EXAMINING THE QUALITY-OF-LIFE EXPERIENCED BY FAMILY MEMBERS AFFECTED BY A LOVED ONE'S SUBSTANCE USE DISORDER AS RELATED TO PERSONAL LOSSES, SUBSTANCE USE, LEVEL OF STRESS, AND PERCEIVED SUPPORT

by

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ABSTRACT

WILLIAM DERRICK JOHNSON. Predictors of quality of life for primary support persons of those living with SUD: Losses, perceived social support, stress, and one's own substance abuse (Under the direction of DR. SUSAN R. FURR).

The quality of life for those who support loved ones living with substance use disorder (SUD) is adversely affected due to destructive behaviors and the impact these behaviors have on the family system (Kaur, 2016). Consequently, primary support persons (PSP) often live their lives in silence and experience disenfranchised losses that impact not just the family unit but also impacts the human system, the most significant system among family units (Howard et al., 2010). This same researcher asserts this circular causality is almost always found among human and family systems as the actions of one person create responses or adaptions from other persons living within that same family unit. This is important because it highlights the way alcohol and other drugs (AOD) impact normal functioning of the addict, their loved ones, and society (Cudak & Pedagogika, 2015).

The purpose of this study was to examine variables that impact of quality of life of caregivers to people living with SUD. Perceived losses due to a loved one's SUD, perceived social support, one's own substance (ab)use, and stress were all examined to learn the impact these variables have on QOL. Multiple linear regression was utilized to examine the impact on QOL (n = 114) as predicted by losses, perceived support, substance use, and stress. Results indicated that support, losses, and stress are significantly associated with the dependent variable QOL (r^2 = .815) to QOL. Results of this study postulate insight into future treatment approaches with PSP and highlight links to treatment that need to be addressed on behalf of PSP as well as the total family unit. These findings have implications for mental health and substance abuse counselors in terms of working with PSP and examining how improved QOL of support persons

impacts those being treated for SUD. Future research is needed to examine how more thorough and more inclusive treatment approaches can include working with families of those who are addicted to substances.

Keywords: Quality of life, primary support person, substance use disorder, families, addiction, losses, depression and stress, support, family support, SUD treatment, family treatment involvement, support person

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DEDICATION

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And finally, I dedicate this piece of research literature to the countless men, women, and families whose daily lives are touched by addiction. I am just like you. I am an addict. This degree and dissertation do not belong to me, they belong to you- KEEP FORGING my angels, keep forging.

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CHAPTER I: INTRODUCTION

Substance abuse and substance use disorders have been purported to be both a "disease of an individual" as well as a result of long intergenerational patterns of family socialization (McKerny & Price, 1994, p. 112) and as such, is a family disease because it is responsible for family problems (Kaur, 2016). In either case, the quality of life of those families is adversely affected due to destructive behaviors of individuals with substance use disorders (SUD) and the impact of these behaviors on the family system. Consequences of SUD may result in silent and/or disenfranchised losses experienced by the families who live with an individual with a SUD (Howard et al., 2010). Importantly, these same researchers asserted while individuals may belong to many systems, the family system is the most recognized of all human systems. Substance abuse has been recognized as impacting the entire family with the addicted person affecting others as well as being affected by the family. Circular causality refers to the fact that the actions of one person (belonging to this system) produces responses from other persons in that same system. This is an important connection because these findings emphasized how alcohol and other drugs (AOD) cause severe disturbance in the functioning of both the addicted person and members of the family and society as a whole (Cudak & Pedagogika, 2015). As such, Steinglass (2009) asserted the consequences of substance misuse negatively impacts family members, at least, equal to the repercussion on the addicted person, thus facilitating an essential reason that families as well as the substance abusing family member have major stakes in successful substance abuse treatment; therefore, family is essential in overall treatment success (Miller et al., 2002). In a 2002 study conducted in Banglore by the NIMHANS addiction center, Gangadhariah and Nayar (2002) found community impact due to SUD to be significant. Specifically, family members participating in this study experienced and reported intellectual

violence (69%), emotional violence (58.6%), physical violence (47%), and economic violence (41.6%). Accordingly, Orford et al. (2013) stated "if it is assumed, cautiously, that on average one adult is adversely affected by each case of addiction, then the number of affected family members worldwide, based on World Health Organization (WHO) (2001, 2006) well exceeds 100 million" (p.71). This finding is significant as Hedges (2012) asserted lack of stability in the family system fosters emotional and physical neglect resulting in victimization and antisocial behavior, as well as lasting psychological problems for the family members dwelling within the same household. This same researcher further detailed AOD abuse as a significant cause of domestic violence, aggression, and conduct disorder and causation of an overall family breakdown. In other words, SUD affect not only the person living with the disorder but also is significantly responsible for dysfunction and the decrease of quality of life (QOL) of the family system (Cudak & Pedagogika, 2015). Orford et al. (2013) purported that ignoring the manner in which addictive substances disempower families may lead to a family experience of neglect, which is one of the most important factors that constrains the lives of family members. Therefore, if progress regarding SUD treatment is to be effective, professionals must be able to access the needs of not only the person living with addiction but also the needs of concerned and affected family members as part of a comprehensive treatment process and approach (Orford et al., 2005).

Overview of the Problem

Though much has been researched regarding the person living with substance abuse disorders, much has been overlooked in relation to the families who are primary support persons (PSP) to those living with SUD. Specifically, little research is available regarding the impact of SUD on the quality of life of families as primary support persons (PSP) to those who abuse substances. Complicating this further, Velleman et al. (1993) asserted that primary health-care

providers are not confident in recognizing nor in dealing with AOD. As a result of substance abuse, not only is the QOL affected but also developmental family life stages are adversely influenced by these same addictive behaviors that occur within the family system (Howard et al., 2010). According to McKenry and Price (1994), to accompany a family member through the turmoil of substance abuse and substance dependency is a journey of trauma and often silent loss. This impact on a family is a profound factor because drug and alcohol use are well documented as intergenerational etiologies.

Interfamily and intergenerational influences on substance use are viewed as powerful factors that involve not just substance use but successful or non-successful recovery as well. Specifically, family conflict, decrease in family support, AOD among other family members, and family stress all are contributory to relapse after the person living with addiction attends treatment (Fals-Stewart et al., 2009). These situations complicate family dynamics that undermine treatment participation (Appel et al., 2004). Interconnections between drug and alcohol use and family relationships have been found to be linked, and addressing these family issues is essential to both short-term and long-term treatment success (Rowe, 2012). Research findings highlight the interconnectivity of family members and dysfunction due to SUD (Cudak & Pedagogika, 2015).

Based on a study by Dawson and Hope (2014), an estimated 10% to 30% of relatives, including parents, have been affected by substance use problems (SUP) or what is alternatively coined secondhand alcohol effects and externalities of drinking/collateral harm (Seid, et al., 2015). This same researcher further detailed AOD abuse as a significant cause of domestic violence, aggression, and conduct disorder as well as overall family breakdown, something that Cudak and Pedagogika (2015) linked directly to a decrease of family quality of life. Families of

those living with SUD are affected by their partners behavioral characteristics as well as by the stressful events caused by the individual's AOD abuse. Drug abuse and dependence seriously impact families, and research specifically has highlighted that SUD compromises family order and psychosocial adjustments (Gilchrist & Taylor, 2009). This is significant because healthy family dynamics encourage stronger and longer-lasting recovery. Specifically, research (Copello et al. 2006) has indicated family-oriented approaches and treatment services improve patterns of substance use/abuse and simultaneously improve family functioning, reduce relapse, and help affected family members increase their quality of life. In this study, the independent variables included (a) the number of losses related to substance use experienced by the family, (b) the impact of a family members 'substance use/abuse, (c) level of perceived stress experience by family members, and (d) the level of social support from others to family members living with someone who abuses mind altering substances. The dependent variable was the overall quality of life of family members of an individual abusing mind altering substances. The dependent variable was examined in relation to the independent variables described previously.

Significance of the Study

The significance of this research study is to assist counselors, therapists, and SUD treatment agencies in understanding the factors that contribute to Quality of Life of those who support clients in treatment for SUD. Losses have been shown to be present in those in recovery programs (Beechem et al., 1996; Chambers & Wallingford, 2017; Furr et al., 2015), but little is known about the losses experienced by family members. Of the few studies conducted regarding PSP, Icelandic researchers examined the impact of stress, depression, and anxiety utilizing the Depression, Anxiety, Stress Scale (DASS) on families of substance abusers. In this study, the researchers purported that over 38% of study respondents were found to have serious to very serious depression, anxiety, and levels of stress, highlighting the effects of declining

environments among PSP of those living with substance use disorders (Olafsdottir & Hrafnsdottir, 2018). One study finding asserted that females living with substance-abusing partners had worse health issues including more anxiety, stress, and physical illnesses as well as an impairment of quality of life due to higher incidences of physical abuse and lower family incomes than women whose partner was not abusing substances (Dawson et al., 2007). This is supported by similar findings in 2010 that asserted increased stress affects psychological health and that PSP of those living with SUD reported higher levels of anger (Blum & Sherman, 2010), depression, and anxiety (Riley & Bowen, 2005).

Research is needed to examine the impact that losses have on the family and to examine and identify other factors that may affect the family's quality of life due to a loved one's SUD. In addition to losses created by the person abusing substances, the examination of the impact of personal substance use and the amount of perceived support from others on quality of life also were evaluated. Research has identified that families which abuse substances have a negative impact on the person in recovery while families which have social support from others are able to provide support to the person in recovery (Horta, et al., 2016). Recently, AOD research has been based exclusively on mortality rates, morbidity, and days of abstinence. Though useful, these measurements alone restrict the true understanding of the total impact of substance use on the primary support systems (Ugochukwu et al., 2013). This research is relevant and essential for policymakers on the importance of including the primary support system in treatment as well as for establishing treatment protocols and national guidelines that are evidence-based and data supported (Birkeland et al., 2018).

Research Questions

To examine the relevance of a family-centered approach to substance use disorder treatment there are two identified research questions in this study:

1. What are the characteristics of the PSP of those in a treatment for SUD as measured by quality of life?
2. What is the relationship between the quality of life and number of losses experienced by PSP, their personal substance use, levels of stress, and perceived social support for PSP?

Research Design

This study was a descriptive study utilizing a survey research design to answer the above research questions. This methodology is appropriate because the purpose of this specific body of research is to provide descriptions of the factors that may contribute to quality of life of family who are considered as the primary support system of the one living with SUD (Rowe, 2012). To answer the above research questions this research study has one dependent variable and four independent variables:

a. Dependent variable: quality of life

b. Independent variables: perceived losses related to substance use, personal substance use, levels of stress, and perceived social support.

Operational Definitions

The operational definitions utilized for this research were as follows:

Grief*:* Grief is cited as a loss stress syndrome that bears resemblance to posttraumatic stress disorder from losses of life-sustaining elements followed by a profound sense of sadness and loneliness (Zuckoff, 2006).

Loss: Losses are identified as both concrete (people, places, possessions, safety) as well as abstract (self-esteem, self-respect, and self-worth; Furr et al., 2015)

Quality of Life (QOL): QOL is the "appraisal of life detailing how individuals perceive and react to physical and nonphysical areas of functioning, such as emotional and social issues" (Lehman, 1983, p. 307.)

Social Support: Perceived support received from others in the social network.

Stress: Stress is an emotional and physical state that occurs when the demands of a situation outweigh the individual's abilities to successfully cope with it (Cohen et al., 2016). These exposures potentially alter and disrupt daily psychological functioning and induce cognitive, emotional, and biological responses to these stressors (Crosswell et al., 2020).

Substance Use: Use of legal and/or illegal drugs, alcohol, or prescription medications for the purpose of social engagement, emotional calming, and/or to avoid physiological withdrawal.

Delimitations

This study has the following delimitations:

1. Participant inclusion were adults (18 years of age and older) who live with or serve as the primary support persons (PSP) of substance abusers and engage in a treatment center's support group.
2. PSP to substance abusing clients enrolled and attending a 90-day intensive outpatient treatment program and/or a 28-day residential treatment program.
3. The sampling procedure was purposive.
4. Participants were able to read, understand, and respond in English fluently.
5. The researcher can control the amount of time provided to complete the survey which can affect the amount of answers a survey research participant is able to complete.
6. This study relied on participants self-report.

