subjects used in this preliminary study was low, 19 chemically dependent and 11 non-chemically dependent. The mean of these FAM scores did not differ significantly from the total sample, but conclusions must wait for cross-validation. Additionally, the SASSI manual indicates that the FAM scale is biased against identifying those co-dependents who are also chemically dependent.

<u>Procedure</u>

To begin collecting data, an abbreviated proposal was presented to the Service Heads of the Mental Health Center of East Central Kansas (Appendix A). Permission to collect data was obtained. Due to the nature of archival data, permission from the Emporia State University Institutional Review Board for Treatment of Human Subjects was unnecessary. The data collection began by obtaining a list of those clients who were evaluated or treated over the last two years. This list served as the source of clients which were serially selected to fill the four categories. The charts were then examined and the necessary information was collected utilizing the data collection form (Appendix B). The necessary data consisted of general demographic information, parental alcoholism, <u>DSM-IV</u> diagnosis, the SASSI-2 decision ruling, and the SASSI-2 profile scores (RAP, FVA, FVOD, OAT, SAT, DEF, SAM, FAM, COR). Additional assessment scores, such as the MAST and MAC were also collected for a future study, unrelated to this current proposal. Names of clients or any other identifiable material were not recorded.

CHAPTER 3

RESULTS

This study was a 2 (COA vs. Non-COAs) x 2 (CD vs. non-CD) ANOVA design. The first independent variable, parental alcoholism, was determined by self report as indicated on the assessment forms and diagnostic reports. The second independent variable, chemical dependency, was determined by the <u>DSM-IV</u> diagnosis given by the clinician. Given the population and sampling methods, two diagnoses were utilized, substance dependence (CD) and substance abuse (non-CD). The dependent variable is co-dependency as indicated by the FAM scale score. The data were analyzed by conducting an ANOVA using a MANOVA program on SPSS. Both the main effects and the interaction effects were analyzed at a .05 alpha level.

Co-dependency scores from non-chemically dependent participants with an alcoholic parent, chemically dependent participants with an alcoholic parent, non-chemically dependent participants with non-alcoholic parents, and chemically dependent participants with non-alcoholic parents were obtained. These scores were used to investigate differences among the four groups. The means of the co-dependency scores are presented in Table 1.

The analysis of variance on the co-dependency scores revealed no significant differences among those with an alcoholic parent and those with non-alcoholic parents, $\underline{F}(1, 76) = 1.18$, $\underline{p} > .05$. The second independent variable, however, revealed statistically significant differences in co-dependency, as measured by the FAM scale, between chemically dependent and non-chemically dependent participants, $\underline{F}(1, 76) = 5.27$, $\underline{p} < .05$. The interaction between parental alcoholism and chemical dependency was not

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Table 1

Cell Means and Standard Deviations of FAM Scores of Co-dependency

	<u>n</u>	<u>M</u>	<u>SD</u>	
COA				
CD	20	8.45	1.54	
non-CD	20	9.20	1.54	
Non-COA				
CD	20	7.80	2.26	
non-CD	20	8.95	1.96	
Total Sample	80	8.60	1.89	

significant, F(1,76) = 0.23, p > .05 (see Table 2).

The within cells variance was further examined through simple effects to determine the source of variation. No significant differences were revealed (see Table 3).

Table 2

Analysis of Variance

	<u>SS</u>	DF	<u>MS</u>	<u>F</u>	p
A: non-COA / COA	4.05	1	4.05	1.18	.280
B: CD / non-CD	18.05	1	18.05	5.27	.024
A x B	0.80	1	0.80	0.23	.630
Within Cells	260.30	76	3.42		

Table 3

Source of Variation of the Analysis of Variance

	<u>SS</u>	DF	<u>MS</u>	<u>F</u>	p	
A W B(1)	4.23	1	4.23	1.23	.270	
A W B(2)	0.62	1	0.62	0.18	.670	
B W A(1)	13.23	1	13.23	3.86	.053	
B W A(2)	5.63	1	5.63	1.64	.204	
Total Within Cells	260.30	76	3.42			

CHAPTER 4 DISCUSSION

The purpose of this study was to explore the ability of the SASSI-2 FAM scale to distinguish children of alcoholics from children of non-alcoholics. Parental alcoholism was determined by self report, and may consist of maternal and/or paternal alcoholism. These two groups were further divided into those with chemical dependency and those without chemical dependency. The presence or absence of chemical dependency was defined by the clinical <u>DSM-IV</u> diagnosis given by a Registered Masters Level Psychologist.