Limitations

This study has the following limitations:

1. Purposive sampling limits the researcher's ability to generalize the results.
2. Participants may respond in ways they feel appear favorable or socially desirable.

Assumptions

The following assumptions were made regarding study participants in this research inquiry:

1. Study participants were family members or are identified as the primary support person (PSP) of the person receiving treatment for substance use disorder.
2. Study participants of the study were attendees of "family days" and/or family workshops sponsored by the intensive outpatient or residential treatment facilities.
3. Study participants were free of any/all mind-altering substances at the time of the survey.
4. Study participants answered a survey-based study regarding their own feelings about personal losses due to being PSP of the person in treatment for SUD.
5. Study participants could read, write, speak, and understand English fluently.

Threats to External and Internal Validity

The validity of a study is imperative because it supports the data collected are correct (Huck, 2008). Both internal and external threats to validity are inherent in all research; therefore, the researcher incorporates steps to minimize these influences with this research. Ecological validity or external validity is the degree to which results of this study can be applicable to groups and environments beyond the experimental setting (Gay et al., 2009). Given the sample size of participants is limited to intensive outpatient treatment facilities and residential treatment centers sponsoring family days and family workshops, generalizability of the research results is limited. Therefore, every effort was made to collect responses from as many PSP participants as possible who fit the selection criterion established for this research study.

Internal validity is "the degree to which the measurements process measures the variable it claims to measure" (Gravetter & Forzano, 2018, p. 524). Of specific focus is the study of social desirability which is the manner in which participants respond to a survey question. For example, is the response provided by PSP an honest response or is the response intended to be viewed as favorable by the researcher? To minimize social desirability and to minimize threat to this study and data interpretation, the survey was administered to all participants by a person

knowledgeable about the contents of this survey and familiar with this survey. Research proctors did not have any affiliation with the treatment facilities housing the survey participants. Participants were not identified, and all responses were confidential.

Summary

This chapter of the dissertation is an introduction to the variables that may contribute to the quality of life experienced by families of those in treatment for SUD. McFarlane (2002) asserted family groups together better solve problems, normalize communications, reduce stigma, and provide better assistance with crisis situations. This is an important discovery in offering a comprehensive experience; however, although research has shown the value of including families in the treatment experience, most mental health facilities are lacking family components as well as educational components (Dixon et al., 2001). Therefore, the purpose of this study was to identify the quality of life experienced by family and emotional support people who support individuals living with SUD and the impact of the independent variables on the quality of life of this population. These findings expand the current literature regarding quality of life experienced by families living with SUD.

Organization of this Study

This dissertation is presented in five chapters. Chapter one provides the reader with information regarding the variables of quality of life of families as support (PSP) for those living with SUD. Chapter one also defines the statement of the problem, significance of the study, research questions, research design, delimitations, limitations, threats to external and internal validity, operational definitions, summary, and organization of this study. Chapter two is a review of relevant literature regarding the variables that were examined in this research. Specifically, previous research regarding QOL and substance abuse is reviewed along with exploration of the influence of the independent variables of perceived loses experienced by the

PSP due to the loved one's SUD, the PSP's own substance use, levels of stress experienced by the PSP, and perceived social support the PSP receives outside of the immediate family unit. Chapter three is an outline of the methodology that was utilized for this study including participants, procedures, instruments, data analysis, and the summary. Chapter four describes the results of the survey instruments. Finally, chapter five includes a discussion of the results, and the implications for practitioners and treatment facilities that work with clients who experience SUD.

CHAPTER II: LITERATURE REVIEW

Family functioning is affected when a family member abuses substances, yet families or PSPs can provide support that encourages long-term recovery. However, the literature on the impact of SUD on families is limited in the United States but more robust among European, Asian, Australian, and Latin American mental health professionals who have provided more comprehensive research support for this topic. In this chapter, an overview of the ways in which family and support systems are affected is provided. Included in this review is the importance of Family Involved Treatment (FIT) as well as contributors to what details healthy family members. This is important because it highlights the relationship between mental health and substance abuse to quality of life of the family. Additionally, this chapter identifies contributors to one's quality of life that include losses experienced related to the actions of persons in SUD treatment, the PSP's own substance use, the PSP's perceived stress, and the support extended by others.

Importance of Family Involvement in Treatment

Because of limited research in the United States, much of what is known about family involvement in treatment comes from other countries. A comprehensive review of the literature regarding AOD treatment has consistently suggested that treatments involving social components are most efficacious, and families are the stakeholders that aid the process of creating positive and sober change (Miller & Wilbourne, 2002). Ironically, although evidence is growing which supports family engagement as influential for change, treatment delivery systems continue to focus on the individual and not the entire family (Copello et al., 2002). Literature has suggested that an increased emphasis on family increased the likelihood of getting the addict to treatment, increased treatment success, and reduced the impact of harm for the family and the person in active treatment (Copello & Orford, 2002). More importantly, Moos et al. (1990), and Halford et al. (2001) asserted that studies focused on families which participated in treatment showed

reduction of stress-related psychological symptomology experiences. In other words, family members of those living with someone affected by addiction benefitted from participating in the treatment process versus non-participating families.

In contrast, a Norwegian study by Orford, et al. (2013) asserted primary support persons of patients living with SUD received limited attention from health and social services even though Norwegian national guidelines for health care services explicitly outline relatives must be included in the treatment and follow-up of the patient/service user to both receive information as well as for their own support (Helsedirektoratet, 2017). Of note, family members and domestic partners who serve as primary support persons (PSP) for those living with substance use disorder encounter stressors in their everyday lives resulting from daily care tasks or burdens of their loved ones. These tensions have been found to lead to poor physical and mental health, social isolation, disruption in family life, lack of safety, dropping out of work or education, depression, anxiety, negative social stigma, and daily dilemmas (Olafsdottir & Hrafnsdottir, 2018). These finding are supported by a 2019 study in Brazil which found that family members of someone with AOD experienced health issues and an increased use of substances themselves (Pacheco et al., 2019). Supporting this finding, a 2018 study in Iceland purported that depression suffered by a parent living with a partner with SUD contributed to mental, physical, and social neglect of the family's children further exacerbating family stress and anxiety (Hrafnsdottir & Olafsdottir, 2106). Additionally, a 2007 study by Kenneth et al. containing data of 12,000 couples reported that women living with substance abusing partners had worse states of health with stress, anxiety, physical illness, and significant impairment of their quality of life. Consequently, SUD of a loved one exponentially increases the physical and mental health burden experienced by the PSP. In other words, effects of SUD on a PSP include

high levels of anxiety, stress, and powerlessness as well as guilt and shame (Bortolon et al., 2017; Orford et al, 2013). Additionally, Jackson (1956) purported feelings of detachment, isolation, and difficulties experiencing quality of life social support among PSP. This is significant because according to Denning (2010), the ongoing development of treatment specific for PSP is limited at best. Even if provided, those who provide support experience substantial consequences. Additionally, this same researcher asserted that limited treatment insight regarding the PSP further complicates the quality of life of the PSP due to treatment modalities not providing stronger skill sets to better manage the stress, strains, and anxiety caused by their loved one's SUD. It is important to note, according to Denning, tough love does not work and is viewed as too harsh. In other words, it is neither a skill that benefits the PSP nor creates change for the problem substance user.

Consequently, the lack of involved formal family treatment leaves PSPs to the advice of support groups such as Al-Anon, Al-Ateen, Nar-Anon, and ACOA (adult children of alcoholics) that often encourage tough love approaches. This is important because Steinglass (1985) purported inclusion of PSP, specifically in the early stages of recovery treatment, increases the likelihood that the substance abuser becomes committed to and engaged in active treatment; therefore, an empirically supported family approach can assist in reducing negative effects of SUD while sustaining positive outcomes (Miller et al., 2002).

Though any support can provide some usefulness, dualistic adherence to directives encourages a one-stop-shop mind-set regarding treatment and falsely positions self-help groups as treatment and in many cases, is seen as the only viable treatment available (Denning, 2010). This is important because any approach to helping or treating a person that limits change to all or nothing choices ignores the reality of how people create and implement change (DiClemente

et al., 1985). It is critical that PSP understand change comes in increments and is embraced for different reasons and motivations (Zinberg, 1984). In other words, it may not happen all at once; it is essential that PSP be provided empirically supported direction and understanding of the change process. This is important to note disappointment may occur with the observances of little changes versus total change and can result in the perception that the loved one presents with less than perfect responses and is seen as failure (Gordon & Barrett, 1993). For this reason, formal treatment environments for families should help to disengage the grip of shame and guilt but also helps eliminate undermining and unrealistic treatment expectations. The belief that going to rehabilitation cures addiction in 28 days is something more produced by reality television (Denning, 2010). Not everyone obtains total abstinence in initial treatment, and the family is not informed regarding better coping skills and proper management of guilt, shame, and caretaking. Through empirically supported instruction, however, informed treatment approaches better prepare families through reliance via self-determination theory. In other words, families are taught that change comes about via one's sense of power to affect change (Ryan & Deci, 2000).

PSPs learn new and supporting principles that may challenge traditional abstinent approaches through the lens the transtheoretical stages of change. New perspectives such as harm-reduction (HR) are obtained through family treatment programing, and PSP are taught how to better come to grips with reality for themselves as well as for their loved one (Denning, 2010). The importance of family treatment is based on individual healing and the PSP learning to separate a person from a behavior; the forementioned social support models provide limited insights into addictive behaviors. This may create a pathological situation. Incorrect expectations with less than perfect responses drive an entire family into a pathologized system

of dysfunctions. Zyrakowska (2005) identified dysfunction in three distinct manifestations: (a) family denial of the existence of a problem thus family protection of the perpetrator; (b) creation of a defense system against the immediate social environment thus eliminating contact with neighbors and extended family members; and (c) the family's loss of hope for a positive solution to the problem. Dysfunctionality in a family is composed of negative feelings conducive to toxic environments where formation of positive life qualities is non-existent. Therefore, a positive family engaged in treatment helps increase levels of family intimacy, which postures stabilizing effects on individual family members, encouraging psychological healing and repair. Alternatively, poor family connections may increase the risk of sustained substance abuse (Wu & Zheng., 2020).

Research is sparse, at best, regarding impact of SUD on the family unit, and the lack of a family treatment model creates further family marginalization. According to Dear (1996), this specific neglect is surprising considering the growing popularity and utilization of harm reduction as an additional approach to managing drug and alcohol disorders, and family support is viewed as a form of harm reduction. This is important because harm reduction seeks to minimize harm to the AOD client as well as minimize the impact on PSP who are adversely affected.

Edwards and Steinglass (1995) provided compelling support for family-involved treatment (FIT) and highlighted multiple variables supporting (FIT): (a) FIT minimizes the negative impact addiction has on family members (Thomas & Corcoran, 2001); (b) substance abusers tend to obtain longer treatment tenure (Sorensen et al., 1985); (c) substance abusers also obtain more positive outcomes (Stark, 1992); and (d) people living in recovery who experience slips do so for a fewer days, use less substances, and have increased periods of abstinence

(Fichter et al., 1997; Moos & Moos, 1984). Thomas and Corcoran (2001) also highlighted FIT supports greater family cohesion with less conflict as well as the association of less depressive symptomologies for PSP.

Conclusively, PSP suffer equal or greater stressors because of living in environments of profound and consistent substance misuse. This affects both the physical and mental well-being of PSP as well as interrupts a positive quality of life for family members (Velleman, 2002). Harris et al. (2007) purported that PSP are an untapped resource primarily due to the lack of available information that is "recovery-specific" while Perkinson (1997) highlighted the very small number of treatment programs that extend family specific therapy and multifamily groups. This is important because Harris et al. asserted multifamily groups as critical components of an intervention for those living with SUD in both treatment as well as recovery communities. While family involvement appears to be beneficial for the person in recovery, little is known about the challenges faced by family members.

Contributions to Being Healthy Family Members

Though limited in empirical research, practitioners have observed that families are impacted by SUD; therefore, the expansion of the literature is essential to better understand the impacts that SUD has on the quality-of-life of the entire family unit. Lander et al. (2013) asserted parents with SUD spend excessive amounts of time both seeking AOD, using AOD, and recovering from AOD bingeing episodes. This is socially and psychologically damaging for both the addict as well as family members because essential opportunities to foster healthy attachments with children and family are missed. Literature has also indicated that partners of those living with SUD experience mental, physical, and socioeconomic issues (Orford et al., 2010). Of utmost significance is the impact of SUD on the stages of family life cycle. Carter and McGoldrick (1989) identified specific family life cycle stages that highlight necessary "tasks"

essential for healthy family member development. These identified family life stages are as follows: (a) married without children, (b) childbearing families, (c) families with preschool children, (d) families with school-age children, (e) families with teenagers, (f) families launching young adults, (g) middle-aged families, and (h), aging family members. Carter and McGoldrick also identified the establishment of healthy family relationships inclusive of the implementation of boundaries from family of origin. Dysfunction due to SUD jeopardizes establishment of these necessary boundaries due to poor communication and impairment of emotional and physical intimacy.

During the childbearing family stage, the formation of emotional safety creates secure and healthy attachments for children and the family unit. Lack of being physically and emotionally present due to SUD disallows safety and increases insecure attachments for infants, children, and the family unit. During the stages of families with preschool and school aged children, promotion of growth and physical and emotional development as well as fitting in are specified family tasks. Unfortunately, decisional discrepancies due to inconsistent parenting, neglect, child welfare interventions, and domestic violence interrupt these early, yet essential, developmental family milestones. These discrepancies may lead to turbulent environments and cast shadows of developmental mistrust and inferiority for children within the home. These negative developmental schemas are impactful in both early childhood development and in one's sense of regulation and social influence (Batra, 2013).

Schema development continues to evolve as children move into adolescence. The task cycles of families with teenagers and launching young adults are laborious emotionally for families. Specifically, developmental tasks include (a) the balancing of freedom concurrently with responsibility, (b) the establishment of healthy peer relationships, and (c) the development

of healthy educational and career goals. However, among homes with parental SUD, educational needs are not met, and conflict is foremost present. Additionally, in young adults "failure to launch" is a typical presentation due to lack of self and environmental support (Carter & McGoldrick, 1989). The next family life task cycles that need to be completed are the stages of middle-aged parents and aging family members. During these stages, developmental tasks encompass maintaining ties with younger generations, rediscovering marital bonds, coping with bereavement, and adjusting to retirement. However, residual past (or current) trauma due to SUD often encompasses marital conflict, child/grandchildren disconnection, isolation, depression, and the continuance of SUD as well as the onset of SUD. Lander et al. (2013) asserted the impact of a family member's SUD is profound and manifests uniquely on each family member. Therefore, assessing SUD must be in the context of the entire family environment, and it helps not just the individual living with substance use problems but also the entire family system.

Relationship of Mental Health to Quality of Life

Mental health is an integral component of quality of life (QOL) and when affected, QOL is perceived as impaired (Deaton, 2008). This is an important factor because a loved one's mental illness affects a PSP through an increase of strain and worry about stability and the future, which in turn leads to stress, fatigue, and sleep deprivation; all these factors have significant influence on mental health (Dawson et al., 2007). Of specific mention is the quality of one's social domain or how one engages and participates in life socially (Helgeson, 2003). This is significant because life conditions such as negative financial and responsibility burdens as well as stressful life events negatively affect QOL which in turn reduces the ability to cope with life and negatively affects QOL (Rees et al., 2001). Birkeland and Weimand (2015) argued that PSP of patients with SUD experience profound stigma and overwhelming feelings of guilt and shame which is

significant because feelings trigger social and societal withdrawal, further eroding QOL for PSP (Hastrup et al., 2011).

In a 2017 study, Birkeland et al. examined psychological distress among PSP of substance abusers. In this study the researchers measured psychological distress utilizing the Hopkins Symptom Checklist 10 (SCL-10) which measures depression and anxiety (Derogatis et al., 1974). This specific inventory required answers utilizing an ordinal scale from 1 to 4 with the highest scores suggesting distress. These same study participants evaluated their own substance abuse using the CAGE-AID questionnaire (Brown & Rounds, 1995). Finally, quality of life for the same PSP's was measured utilizing the QOL-5, which is a validated and general instrument covering QOL that is outlined using an integrative quality of life (Lindholt et al., 2002). Among study results, researchers concluded that some of the study participants scored markedly low regarding QOL where only a small sample of 3% displayed problematic substance use. However, the study results concluded that family cohesion and psychological vulnerabilities are abundant among PSP of people living with SUD (Birkeland et al., 2017).

An additional 2005 study among PSP of substance abusers took place across areas in Southwest England, Mexico City, and Aboriginal inhabitants in Australia. It is noted there was an expansive recruitment of participants representing rural and urban areas, areas stricken with poverty, as well as areas of advantage and privilege (Orford et al., 2005). Findings were consistent with the Birkeland et al. (2017) study with regards to psychological vulnerabilities. Specifically, problems among PSP and other family members included higher levels of behavioral disturbances, antisocial behaviors such as conduct disorder, and emotional difficulties as well as precocious maturity (Velleman et al., 1993).

In conclusion, mental health is tied not only to relationships, personal exchanges, and interactions but also to environments in which one resides (Velleman, 1993), and PSP harm is abundant. To lessen the impact of mental health deterioration caused by a loved one's substance abuse a wider scope of inclusion of who receives treatment must prevail.

Contributions to Quality of Life

The human experience is a complex interaction entailing internal and external contributors including, but not limited to, biology, socio-demographics, and stressors as well as cultures (Laudet et al., 2009). It is multidimensional and captures a vast range of both clinical functioning and personal variables (Aaronson, 1990). The World Health Organization defines Quality of Life as "individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" (WHO, 1998, p.3). According to Frisch et al. (1992), a person's life satisfaction or quality of life involves an individual's subjective evaluation to which the degree of the one's most important goals and wishes are fulfilled and where both positive and negative life affects are part of a broader life construct of subjective well-being. In other words, a person's reality consists of both positive and negative experiences, and both the positive and negative involvements inform and construct a person's reality or way of sense making and indeed SUD are key influencers (Frisch et al., 1992).

Dethie et al. (2011) identified the following factors as crucial regarding positive relationships and quality of life: (a) family members ability to resolve problems, (b) adaptability, (c) the ability to trust, (d) ability to experience intimacy and closeness in relationships, (e) the ability to control one's emotions, and (f) individual family members having confidence in themselves. These dimensions outlining positive family development are important to note because the worldwide prevalence of AOD abuse disrupts family and life functioning and are

prevalent among those that live with individuals with SUD. Accordingly, research has shown that those who have grown up with a parent living with SUD had more behavioral issues, interpersonal problems, experienced more distress, and presented with more codependency than those not living with someone with SUD (Klosterman et al., 2011). A study conducted by the Icelandic Center for Addiction and Treatment purported that PSP and others close to someone who abuses substances experienced low family cohesion and a lack of closeness (Hrafnsdottir & Olafsdottis, 2016). Consequently, it is possible that QOL of family members is affected when a family member abuses substances.

Lack of both family cohesion and closeness were identified as issues by a 2014 research study which utilized the FACES IV self-evaluation. Research from this study asserted family cohesion and relations were rated significantly lower for families who live with an addicted family member compared to families who do not (Margasinki, 2014). These findings are important because problems resulting from AOD place significant strain and risk on overall family interactions. Family strain resulting from SUD affects quality of life for the family unit (WHO, 1993), and these stresses become cumulative in impact, affecting the family unit's QOL and the individuals or single persons impact levels (Poston et al., 2003).

Significant findings have centered around adolescents and children living in homes where someone is in active addiction. According to Morgan et al. (2003), children living among active addiction often lack the development of trust and emotional intimacy, both of which are identified as important in child development. However, in the United States QOL for families as a measurement in addiction and addiction research lags far behind other biomedical disciplines such as the practice of medicine (Morgan et al., 2003). Of additional importance, existing literature has examined the lives of those living with SUD as a primary focus yet ignores QOL of

those living with someone diagnosed with SUD. Evidence has suggested that family involvement in the treatment process helps to engage the AOD abuser into SUD treatment (Szapocznik et al., 1988), enhances overall QOL for families and the addict, and predicts sustained remission for the person living with SUD (Laudet et al., 2009).

Utilization of measures regarding QOL as a tool to measure recovery success for substance abusers and their families is limited, despite the wide range of destruction that SUD impose on patient, family, and our society (Foster et al., 1998). Aaronson (1990) indicated that researchers do agree that QOL is subjective and is a multidimensional construct; however, there still lacks a comprehensive theoretical model of QOL that has been both developed and applied in assessments, research, or practice. Therefore, for this research study an operational definition is appropriate prior to examination of contributors to QOL.

Donovan (2005) described QOL as experiences of functioning that are important in life quality but are not measured by traditional assessments such as the Addiction Severity Index (ASI). Of specific mention are two types of QOL instruments researchers have utilized. First, is health related QOL (HRQOL). Within this QOL measurement a patient's perception of health and how one's physical health affects physical, psychological, social functioning, and overall well-being is examined (Leidy et al., 1999). Examples of HRQOL instruments are Short Form 36 Health Survey (SF-36) as well as the abbreviated SF-12 version (Stewart & Ware, 1989). In contrast, the World Health Organization offers a glimpse into quality of life by offering Quality of Life Inventory which measures a person's overall life satisfaction. Unlike the HRQOL, the WHO QOL looks at life satisfaction in general versus being tied to a health-related genre (WHOQOL Group, 1995). The WHO definition for overall quality of life focuses on a person's life experiences, especially their well-being or perception of overall quality of life (Clark, 2008)

and offers insight into everyday functioning, improved health, wellness, and ability to productively have a life (Curie, 2005).

PSP of people who misuse substances face social stigma related to their loved one's addiction, and this stigma can lead to feelings of being overwhelmed, guilt, and shame (Bikeland et al., 2015). It is important to note that diverse life conditions such as unemployment, higher financial burdens, difficult life circumstances, and social withdrawal may all play a role in QOL and may reduce abilities to cope with life challenges. Barcaccia et al. (2013) concluded psychological, spiritual, and social dimensions strictly related to health of families must be examined as part of understanding the summative QOL concerns and may reflect both environmental and existential relevance. In other words, psychological, spiritual, and social dimensions should be included in addition to related physical health when evaluating QOL (Baraccia et al., 2013). Although SUD manifest in people differently, dysfunction despoils family integrity and disrupts the quality of family and individuals 'lives by diluting family order, depleting communication, and creating weakened family relationships (Smith, 2015).

The mere nature of substance misuse often creates chaos, especially for those directly engaged in daily living with the abusing individual, and affects most areas of functioning such as vocational, social/familial, physical, and mental health (American Psychiatric Association, 1994). This is important knowledge because SUD treatment protocols need to address the full range of problems that interfere with positive and emotionally healthy daily living, not just for the user but for the entire family system (Laudet et al., 2009). This research is also important in better understanding the totality of the impact of SUD on the daily lives of PSP that support those living with SUD. All of these studies focusing on family have been conducted outside the United States (Bizzarri et al., 2005), so little is known about how families in the United States

are affected by substance use of a family member. However, the overall number of research studies conducted examining QOL for the PSP globally has been found to be fewer than 100 (Donavan et al., 2005). In conclusion, a study by Olson (2011) revealed that SUD in only one family member influenced other family members ’satisfaction with family and lowered the quality of life and communication among family members. It is important to note these same researchers asserted research regarding family stress, anxiety, and depression warrants further examination regarding how these specific stressors effects overall QOL of family members.

Losses Related to Actions of Persons in Treatment

In addition to QOL for families supporting someone with SUD, PSP incurs significant losses directly corresponding to their loved one’s substance use disorder even during the treatment experience. According to a 2009 UK Drug Policy Commission report, economic costs to PSP are of direct monetary expenditure as well as disbursements in time spent assisting the person living in this lifestyle (Copello et al., 2009). Reported losses included time and expense associated with service agency engagement, transportation to appointments, treatment, home care, and in some cases, the purchase of food and rent for the addicted person seeking treatment assistance (Copello et al., 2009). These same researchers stated that the PSP incur other direct and indirect losses as well, and these are not just fiscal expenditures, but emotional. One specific example cited was the unknowing or unexpected financial expenditures discovered by the PSP of an addict. Stolen money and other assets are losses seldom thought of but realized after the obtainment of help for the additive disease. Many of these losses are realized due to the drug using family member’s ‘efforts to secure drugs (Drugscope, 2005). Clark et al. (1995) purported that families ’financial losses are daily and are appropriately termed ‘day- to- day ’costs, and these losses are often costs for which they are not remunerated and extend far beyond the treatment experience. Of specific mention, a 2015 study identified the grief associated with

losses such self-respect, confidence, and time as unrecognized and are losses to be considered when examining losses related to addiction (Furr et al., 2015). In other words, losses go beyond the fiscal costs due to the loved one's drug use and add a burden to the total ramifications of being the PSP to someone who misuses AOD.