The SASSI-2 co-dependency measure, the FAM scale, did not distinguish children of alcoholics from children of non-alcoholics. The mean co-dependency scores for these two groups were indistinguishable. This finding questions the ability of the FAM scale to identify co-dependency. As Miller (1988) suggested, "If the FAM is a general measure of co-dependency, it appears reasonable to expect those individuals . . .who were adult children of chemically dependent parents to score higher on FAM than those whose parents were not chemical abusers" (p. 4-31). The current findings are in agreement with the initial validation findings which seriously questioned the overall validity of the FAM scale.

While the FAM scores did not differ by parental alcoholism, a difference was found in relation to the clinical diagnosis. The chemically dependent participants had significantly lower FAM scale scores than the non-chemically dependent participants. This finding confirms the suggestion that the FAM scale may be biased in its ability to detect co-dependency within the chemically dependent population. Given the high rate of chemical dependency among children of alcoholics, this may pose an obstacle to identifying co-dependency and thus preventing necessary therapy. No significant interaction between chemical dependency and parental alcoholism in relation to FAM scores was found.

One limitation of this study is the sample utilized. Each participant had received an alcohol or drug related evaluation and/or treatment. This stipulation may have clouded the non-chemically dependent population. Given that the non-CD population had received a diagnosis of substance abuse, it is recommended that this study be replicated utilizing a two additional groups, those with no substance related diagnosis and an alcoholic parent and those with no substance related diagnosis and no alcoholic parent.

Another limitation of this study was the exclusion of other potentially co-dependent relationships. There is a possibility that the inability of the FAM scale to distinguish children of alcoholics from children of nonalcoholics may be due to the existence of other co-dependent relationships. It is recommended that future studies identify and explore the effects of other significant relationships with alcoholics on FAM scale scores. Such relationships may include, an alcoholic spouse, child, legal guardian (other than parent) or significant other.

A third limitation of this study may be the depth of the relationship with the alcoholic parent. Perhaps events such as divorce, death, abandonment, etc. which separate the child from the alcoholic parent may influence the formation of co-dependent patterns. This relationship should be explored in future studies. Given the wide-spread usage and popularity of the SASSI-2, the validity of the FAM scale needs to be further explored. Due to the great denial common to substance related problems, the detection of co-dependency may be the initial indicator of familial substance dependency. Early identification is crucial to the prevention of further dependency within the family unit. This study elicits numerous areas warranting future research. More research is necessary to identify other variables contributing to the development of codependent patterns and to explore the mentioned limitations as it influences FAM scale scores.

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Appendix A

RESEARCH PROPOSAL

An Exploration of the Validity of the SASSI-2

FAM Scale in the Detection of Children of Alcoholics

The present study will examine the ability of the FAM scale on the SASSI-2 to identify children of alcoholics. According to the SASSI-2 manual, the FAM scale is designed to identify co-dependent traits commonly found in those close to a chemically dependent individual. The validity of the scale was first examined using only non-chemically dependent spouses of individuals in an inpatient setting. In addition, the SASSI-2 manual suggests and inverse relationship between chemical dependency and FAM scores. This study will explore this claim. It is hypothesized that an individual's FAM score on the SASSI-2 will not be related to his/her chemical dependency rating. It is also hypothesized that the FAM scores will be related to parental alcoholism.

The current study will be conducted utilizing archival data. The subjects will consists of past clients who were court ordered for evaluation following an alcohol or drug related offense and/or were administered an Intake Evaluation. Demographic information will be collected, including the subject's age, gender, parental alcoholism (by self report), and BAC level if applicable. Assessment information such as the nine SASSI-2 subscales, the 44 classification, and the clinician's diagnosis will also be collected. To protect the client's confidentiality, each subject will be given an identification number that corresponds to the order collected. Names and other identifying material will not be collected.

Appendix B

DATA COLLECTION

SUBJECT #						
GENDER:	Male	F	emale			
AGE:	_					
RACE: Cauca	asian	Black	His	spanic	Asian	Other
PARENTAL ALCO	DHOLISM:	N	١o	Yes:	Mother	/ Father
SASSI-2 SCORES:	RAP	<u> </u>			MAC:	+ _ +_ +
	FVA					
	FVOI	D			MAST: _	
	OAT					
	SAT					
	DEF	<u></u>				
	SAM					
	FAM					
	COR					
DECISION RULES	: CD	Ν	JOT CD			
DIAGNOSIS:		303.90	Alcohol I	Depende	nce	
		305.00	Alcohol A	Abuse		
			Other			
CLINICIAN:	Carolyn	Celeste	Ru	ıth		

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