Of similar focus, a realization purported in the 2009 UK Drug Policy Commission Report highlights the loss of safety. Safety specifically was identified as a 'day-to-day' occurrence that also came with a monetary cost infrequently realized. In other words, protecting the person with an addiction from violence where dealers make financial or threatening demands is a frequent occurrence by PSPs. This reality thrusts many PSP into "holding" patterns regarding their own personal lives which typically translated into loss of employment and reduced productivity and compensation (Copello et al., 2009). This is stress inducing and according to Copello et al. is causation of higher health care costs due to stress induced ill-health. In a study conducted in the United States, Ray et al. (2007) purported that the excess medical costs for each AOD using family member was $710 per year and further detailed an even higher costs per family if the user was female. This revelation suggested attention be extended to the specific impact that gender has on the losses experienced by PSP of AOD abusing people.

Primary Support Person's Own Substance Use

Bhardwaj et al. (2021) asserted that the experience of being a PSP is a process, and in some cases the addiction is a chronic relapsing disease that increases the burden of care for those supporting someone living with SUD. This role results in family conflicts (Bush, et al., 1996), depression (Bush, et al., 1996;, Shankardass et al., 2001), exhaustion (Bush, et al., 1996), lack of leisure time activities (Lamichhane et al., 2008; Mattoo et al., 2013; Shyangwa et al., 2008), anger (Shankardass et al., 2001), difficulties in social and interpersonal relationships (Shankardass et al., 2001),, physical and sexual abuse as well as feelings of isolation and

stigmatization (Bush, et al., 1996; ; Shankardass et al., 2001. However, little focus has been given to caregiver's burden and their own alcohol abuse as a coping strategy due to supporting someone with SUD. Being a PSP affects those caregivers who support someone with SUD. Accordingly, Cicek, et al., (2013) purported PSP of those with SUD are significantly more impaired according to QOL measures than support persons with non-substance abusing loved ones. Rospenda et al. (2010) also supported these findings and emphasized that though caregiver burden has been linked to pernicious physical and mental repercussions, little focus has been given to the effects of drinking or substance abusive behaviors by the PSP. This is important because external factors including, but not exhaustive to, caregiver personality, social support, status within the family unit as well as other responsibilities impact a PSP and play a role in how they appraise caregiving or support responsibilities (Lawton et al., 1989).

Caregivers play important roles in the lives of alcoholics, and the evidence has indicated supporting family members who abuse substances significantly increase the burden for the entire family unit (Patil, 2014). In other words, as overall substance use increases among family units, the quality-of-life decreases (Krishna et al, 2017). Additionally, Rospenda (2010) asserted that PSP who experience social and emotional burdens relating to caregiving were at risk for their own problematic substance use. In other words, harm to others as caused by substance abuse adds to the peripheral impact substance-related disorders have on the physical health and social health of the PSP (Hope, 2014). Rospenda et al. asserted that a significant number of PSP consume substances due to stresses directly related to being a caregiver. This is corroborated by Connell (1994) who found that 34.1% of spousal caregivers used substances as coping, and 2.3% of those same identified spousal caregivers who use substances, they used substances to cope on a frequent basis. The research of Gallant and Connell (1997) parallels these findings which

reported that 30.3% of PSP consumed substances as coping strategies for caregiving, and 3.5% of the study respondents started consuming alcohol since assuming PSP responsibilities. Saad et al. (1995) purported that 10% of PSP specifically used alcohol to reduce stress. Similarly, Tripathy et al. (2019) found these secondary or peripheral effects are identified globally and are referenced as "harm to others" in Australia and New Zealand, while Tripathy et al. also found that scholars in the United States and Canada reference the effects of SUD on PSP as "externalities" and/or "second-hand effects". These same researchers identified "harm to others" or "third-party" harm as commonly used references in most Nordic countries.

PSP report a poorer QOL than non-caregivers (Glozman, 2004). Specifically, Gallant and Connell (1997) reported higher rates of depression and anxiety among this subset of people; however, alcohol-related outcomes for PSP have been neglected in the literature and while the relationships between caregivers 'burdens regarding mental and physical health have been studied, the relationship between caregiver burden and alcohol use and/or abuse has been ignored (Rospenda et al., 2010). This is significant because alcohol abuse or drinking patterns meeting the criteria for SUD is cause for concern for the health and well-being of the PSP and those under the PSP's care. When the PSP is responsible for the daily living activities of others, PSP substance use places them at risk. PSP alcohol use has also been linked to elder abuse (Conlin, 1995) and other high-risk behaviors (Conner et al., 2009). Accordingly, Connor et al. (2009) suggested depression, anxiety, and social isolation are often exhibited by the PSP and may forecast increased alcohol use (Seezman et al., 1988); therefore, the relationship between PSP caregiving burden and alcohol use warrants further investigation.

Though brief in availability, research looking at the role of substance use among caregivers has shown to be consistent over various forms of caregiving and that the burden of

being a PSP is conceptualized in numerous ways (Rospenda et al., 2010). Heflinger and Brannan (2006) reported approximately one-third of PSP for youth with substance abuse issues or mental health problems had consumed alcohol within the past 30 days. Though these studies reveal alcohol use and abuse among PSP, more information is needed about factors that may contribute to PSP substance use. One factor that may lead to substance use as a coping mechanism is a lack of support from others.

Role of Social Support from Others

Support from others can help PSP cope with the demands they face when caring for a family member with addiction; however, little research has been done to identify the different facets that correlate with abusive alcohol or substance use by a PSP (Rospenda et al., 2010). According to Novak and Guest (1989), the Caregiver Burden Inventory (CBI) survey identifies five subscales of burden experienced by PSP and the expected relationship of each identified subsets with alcohol use. The identified burdens of the CBI are: (a) time-dependence burden, (b) developmental burden, (c) physical burden, (d) social burden, and (e) emotional burden. Time-dependence burden measures the perception of time used in the role of PSP. Accordingly, role theory suggests individuals with multiple roles are less likely to drink due to an increase of role demands. Developmental burden measures PSP perceptions of "off-time" or being out of synch compared to their peers. Fittingly, Novak and Guest asserted that considerable anxiety and stress are experiences by a PSP compared to those who do not serve as a PSP. Mjelde-Mossey et al. (2004) discovered among PSP who distanced themselves from others as a coping mechanism were more likely to consume alcohol. In other words, not sharing with others the stressors of being PSP involves emotional and cognitive detachment, suggesting that those who utilize this technique incur a greater developmental burden and feel that they cannot share their experience with others. They then detach from others and become more likely to exhibit drinking behaviors.

Physical burden measures feelings of fatigue by the PSP due to supporting and caretaking. Examples included feelings of being physically ill as well as experiencing insomnia, thus creating an overall lower sense of well-being.

Additional findings support the previously mentioned research and have concluded that the social burden subset measured feelings of conflict resulting from being a PSP. Zarit et al. (1980) found social burden less severe for those with strong social supports. Meaning, PSP with less social interaction and support drink more than those who do not feel an interruption in outside social engagement. Emotional burden, the fifth of the identified burden subsets, measures negative feelings PSP have towards those they support. Feelings of resentment and discontentment are experienced by PSP due to being a support person. Folkman and Lazarus (1988) posited that people use alcohol to escape and avoid uncomfortable situations and negative feelings. This is supported by Cooper et al. (1995) whose research found that drinking is used to regulate negative emotions; therefore, PSP who assert higher levels of emotional burden are more likely to drink versus those with lower emotional burden. Burden subset predictors are important because they assist researchers in determining better approaches to assisting PSP who experience own substance abuse issues.

In a 2010 study by Rospenda and Richman, the CBI was utilized to access the effects of work life and caregiving balance experienced by PSPs. The findings supported higher scores on social burden and emotional burden accurately predicted increased drinking and problem drinking among PSP; however, time-dependence burden, developmental burden, and physical burden did not predict drinking behaviors. This is significant because the social burden subscale indicates the impact of being in the PSP role on family relationships with higher correlations of strained relationships associated with supporting and caregiving.

Caregiver burden is a complex phenomenon, and substance use among PSP complicates an already challenging environment. These responsibilities often contribute to more stressful and unpleasant conditions for the entire family unit (Krishna et al., 2017). This is important to note because effects of PSP substance use and abuse penetrates to all areas of the family unit affecting physical and psychological health, finances, employment, social life and relationships (WHO, 2010). This is significant because alcohol and substance use by a PSP compounds occupational dysfunction which adds to the already existence of physical, emotional, and financial distress (Platt, 1985), and therefore negatively influence a PSP's perception of overall caregiving (Jones, 1996).

Role of Stress

PSP of those who abuse substances are significantly impacted by the addiction (Kourgiantakis et al., 2013). Accordingly, Orford et al. (2010) asserted PSP of those living with SUD should not be powerless to their loved one's addiction, but rather need to recognize that environments where SUD is present have a negative impact on a family's physical, emotional, and financial health (Petry et al., 2005). Lucksted et al. (2012) purported most PSP benefit from psychoeducation, professional or peer support, and skill development to cope with the everyday stressors associated with one's SUD. Therefore, helping PSP address stress may be beneficial in improving their QOL.

Substance abuse within the family can create a stressful environment. People respond differently to stressful situations and conditions, with some approaches being more effective than others (Orford et al., 2010). If stress is not coped with adequately, one's quality of life or state of well-being decreases (Orford et al., 1987). Research has supported that the impact of SUD on PSP leads to change in daily routine and feelings of vulnerability, isolation, and abandonment (Horta et al., 2016). Machado et al. (2105) asserted that behaviors due to SUD are damaging to

intimate relationships and create chaos within their environments (Adams, 2008). Copello and Orford (2002) stated that one of the most significant stressors is the notion that PSP are seen as adjunct (in treatment centers) and not central to treatment protocols. PSP are often neglected, which causes strain on the family and creates limits on the effectiveness of substance abuse treatment (Csiernik, 2002; Orford et al., 2013). This is important because PSP are forced to cope with highly stressful events (Orford et al., 2010) which, according to Velleman (2010), are neglected in health and social care policy regarding PSP and SUD. Accordingly, coping with a loved one's SUD creates deleterious consequences on finances, relationships, mental health, and physical health (Dowling, 2014), which may cause a need for positive social and professional support (Orford et al., 2010). The Stress-Strain Coping Support model (SSCS) explains these dynamics which necessitate the need to provide active and effective coping mechanisms (Zeidner & Endler, 1996).

When a person lives with SUD, intense stress is present for the PSP and chaos shrouds not only the PSP but the family unit. The result is damage to intimate relationships and unpleasant environments in which to live (Adams, 2008). This same author continued to purport that the disarray created by SUD intensifies, and long-standing stressful circumstances incubate deep within the family unit as well as with the PSP. As the substance use in the individual with SUD becomes excessive, normal everyday life engagement and functioning no longer exists (Orford, 2001). SSCS views PSP as everyday individuals endeavoring to cope or manage profound stress inherited due to a loved one's SUD and not due to self-causation. However, PSP have been viewed as having their own pathology identified as "co-dependency" or "enmeshment." (Hurcom, 2000; Orford et al., 2005). Orford et al. (2010) identified these perceptions as pervasive and subtle and serve as stereotypes held by the general population. For

this reason, PSP are cast in negative societal perceptions versus being viewed as ordinary people trying to manage overwhelming circumstances. This literature highlights the magnitude of factors that intensify the stress experienced by PSP and further emphasizes the need for an accurate model of coping and support for the PSP.

The Multidimensional Scale of Social Support focuses on helping PSP by increasing positive social support (Orford et al., 2010). Horvath and Urban (2919) asserted that SUD of a loved one as a chronic stressor. In understanding the role of stress, Lazarus and Folkman (1984) emphasized that people face conditions in everyday living that are profoundly stressful and long-standing and defined these conditions as chronic. These same researchers further asserted that people respond to stressful conditions differently, and some respond in more efficient methodologies than do others, resulting in better QOL and health compared to others with lesser coping methodologies. This is important because the burden of a PSP negatively escalates as the addict consumes higher volumes of substances per episode of binge using (Jiang et al., 2015). According to Orford et al. (2010), if stress is not managed in an efficient and satisfactory manner, the result of the strain presents in some form of illness or lower QOL and well-being. Orford et al. also argued that those who live with stresses resulting from a loved one's SUD have the capacity to manage these difficult and complex situations just as they manage living with the person with SUD themselves.

One such model of identification of strain caused by a loved one's SUD is the Stress Strain Coping Survey (SSCS) model, which states that highly stressful living environments related to a loved one's SUD create anxiety, hopelessness, depression, and fear among PSP. This model assumes that the affected PSP can lessen the impact of stress and strain by learning and implementing social support strategies (Orford et al., 2010). Three coping strategies have been

identified: engaged, tolerant-inactive, and withdrawal. Engaged coping strategies include the PSP trying to control and support the family structure by utilizing emotional, assertive and/or supportive reactions to the chaotic environments created by the addict's SUD. Tolerant inactive coping strategies include not only tolerance toward the substance misuse but also identifies acceptance, support, and self-sacrificing regarding the loved one's substance abusing behaviors. Tolerant-inactive coping was found to be significantly correlated with increased symptoms. Use of withdrawal as the coping strategy results in the PSP focusing on their own needs as well as the establishment of distances between them and the substance abusing person (Orford et al., 2019).

Supporting Orford's findings, Arcidiacono et al. (2010) purported these coping mechanisms conciliate the relationship between stress and strain and support better targeted coping strategies, while Orford et al. (2001) reported that PSP exercising the tolerant-inactive and engaged coping strategies had the highest levels of consequential symptomologies. The participants who exercised both the engaged and the tolerant-inactive coping strategies reported increased levels of hopelessness and stress as well as a higher level of burden (Zsolt & Urban, 2019). In other words, though both aforementioned coping strategies are understandable, these coping approaches to stress are more likely to be associated with negative outcomes (Orford et al., 2010). However, utilizing the stress coping strategy of withdrawal is linked with more positive health-related outcomes than the engaged strategy (Orford et al., 2005). The stress coping strategy has demonstrated less of the negative variable of hopelessness, perhaps leading to a better overall QOL for the PSP. The ability of a PSP to cope with stress is influenced by their capacity to cope with their situation (Templeton et al., 2007). In other words, learning and implementing new cognitions and behaviors toward their role as PSP and their understanding of

SUD are essential to managing stress and in reducing the strain caused by the stress (MacNeil et al., 2016).

Muller and Spitz (2003) defined coping as "the cognitive and behavioral efforts to master, reduce, or tolerate the internal and/or external demands that are created by the stressful interaction" (p. 508). This view is supported by the five-factor model which ranges in coping strategies from complete involvement to avoidance of the consequences experienced by PSP due to their loved one's SUD (Zuckerman & Gagne, 2003). Specifically, Folkman and Lazarus (1980) argued that adaptive coping reduces the impact of stresses experienced by the PSP by participating in self-help, planning, seeking information, and participating in social support groups. Conversely, these same researchers purported maladaptive coping behaviors of avoidance and self-punishment lead to behavioral and emotional problems which induce more stress for the PSP and negatively impacts their overall QOL (Zuckerman & Gagne, 2003; MacNeill et al., 2016). For this reason, researchers have supported the importance of examining the PSP's perspective of issues caused by SUD (Alexanderson & Nasman,2017; Forrester et al., 2016). Accordingly, a better QOL for the PSP requires further research to extrapolate better coping strategies (McCann & Lubman,2107), inclusive of education, personalized advice/peer support, stronger social support connectedness, as well as better informed professional AOD clinicians (Dallery et al., 2015). Addressing the stress that PSP experience caused by their loved one's SUD may prove to be essential in increasing their QOL. Given that SUD treatment is enhanced by having healthy family support, assisting PSP in managing stress can be a method of strengthening treatment outcomes.

Summary

In this chapter, the role of the PSP has been examined in terms of the impact of SUD on those who provide support for someone in treatment. The importance of the quality of life of the PSP has been established based on previous research and literature. Factors have been identified that might contribute to QOL of support people and include (a) personal losses, (b) a PSP's substance use, (c) levels of stress due to the caretaking role, and (d) perceived support from others regarding the PSP's care-taking role due to their loved one's SUD.

CHAPTER III: METHODOLOGY

The purpose of this chapter is to examine the overall quality of life of PSP living with someone with substance use disorders (SUD). This chapter describes the methodology for this descriptive quantitative study and examines variables as related to the QOL of the PSP. This specific research approach is appropriate and rooted in a positivist paradigm. In other words, a positive paradigm of examination (PPE) assumes that a single, tangible, and understandable reality exist and can therefore be understood, identified, and measured (Park et al., 2020). Park et al. also purports that this research approach allows prediction in a causal framework to operate and respond naturally within its environment. Robson (2002) agreed with Park et al.'s definition and further asserted that PPE as quantitative discovery is an objective and value-free lens through which to view scientific research. This is important because Frisch (1992) purported links between QOL satisfaction and other emotional conditions, such as drug and alcohol abuse, have heuristic value in assisting and understanding multiple mental health disorders.

The primary section of this chapter details participants of the research. The second section is a description of the procedures used to gather data for this study. The third section defines instrumentation that was used for this study. This portion is followed by the research questions, research design, and ends with a description of the data analyses.

Participants

Participants were adults, 18 years of age and older, who are considered PSP of a person living with SUD and who currently is in treatment. Additionally, PSP were identified as persons actively engaged in their loved one's daily life and were willful participants of the treatment facility's family support group. The treatment programs utilized for this study were 90-day intensive outpatient treatment programs (IOP) and/or 30-day residential programs, either of

which are treating SUD as the primary focus for their loved one receiving treatment. An a-priori power analysis using G*Power has indicated that a minimum of ninety-nine (99) participants are necessary to achieve a medium effect size at 90% confidence rate.

Procedures

First, this researcher received approval from the Institutional Review Board (IRB) for Research with Human Subjects at the University of North Carolina Charlotte (UNC Charlotte). Approval was obtained prior to the recruitment of any study participants and the collection of research data. Recruitment of study participants was via verbal solicitation during family day at each of the participating study intensive outpatient and/or residential agency locations. Recruitment was over a two-month period and was administered to all willing PSP individuals only once during the designated family day. All participants were administered the survey by an individual familiar with the study and the research design but not affiliated with the treatment facility. The survey was available as a one-time participation entry and engaged PSP's 18 years of age or older. Each participant was given an introductory letter explaining the purpose of the study and a letter of informed consent. Participants were advised that they may discontinue participation of the survey at any time while the survey is being administered. All survey data responses were collected and sealed in an enveloped by the attending study professional if completed on paper. Participants were given the option of completing the survey electronically or utilizing a paper survey. Paper surveys were hand delivered to the office of the overseeing study and kept in a secure location. Next, survey results were entered into the Statistical Package for Social Sciences (SPSS) software for statistical and study analysis.

Participants were first given a Recruitment for Study Overview sheet detailing the purpose of the survey, survey participant directions, and how the data are to be utilized. This section of the chapter will describe these in detail.

Recruitment for Study Overview (Appendix I)

The recruitment information sheet introduced the individual who administered the survey, name of the survey, an outline of the survey purpose, and answered specifics regarding survey participation.

Informed Consent (Appendix II)

The informed consent form was distributed to participants and read by each survey participant prior to receiving and completing the actual survey document. This document included the following: (a) project purpose statement, (b) information about the researcher, (c) eligibility criteria, (d) description of participation, (e) a list of any known risk and benefits, (f) a volunteer statement, (g) a statement of confidentiality and anonymity, and (h) permission to stop their survey participation at any time without penalty.

Instrumentation

Data was collected using self-report instrument. Participants completed the following instruments: (a) The World Health Organization's Measuring Quality-of-Life Inventory BRIEF (WHO, 1992), which has 26 items; (b) The Losses Related to SUD Inventory, which is a 26 item yes/no answer assessment (Furr et al., 2015); (c) The CAGE, which is 4 items qualifying assessment (Basu et al., 2016); (d) The Multidimensional Scale of Perceived Social Support Inventory (MSPSS), a 21-item inventory scored as a Likert scale (Cao, 2015); and (e) The DASS Inventory, known as the Depression Anxiety Stress Scales Inventory (Henry & Crawford, 2005).

In addition, survey participants completed a brief demographics section. Each inventory is described in the following section.

WHO Quality of Life Inventory

This research utilized the Quality-of-Life Inventory (QOL) designed and used by the World Health Organization (WHO). This specific instrument referenced as WHOQOL-BREF measures overall life satisfaction and was utilized in this study to measure the well-being of the PSP living with someone who abuses substances. This is important because life paradigms of well-being encompass a broad scope of mental health constructs where negative and positive life constructs affect one's subjective well-being and happiness toward the overall QOL (Andrews, et al. 1976; Diener, 1984; Veenhoven, 1984). In other words, lives are affected both positively and negatively by daily interactions with others, which may influence one's overall QOL. The WHOQOL-BREF inventory is an empirically validated model of life satisfaction measurement (Frisch, 1992) and has been developed for cross cultural comparisons of overall QOL (Vahedi, 2010). This specific inventory is one of the most well-known instruments developed, is cross cultural in efficacy and consistency, and is available in more than 40 languages (Shahrum, 2010; WHOQOL BRF, 1992).

This instrument is brief, consisting of 26 items, and is rated by participants responses to their overall life quality and happiness (*1= Very Dissatisfied, 2= Dissatisfied, 3= Neither satisfied nor dissatisfied, 4= Satisfied, and 5= Very Satisfied).* For this research study, specific inventory results are important because it informs future treatment planning and outcome assessment for families affected by SUD. The WHOQOL inventory has a Cronbach's alpha of 0.825. Confirmatory Factor Analysis found an acceptable comparative fit index (CFI) of .901. The WHOQOL-BREF was shown to have discriminate validity in its ability to discriminate between ill and well populations.

The Experience of Loss in Addictions Inventory-PSP Version

The Experience of Loss in Addictions Inventory-Primary Support Person (PSP) version was derived from the original instrument, The Experience of Loss in Addictions Inventory (Furr et al., 2015). This initial instrument was designed to be used with clients in treatment for SUD. A review of 25 articles focused on grief and substance abuse resulted in identifying 149 potential losses. Twenty-three themes were derived from the 149 identified losses and were placed in three categories (i.e., loss experiences prior to abusing substances, loss experiences while abusing substances, and loss experiences since entering recovery). Additional research identified eight items to add to the section on losses experienced while abusing substances (Blume & Marlatt, 2000; Dayton, 2005; Rotgers et al.,1996; Streifel & Servaty-Seib, 2006), resulting in 31 potential types of losses. An expert review was conducted by two substance abuse counselors who also had completed a course in grief and loss counseling. This review resulted in a modification for clarity and appropriateness of items for the population. Cronbach's alpha was .90 for the 31 items in this section of the instrument.

For the development of the Experience of Loss in Addictions Inventory-PSP version, the 31 items were independently rated as either appropriate or inappropriate to use with PSP by the authors of the original instrument. These reviewers had an 87% agreement on the items to include or exclude. This review resulted in 26 items being retained for this version of the instrument. Four items which were not in agreement were discussed and reworded to be appropriate to the population. Then, the items were reviewed by three clinicians working in the area of substance abuse to ensure appropriate survey wording as well as two at-large individuals to ensure clarity.

Depression Anxiety Stress Scales Inventory (DASS-21)

Studies confirm that experiencing large amounts of stress and the perceptions of high levels of stress are associated with poor mental and physical health (Epel et al., 2018). Until recently, stress has been often measured by unvalidated measures, and the models utilized were with assumptions that stress was too broad and nebulous a construct to accurately measure (Crosswell et al., 2020). Of utmost interest, psychological scientists failed to define stress, leading to the construct of stress as something more general and therefore placed under an umbrella of "catch all" definitions (Cohen et al., 2016). For this reason, in this study stresses are defined as exposures that potentially alter and disrupt daily psychological functioning and induce cognitive, emotional, and biological responses to these stressors (Crosswell et al., 2020). The DASS-21 consists of three 7-item self-report scales that measures depression, anxiety, and stress, and has a Cronbach's alpha of .89-.91 score for the stress sub-scale and a Cronbach's alpha of .93-.94 for the total inventory scale (Henry & Crawford, 2005). For purposes of this study, only the stress subscale was utilized.

Multidimensional Scale of Perceived Social Support Inventory (MSPSS)

Cao et al. (2015) defined social support as the availability of people with whom others can rely upon. More succinctly, this same author further asserted that it is the amount of assistance arrived at or received via interacting with one another. In other words, social support is multidimensional and directional, and depends upon socialization processes, personal values, and being cared for by others (Jalali-Farahani et al., 2018). Alternatively, DeBardi et al. (2016) asserted that social support is affected by type of support, specific source sizes, and direction. DeBardi et al. continued to assert that direction is related to an individual's perception regarding the satisfaction of their needs. In the case of the PSP, the type of support (ToS) refers to the presence of emotional, informational, instrumental, or valuing (Dambi et al., 21018).

According to De Bardi et al. (2016) emotional support refers to support in the sense of physical affection and care, and informational support entails research and/or provides education. These same researchers continued by defining instrumental support as offering concrete assistance or material goods and valuing support as providing feedback for self-assessment. Tomaka et al. (2006) further entailed support services as delivered by family members, partners, friends, colleagues, neighbors, and pets. In other words, support was viewed as coming from multiple sources, and a heterogenous network is linked to a better QOL (Gallardo-Peralta et al., 2018). Most importantly, social support acts as a protective factor for stressful life events and improves mental health, as well as mitigates low self-esteem, stress, and social isolation (Warner et al., 2019), each of which are prevalent among PSP.

Measuring social support is an important factor for better understanding one's quality of life. (Perez-Villalobos, et al., 2021). The MSPSS or the Multidimension Scale of Perceived Social Support is a 12-item inventory that is used to measure this construct and was originally designed to measure perceived social support of family (FA), friends (FR), and significant others (SO; Zimet, et al., 1988). The MSPSS is a quick application scale, is easy to follow and administer, free to use, and does not require a license. The MSPSS has a Cronbach's alpha of 0.858 to 0.941. Aside from the ease of the inventory administration, it is important to gather the perception of social support of PSP in order to better prepare clinicians in working with this population as part of comprehensive SUD treatment approach. Past literature highlights that treatment modalities focus primarily on the addict, and the PSP normally finds themselves in the treatment peripheral if considered at all, thus including PSP in treatment has shown to be effective (Selbekk et al., 2014). In other words, AOD abuse within a family unit create chronic stress; therefore, the need to measure the level of stress is an important aspect when examining

the QOL of PSP. In other words, Orford et al., (2005) asserted the effects of SUD on PSP is considered highly stressful. If not coped with properly, it may create a poor state of health and well-being. Horta et al, (2016) supported Orford and found that PSP felt powerless and unsure of how to act or respond in everyday life interactions. This is important because it highlights the unpreparedness of PSP in coping with SUD as well as the inability of professionals to help them due to lack of knowledge as well as lack of effort (Horta et al., 2016).

Family CAGE-AID Questionnaire Inventory

For the purposes of this study, the CAGE was used to screen the PSP and other support persons for substance abuse and/or dependence (Basu et al., 2016; Brown et al., 1995). CAGE is an acronym and stands for "C: have you ever tried to cut down on your drinking," "A: have others gotten annoyed about your drinking or using," "G: have you ever felt guilt about drinking/using," and "E: have you ever needed to drink to steady yourself?" The Family CAGE-AID Questionnaire (FCAQ) assesses for alcohol and other substance dependence (Basu et al., 2016). This simple inventory may be helpful when working with PSP because it assists in determining the magnitude of problems due to SUD; therefore, this screening helps in the prevention of related morbidity and mortality (Fleming & Manwell, 1999). The FCAGE-AID questionnaire is a brief and popular instrument with high test-retest reliability and correlates well with other screening instruments (Aertgeerts et al., 2004), with Cronback's Alpha coefficients of 0.84 to 0.89 (Frank et al., 1992). The FCAGE-AID was completed after the other instruments to prevent these questions from the influencing the responses to other inventories. Data interpretation for the FCAQ-AID was measured per the instrument design which asserts one or more positive responses to the FCAQ-AID is a positive screening for SUD (Brown & Rounds1995). This is significant because Fleming and Manwell (1999) purported that

recognition of AOD abusive using patterns, in early stages, requires less intervention that could be delivered as simply a brief counseling session. The PSP plays an important role in the lives of the family; therefore, utilization of the Family CAGE-AID was an appropriate inventory to utilize as a predictor for the PSP.

Marlowe-Crowne Social Desirability Scale

Within the field of research examination of social desirability is well documented and is utilized frequently (Maher, 1978). Specifically, the Marlowe-Crowne Social Desirability scale (MCSDS) is an adjunct study measure that effectively measures impact of social desirability on self-report measurement inventories for the primary purpose of investigative and descriptive research (Reynolds, 1982). The MCSDS is a valid predictor of relevance as some study participants misrepresent honest answers or what is coined "faking." Faking is defined as an intentional misrepresentation in self-report to attempt to obtain favor or attain desired outcome (Holden, 2007). In this study, the Marlowe-Crowne Social Desirability Scale, Short form C (Reynolds, 1982) measured social desirability or the tendency of study participants to respond in ways that make them appear favorable or more persuasive was utilized (Day-Vines et al., 2020). This inventory is a 10-item survey with a correlation of .80 and .90 between the short form and the long form; therefore, reliability for either form is strong (Strahan & Gerbasi, 1972). Low scorers are between 0 to 8 indicating respondents more willing than most to respond to tests truthfully, even though doing so may be met with some sense of social disapproval. In this study one person out of the 114 study participants

fell in the low range score matrix with a score of 8. Average scorers are between 9 to 19 and tend to show an average degree of concern for social desirability and is the domain that had 112 scorers of the total of 114. High scorers of 20 to 33 indicated a high concern for social approval

and tend to answer questions to avoid disapproval of people. Only one study participant scored in this range with a score of 20.

Research Design

The research design for this study was a non-experimental correlational survey design to explore the relationships between quality of life and the predictor variables of (a) number of losses, (b) personal substance use, (c) stress, and (d) social support received. To gather data, a survey consisting of items was administered to PSP participating in SUD family treatment at intensive outpatient treatment centers in North Carolina. The data was gathered to answer the below research questions regarding the QOL for PSP of those living with SUD as well factors which may be related to QOL.

Research Questions

This research is conducive to examining the overall quality of life for the PSP(s) of people living with a person diagnosed with SUD and was guided by two research questions:

> **Question 1.** What are the characteristics of primary support person(s) (PSP) of those in treatment for SUD as measured by overall quality of life?
>
> **Question 2.** What is the relationship between the quality of life and number of losses experienced by families, their personal substance use, levels of stress and perceived social support for PSP due to their loved one's SUD.

The first question provides descriptive information about the population being studied through examining mean scores of participants on each instrument. This information provides a description of the population which has not been studied extensively and helps provide context for the analysis. To determine the influence of the predictor variables on the dependent variable, a linear regression was utilized to measure a possible relationship among the variables (the

dependent variable and the independent variables). The statistical assumptions for a linear regression include linearity, independence, homoscedasticity, and normality (Casson et al., 2014); therefore, if the relationship between the dependent variable and the independent variables is not linear, the result of the analysis under-estimates or over-estimates the true relationship. Therefore, the first line of inquiry must be ensuring the following four assumptions of linear regression are met: (1) linear relationship exist between the independent variable X and the dependent variable, Y; (2) there is no correlation between consecutive residuals or rather they are independent; (3) homoscedasticity, or rather the residuals have a constant variance at every level of x; and (4) normality meaning the residuals of the model are distributed normally. Additional study analysis was conducted utilizing stepwise analysis. Because this was exploratory research, there was no existing theoretical basis for selecting the order of variable entry into the model. Stepwise regression provides a method of variable selection that determines the optimal selection of the independent variables and helps determine the best subset for the model... The results of the study measures are described in Chapter 4.

CHAPTER IV: RESULTS

The significance of this survey study was to gain further insight into how Quality of Life of PSP is related to loss, social support, stress, and personal substance use. This chapter begins with a description of the participants of this study as well as a discussion of the reliability of the instruments utilized. The subsequent third and fourth parts are inclusive of data screening as well as a correlational analysis of the variables utilized. This chapter will close with a section summary followed by an overall examination of the research findings in chapter five.

Description of Participants

This study utilized convenience sampling to recruit PSP attending a family day at the treatment center where their loved ones were receiving treatment for SUD. The primary investigator of this study was introduced to attending PSP and provided an explanation about the purpose of the study, the components making up the study, the average length of time survey participation would require, and the benefits of collecting experiences regarding their personal losses due to their loved one's SUD. The PI also explained the data collection process as well as survey data storage, utilization, and future data usage for the development and expansion of current and future treatment programs that would better support the needs of the PSP. The ultimate goals are to help treatment centers understand how to support PSPs and help improve their QOL.

Forty accredited residential and/or intensive outpatient treatment facility sites were contacted to participate in this survey study. Of this total, 12 of the 40 responded to the PI, and 5 of the 12 facilities (12%) agreed to participate in the QOL Study. A total of 148 eligible individuals met the criteria of being a PSP and attended the family day when the survey took place, and of the 148 attendees, 114 completed the survey.

Demographic data included 56.1% females (n= 64), 32.4% males (n= 48), 1.8% transgender and/or gender nonconforming (n=2), 0% self-describing (n=0), and 0% preferred to not answer (n=0). Of the sample, 3.5% identified as Hispanic/Latino (n=4), 72.2% Caucasian (n=83), 20.9% African American/Black (n=24), 0% Asian (n=0), 0.9% Pacific Islander (n=0), and 2.6% European (n=3). Identified sexual orientation of the survey population included 20% bisexual (n=23), 7% gay/lesbian (n=7), 73% heterosexual (n=83), and 1% transgender/nonconforming (n=1).

Table 4.1: *Personal Demographics Information, Totals, and Percentages*

Variable	Frequency	Percent
Gender		
Female	64	56.1%
Male	48	42.1%
Transgender/nonconforming	2	1.8%
Prefer to self-describe	0	0%
Prefer not to answer	0	0%
Totals:	114	100%
Race		
Hispanic/Latino	4	3.5%
Caucasian	82	75.7%
African American/Black	24	20.9%
Asian	1	.9%
Pacific Islander	00	0%
European	03	2.6%
Totals:	114	100%

Sexual Orientation

Bisexual	23	20.2%
Gay/Lesbian	07	6.1%
Heterosexual	83	72.8%
Transgender/nonconforming	1	0.9%
Totals:	114	100%

In addition to the PSP demographic information provided above, additional information was collected. PSP supported an average of 1.3 individuals living with SUD. The average number of times the PSP's loved one had attended treatment for SUD was 1.9, and the total number of PSPs who have also attended treatment for SUD was 34. The above continuous variables are displayed in the following tables.

Table 4.2: *Number of those living with SUD that PSP supports:*

Variable	*# s Supported by a PSP*	*Percentage of Total*
Did not answer	8	7.0%
0	16	14.1%
1	56	49.1%
2	27	23.7%
3	04	3.5%
4	02	1.8%
5+	01	0.90%
Totals:	114	100.00%

Additional demographic information included in Table 4.3 is the number of times a loved one has attended any type of treatment for SUD, and table 4.4 is the number of PSP who have attended SUD treatment.

Table 4.3: *Number of Times Loved One in Treatment*

Variable: Times in Treatment	*# of Respondents*	*Percentage of Total*
No Response	7	6.1%
0	23	20.2%
1	21	18.4%
2	25	21.9%
3	25	21.9%
4	11	9.6%
5	1	0.94%
6+	1	0.94%
Totals:	114	100.00%

Table 4.4: Number of *PSP who have been in treatment for SUD:*

Response	Number of PSPs	Percent of PSPs in treatment
Did not Answer	3	2.6%
NO	77	67.5%
YES	34	29.8%
Totals:	114	100.00%

These descriptive statistics indicate that the population attending family day is predominately women with most attendees being Caucasian. For many attendees, their loved one has been in treatment more than one time. Finally, treatment for SUD is present in a substantial proportion of the PSP.

Reliability of Instruments

In Table 4.5, the alpha coefficients, number of items, means, standard deviations, and ranges for the WHO Quality of Life Brief Inventory (WHOQOLBRF), the Losses Related to SUD Inventory (LOSSES), the CAGE Inventory (CAGE), the Multidimensional Scale of Perceived Social Support Inventory, (MSPSS), and the Stress subscale of the Depression Anxiety Stress Scales Inventory (DASS) are shown. Cronbach's alpha internal consistency measures

were used to estimate the reliability of the WHOQOL-BRF, the LOSS, the CAGE, the MSPSS, and the DASS inventories.

Table 4.5: *Cronbach's alpha, number of items, means, standard deviations, and range*

Instrument	Cronbach'α	Items	M	SD	Range
WHO	.95	24	72.81	18.463	24-120
LOSS	.96	26	14.96	8.497	0-26
CAGE	.80	4	2.27	1.495	0-4
SUPPORT	.97	12	52.41	20.353	12-84
STRESS	.97	7	27.69	16.15	0-21

For this study the results of the Cronbach's alpha for the WHOQOL-BRF was .95, LOSS was .96, CAGE was .80, SUPPORT was .97, and Stress was .97 indicating these assessments all had high levels of internal consistency. The WHOQOL-BRF scale consists of 24 items on a 5-point Likert scale. Scores in this study ranged from 1 (not at all) to 5 (an extreme amount). Higher scores indicate greater levels of Quality of Life. The LOSS measure consists of 26 items answered either yes or no. Scores in this study ranged from 0 to 26. A higher score indicates a higher number of personal losses related to their loved one's addiction. The CAGE inventory consists of four items answered either yes or no. One yes answer indicates a possible problem with substance use. The SUPPORT scale, a 12-item inventory, utilizes a 7-point scoring range. Scoring in this study ranges from 1 (very strongly disagree) to 7 (very strongly agree). A higher score indicates a greater perception of social support. The STRESS inventory is a 7-item scale and utilizes a point range scoring structure 0 (did not apply to me at all) to a 3 (applied to me

very much of the time, with a higher score indicative of a greater presence of stress in the respondents' everyday function. To further safeguard survey reliability, this researcher performed a question audit to ensure avoidance of question overlapping between each inventory compared to the WHOQOL. In this discovery process, only 8% of the total survey questions had a remote correlation of an overlap between WHOQOL questions and the questions listed in each of the other utilized surveys. Table 4.5A lists each inventory, the total number of questions per inventory, and the question number of any possible duplication of questions based on word syntax or common word usage.

Table 4.5A: Inventory word and syntax overlap per inventory

WHO Quality of Life (QOL)	**Loss**	**Stress**	**CAGE**	**Social Support**	**5 total Inventories**
Questions Possible Overlap Q	Questions 1,7,10,11,13,19	Questions 0	Questions 0	Questions 20, 22	TTL # of Surveys 5
	6/26=23%	0/7=0%	0/4= 0%	2/12=16%	73 total survey questions
Survey 8(73)	8.22%	0.00%	0.00%	2.7%	8/73= 11% TTL with possible overlap

Data Screening

The normality of the residuals was examined. The observed standardized residuals appeared normally distributed as evidenced by inspection of the histogram and normal probability plot (P-P). Missing values were identified with three individuals having one missing value in the QOL-BREFF instrument. Instructions for the instrument included taking the mean of the remaining items in the subscale and replacing the missing items with that number. There were two individuals with one missing value in the stress measure and two individuals with one missing value in the social support scale. These values were replaced using the same procedure. Data were screened and checked for assumptions prior to running the multiple linear regression analysis. The variation inflation factors (VIFs) for the predictor variables were all below the cutoff value of 10.0, suggesting multicollinearity was not an issue.

Pearson Correlations

Correlational coefficients were calculated utilizing the Pearson correlation coefficient. This scale is utilized to measure the linear relationship between two variables. In this study, the independent variables of loss, perceived social support, personal substance abuse, and stress were examined to find the relationships with the outcome variable of QOL. As expected, the predictor variables of loss, personal substance use, and stress were negatively correlated with PSPs overall QOL; however, the outcome of the variable perceived social support was highly associated with a better QOL. This suggests that higher levels of perceived support are associated with higher QOL and a decrease in perceived social support is accompanied by a decrease in the PSP's QOL. Statistically positive correlations existed between perceived social support and QOL ($r=.868$, $p<.001$); however, losses ($r=-.734$, $p<.001$), personal substance use ($-.402$, $p<.001$), and stress ($r=.-.488$, $p<.001$) were statistically significant factors when correlated

with QOL but were not as strongly related as was social support. The results of the Pearson correlations are shown in Table 4.6.

Table 4.6: *Pearson correlation matrix between predictors and outcome variable*

QOL	QOL	CAGE	Stress	Support	Loss
QOL	1.00	-.402**	-.488**	.868*	-.734**
CAGE	-.402**	1.00	.286**	-.337**	.427**
Stress	-488.	.286**	1.00	-.400**	.400**
Support	.868**	-.337**	-.400**	1.00	-.661**
Loss	-.734**	.427**	.400**	-.661**	1.00

*Indicates significant correlation at p<.05. ** Indicates significant correlation at p<.001

Multiple Regression Analysis

A multiple linear regression analysis utilizing SPSS was utilized to determine if perceived social support, losses, personal substance use, and stress predicted the QOL of the PSP. The analysis revealed that support ($r^2 = .75$) was a positive predictor of a higher QOL and accounted for explaining 75% of the variance of QOL. When loss was added as an independent variable, an additional 4.4% of the variance was explained while stress explained an additional 1.2% of QOL. For both loss and stress, higher levels predicted a lower QOL. When added to the model, personal substance use did not make any added contribution. Together, the independent variables of social support, loss, and stress explained 81% of the variance in QOL. CAGE did

not contribute to the multiple regression analysis which may be related to lack of variability in the responses to this instrument.

Table 4.7: *Multiple regression analysis*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.868[a]	.753	.751	9.33564
2	.894[b]	.799	.795	8.45949
3	.901[c]	.812	.807	8.21697

a. Predictors: (Constant), Support

b. Predictors: (Constant), Support, Loss

c. Predictors: (Constant), Support, Loss, Stress

d. Dependent Variable: QOL total

The above multiple regression analysis table provides strong insight into the influence of multiple independent variables. This is also confirmed by observation of the beta coefficients as the use of beta coefficients provides a direct comparison between independent variables to determine which IV has the most influence on the DV. In this study the beta coefficients were support (.868), loss (-.286), and stress (-.127) indicating support having the dominant influence on the DV QOL.

CHAPTER V: DISCUSSION

The purpose of this study was to examine the dependent variable of QOL in relation to the independent variables of number of losses incurred due to their loved one's substance abuse, the level of social support from others the PSP perceives, the impact of the PSP's own substance use, and the perceived stress incurred by the PSP due to supporting someone with SUD This chapter provides an overview of the study as well as a discussion of the findings and their implications. The contributions of the study, limitations of the study, implications of the findings, and recommendations for future research will conclude the chapter.

Overview of the Study

Counselors, psychotherapist, health care providers, treatment centers, and primary support persons around the world interact with and support people living with SUD daily. More importantly, SUD respects neither time nor geographic boundaries and acutely impacts QOL for those most closely involved with those substance abusive behaviors. Due to the destructive behaviors of the person with SUD, the impact of those behaviors feeds circular causality where the actions of one family member produces responses from others in the same family unit (Cudak & Pedagogika, 2015). Steinglass (2009) purported those consequences of SUD negatively impact the PSP equally to the influences on the addicted person and therefore according to Miller et al. (2002), PSP involvement is essential in overall treatment success. In other words, family stress, conflict, and AOD among other family members are contributory to relapse (Fals-Stewart et al., 2009) and to other behavioral consequences.

Family breakdown is purported to decrease QOL as well as compromise family life order and psychosocial adjustments (Gilchrist & Taylor, 2009). Frye et al. (2008) asserted that harms due to SUD on the PSP have adverse effects on the support-giving role of the PSP and

furthermore undermine their loved one's recovery. Therefore, a healthier support environment provides stronger and longer lasting recovery efforts and concurrently improves family functioning, reduces relapse, and improves QOL (Gilchrist & Taylor, 2009). Although PSP research is limited, in this study the independent variables of perceived social support, loss, substance use, and stress proved to be significantly correlated to the dependent variable Quality of Life.

Research Question 1: Examination of Descriptive Data on PSP

Little research has been conducted on those who support a person attending treatment for SUD. This study offers insight into those who are affected by the SUD of a loved one. In this sample, the majority of PSP were females who may encounter greater financial and safety losses than males who are in the support role, and research has shown that female partners of a person who abuses substances have an increased risk of developing their own SUD (Dawson, et al., 2007). Treatment programs need to be mindful of how female partners may face stressors around living with a person with SUD. Providing additional mental health services to support women who have had to take on additional family roles could be beneficial to both the partner and the person in treatment.

In this study, the descriptive data also indicated that the majority of individuals attending family days were Caucasian while research had shown SUD affects all races (Keyes, et al., 2015). Further investigation into what barriers may exist for support givers from other racial backgrounds is needed and is an important component to be researched. Given that many counselors in treatment programs are White, the question arises of how to create a welcoming atmosphere for those who are from other racial or cultural backgrounds.

This data shows that a substantial number of PSP also have issues with substance use and may also have been in treatment themselves. Several written comments in response to the question of receiving treatment themselves suggested that even more participants needed to enter treatments. For example, one participant in this study asserted "I need to be" (in treatment) instead of choosing the yes/no answers the survey question provided. The questions, "Have you ever been in treatment for substance abuse" revealed several respondents answering with prompts suggesting recognition of the need to attend SUD treatment. This is a topic that needs to be addressed with those who attend family days. The family member in treatment needs the support of people who can support their recovery. When support people are dealing with their own substance use, treatment can be adversely affected. Leaving a treatment program only to return to a family setting where others are abusing substances can be detrimental to continued progress in terms of on-going sobriety and overall recovery.

Research Question 2: Multiple Regression Analysis

Given the strong correlation of each independent variable, addressing any of these areas with the PSP may result in improved QOL for those supporting someone in treatment for SUD. Each of the individual correlations reflected the researcher's expectations. QOL increased as the number of losses decreased and while treatment cannot eliminate losses incurred by the PSP, this specific finding indicates that helping families and PSP understand the overall impact of the losses and teaching the PSP how to better approach and manage them could be valuable in helping to establish a higher QOL. The same is true of the variables stress and the personal use of AOD by the PSP. In this study, the findings suggested that as these measures increased the corresponding QOL decreased. It is important to note that these two variables are items that the PSP can take action to minimize and reduce their impact. Stress management techniques can be

taught as part of the PSP family treatment curriculum. Furthermore, assisting the PSP in understanding their own substance (ab)use could be an important aspect of creating a family atmosphere where the person in treatment will continue with their own recovery efforts. In other words, "adaptive coping is more likely to benefit affected family members, as attempts are made to reduce the impact of the relative's substance misuse" (Zuckerman & Gagne, 2003, p. 101).

The strongest finding in this study is related to the variable/role of social support in QOL. Other research has recognized the importance of support from external sources including 12-Step themed approaches such as Al-Anon, family days at treatment centers, and the expansion of social groups of people living with similar problems (Donovan, et al., 2016). However, this research indicates that direct support for the PSP had the strongest influence on QOL accounting for 75% of the variance. Treatment programs can benefit from examining the support the PSP receives outside of family days. These findings stress the importance of support during the treatment experience with the treatment center. Examples of expanding support may include seminars on single parenting, budgeting, grief and loss issues, substance use and abuse, parenting skills, anger management, assertive communications skills, and the role substance may play within a culture. Health care researchers have identified integrating knowledge into current treatment approaches to offer more meaningful and successful treatment outcomes (Legha & Novins, 2012).

Limitations

This study took place in one geographic location which limits the generalizability of the findings to similar locations. While there was some diversity in terms of race and gender, utilizing a wider geographic area would allow greater ability to generalize the findings. The treatment centers in this study were located in a metropolitan area which may differ from rural locations. An

unexpected barrier occurred due to the lack of support from treatment centers to participate in the study. Initial contacts were made to both announce the study and secure agency participating in six states. Inquiry was made to both residential and intensive outpatient facilities; however, concern regarding confidentiality and Covid were reasons provided for not participating in this study. The centers which chose not to participate may differ from those which had interest in learning about those who attend family days and may need additional support.

Social desirability or the desire to look good to others could be an issue with a population which may be concerned about how others view them. For this reason, the Marlow-Crowne Social Desirability Inventory (M-C Form A) was utilized by all survey participants and all but two respondents scored in the average category of 9 to 19, indicating an average degree of concern for social desirability. One participant scored low range of 0-8 indicating a greater willingness to truthfully answer the inventory and only one participant scored high range of 20-23, indicating a high probability to answer questions to avoid disapproval of people who may read their responses. The data for this survey was obtained and collected via self-report methods; therefore, both self-reporting data collection and the social desirability inventory are also considered limitations of this study.

Discussion and Conclusions

The discussion section of this chapter focuses on the descriptive statistics as well as the findings. The predictor variables of support, loss, substance u(abuse), and stress suggest these variables have a direct influence on the outcome variable quality of life, and these findings are new to the literature. This is important because QOL represents a sense of belonging, one of the most basic and important developmental aspects of human development. But more notably, a recent study conducted in Kerman, Iran revealed the QOL for PSP's significantly affected

physical health, mental and social health, as well as financial aspects (Navabi et al., 2017). These findings combined with this study suggest further areas of opportunities for research and SUD treatment development.

Pearson Correlation Coefficients

An analysis utilizing the Pearson Correlation Coefficients measurement was conducted. Perceived support, losses, personal substance abuse, and stress as well as QOL were the variables measured. Social support was positively correlated with a higher QOL and losses, substance abuse, and stress all highlighted a negative correlation. Although significant correlations were found for each of the independent variables and QOL, the most conclusive insight from this measurement was the relationship between support and QOL. The importance of this finding offers insight into treatment considerations for PSP which are not being addressed regularly in the United States.

Multiple Linear Regression

Measurements obtained through the multiple linear regression indicated higher social support as the most significant correlation to the QOL of the PSP. While this QOL variable was selected because of previous research which indicated social support as important (Navabi, et al. 2017), the strength of its contribution to QOL was unexpected. The fact that three of the independent variables each had substantial correlations with QOL provides treatment centers with a number of avenues to peruse with PSP as part of a comprehensive treatment program.

Contributions and Implications of the Study

The literature regarding the PSP and QOL due to their loved one's SUD is quite limited in the United Sates. However, most of the research regarding PSP and QOL has been conducted by researchers in India, Brazil, Finland, Mexico, Iceland, the Netherlands, Spain, England, Turkey,

and Iran. Therefore, complete information regarding effective treatment protocols is not as robust regarding working with PSP and the effects the disease inflicts on QOL in the United States

SUD is a disease with biological, psychological, and sociological dimensions and is a chronic and progressive disease with high fiscal and social costs (Olafsdottir, et al., 2018). Strong links between the disruption of family engagements due to a loved one's SUD presents in PSP's mental recall and processing, via psychosocial interactions and withdrawal, stress as well as personal losses (Blum & Sherman, 2010). Further research evidence is from a study conducted by the National Epidemiologic Society on Alcohol and Related Conditions. In this study, researchers investigated the effects experienced by a single member of a family unit where a loved one lives with SUD and found higher levels of anger, depression, and stress experienced by the PDP. Furthermore, this same study found that distress was correlated with the loved one's substance use in general rather than specifically tied to the amount consumed (Rognmo et al., 2013). That research supports this study regarding the impact of substances directly on the PSP's QOL and specifically identified social support as the key area of focus for expansion and development within treatment centers and treatment curriculum approaches.

Additionally, this study was evaluated and conducted with little existing literature regarding the PSP and the effects SUD has on the PSP's immediate QOL. Though the independent variables of losses, substance use, and stress negatively correlates with QOL, the predictor of a higher level of social support also correlates with a higher QOL and a lower amount of social support correlates to a lower QOL for a PSP. This is important data to examine because it provides further insight into ways of approaching SUD treatment for treatment centers to consider when designing family day programs. This study adds to the present literature by providing empirical information regarding new considerations for treatment approaches for

SUD, and this study's findings suggest an expansion of treatment services and programs to not just the person living with SUD but also the inclusion of PSP's.

Recommendations and Future Research

"Recovery is multidimensional and extends far beyond abstinence. It's developing new strategies and skills for sober living" (Garner et al., 2013).

Based on the rates of relapse among those with SUD, treatment programs can benefit from finding ways to strengthen support for both the person in treatment and for their support system. Yet few programs have a comprehensive treatment approach for PSP. Further research is needed along with the development of more inclusive treatment approaches to serve not just the person living with SUD, but also those that love and support them. According to this study, social support highly correlates with a higher QOL for the PSP; therefore, it is important that we reexamine the way in which and to whom we extend treatment services. Research asserts that the total environment serves as causation to the many factors that lead to SUD (Mason, et al., 2012), Further concern is voiced by Johnson and Stone (2009) who detailed the extent to which living in an environment as a child where SUD exists is correlated with increased risk of substance abuse and clinical depression as an adult. Therefore, approaching treatment in a holistic approach includes not just the client with SUD but also the entire family unit. This treatment focus allows the opportunity of skill development for both the substance user to get sober while also offering a parallel skill development for those loved ones directly and negatively touched by SUD. A 2008 study in Finland produced data which strongly suggested that adverse circumstances of upbringing had consequential effects on their overall life quality and highly contributed to depression, social inactivity, and subsequent substance abuse (Kestilia et al., 2008). Addressing these pathologies parallel to their loved one's treatment experience increases the focus of skill development for the entire unit and thus could elevate successful recovery time for the person

with SUD. According to Navabi, et al. (2017), the development of an instrument specifically measuring an addicted person's family QOL would be of great assistance to further treatment delivery system as well as encourage further research. This study is a move in this suggested direction. Analyzing losses, substance abuse of PSPs stress, and social support have contributed to a clearer understanding of new approaches to addiction treatment and to identifying social support as the biggest factor in a higher quality of life for the those that support people who live with addiction. Based on the results of this study, treatment centers can support PSPs by focusing on skill development in processing grief and loss, effective communication skills, stress management, anger management as well as trauma processing as needed areas of support and development. Additionally, introducing substance abuse education, marriage and family therapy and parenting skill development are also important areas of focus in advancing a more thorough treatment approach and improving overall family QOL through offering a family centered treatment approach for SUD. Ultimately, research needs to examine how improvement of QOL in PSP is related to treatment outcome for the person dealing with SUD.

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APPENDIX I: INFORMED CONSENT

Appendix I

Informed Consent Form

"Examining the Relationship of Quality-Of-Life Experienced by Family Members Affected by A Loved One's Substance Use Disorder as Related to Personal Losses, Substance Use, Level of Stress, and Perceived Social Support

Project Purpose:
You are invited to participate in a research study investigating how the quality of life of a primary support person (spouse, partner, brother, sister, etc.) is affected by a loved one's substance use disorder. Specifically, this study looks at perceived personal losses, substance use, levels of stress and perceived social support. Findings from this study are important and will help expand a more comprehensive impact of substance abuse as well as to improve substance abuse treatment of family and friends to those living with this disorder.

Investigator
My name is Derrick Johnson, and I am a Licensed Clinical Addiction Specialist, a Licensed Clinical Mental Health Counselor, and a Doctoral Candidate in the Counselor Education and Supervision Ph.D. program at The University of North Carolina Charlotte. I am joined in this study by Dr. Susan Furr, Professor of Counseling at The University of North Carolina at Charlotte.

Eligibility
You are invited to participate if you meet the following inclusion criteria: (a) you are 18 years of age or older and (b) currently have a loved one participating in treatment at an intensive outpatient or residential facility program or your loved one is undergoing individual counseling for a substance use disorder.

Description of Participation
If you decide to participate in this study, you will take part in the following activities:
(a). complete a questionnaire highlighting your quality of life as primary area of life as impacted by a loved one's substance use disorder. The questionnaire will take approximately 10 minutes to complete. You will not be asked to provide any personal identifying information. This will be a one-time participation and there will not be any follow-up required.

Risks and Benefits

Although there may be no immediate benefits to participants of this study, your personal contribution may provide valuable insight to inform future addiction treatment programs. Risks may include an emotional and/or psychological reaction to answering or remembering sensitive questions/events pertaining to prior losses perceived or incurred as related to involvement with the loved one and the substance use disorder.

Volunteer Statement

You are a volunteer. The decision to participate in this study is completely up to you. If you decide to participate in this study, you may stop at any point in the survey. You will not be treated differently if decide to not participate in the study or if you stop once you have started.

Confidentiality

You will not be asked to provide any personal identifying information. Your responses will be collected and placed in an envelope, sealed, and will remain the study investigator, Derrick Johnson, and placed into a locked file cabinet. Numeric data from the study will be analyzed using statistical software via password protected University of North Carolina at Charlotte servers.

UNC Charlotte wants to make sure that you are treated in a fair and respectful manner. Contact the Office of Research Compliance at 704-687-1871 or uncc-irb@uncc.edu if you have questions about how you are treated as a study participant. If you have any questions about the actual project or study, please contact Dr. Susan Furr, Professor, UNC Charlotte Department of Counseling at sfurr@uncc.edu.

Thank you for your time and consideration.

W. Derrick Johnson
PhD Candidate, Counselor Education and Supervision
The University of North Carolina Charlotte

Professor
Counselor Education and Supervision
The University of North Carolina Charlotte

APPENDIX II: RECRUITMENT SCRIPT FOR IN-PERSON STUDY

UNC CHARLOTTE
CATO COLLEGE *of* EDUCATION

Recruitment Script for
Investigator Initiated In-person Contact

"Examining the Quality-of-Life Experienced by Family Members Affected by a Loved One's Substance Use Disorder as Related to Personal Losses, Substance Use, Level of Stress, and Perceived Social Support."

Hi, if I may please introduce myself: My name is _____.

I am assisting in a research project being conducted through the University of North Carolina Charlotte Department of Counseling. This study is specifically about the impact of substance abuse on families. I'm approaching you to see if you'd be willing to participate in this study. Please note, this study is not part of your loved one's treatment services. There is nothing in particular about you personally that made me ask you to participate. We are approaching every family or support person of someone attending outpatient or in-patient treatment for substance use disorder at this facility. This research is separate from the IOP treatment your loved one is receiving at this intensive outpatient treatment center and whether you decide to participate in the research will not affect the care your loved one receives.

Again, I am approaching you because we are looking for support people at least 18 years of age who are impacted by or take care of someone receiving intensive outpatient care for substance

use disorder. This research is totally separate from the care your loved one is receiving at this treatment facility and whether you decide to hear more about the research will not affect his/her care.

If you would be interested in being part of this research study, I will be handing out the survey immediately after the completion of your family day. The survey will take approximately 5 to 10 minutes to complete and does not require any personal sharing, but rather is formatted for you to choose: Very poor, poor, neither poor nor good, good, or very good as responses. The results of this study will be viewed only by the two primary researchers of the counseling department of the University of North Carolina Charlotte and will be used to further understand impact of substances on families and will assist in developing better informed treatment programs for families of substance abusers.

Thank you for your time.

APPENDIX III: LETTER OF PERMISSION

July 31, 2023

Mr. Derrick Johnson
UNC Charlotte Counseling Department
Charlotte, NC

Derrick,

I am happy to provide you with a letter of endorsement to conduct your research survey study during the family days at NorthStar Clinical Services. As an agency, we are happy to be able to partner with you and your university to advance the field of knowledge and treatment for those that live with substance abuse as well as their family members.

Let me know if I can be of help in any way-

Thanks,

Thomas Leahy
Managing Partner
NorthStar Clinical Services
322 Lamar Avenue, #220
Charlotte, NC 28204

APPENDIX IV: WHO QUALITY-OF-LIFE BREF INVENTORY

Instructions:

This assessment asks how you feel about your quality of life, health, and other areas of your life. Please answer all the questions. If you are unsure about which response to give to a question, please choose the one that appears most appropriate. This can often be your first response.

Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life in the **last two weeks**.

Do you get the kind of support from others that you need?

1 Not at all
2 Slightly
3 Moderately
4 Very
5 Completely

You would circle the number 4 if in the last two weeks you got a great deal of support from others.
If you did not get any of the support from others that you needed in the last two weeks you would circle 1.

Thank you for your help.

Please read the question, assess your feelings, for the last two weeks, and circle the number on the scale for each question that gives the best answer for you.

		Very poor	Poor	Neither poor nor good	Good	Very good
1	How would you rate your quality of life?	1	2	3	4	5

		Very dissatisfied	Fairly Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
2	How satisfied are you with your health?	1	2	3	4	5

The following questions ask about how much you have experienced certain things in the **last two weeks**.

		Not at all	A Small amount	A Moderate amount	A great deal	An Extreme amount
3	To what extent do you feel that physical pain prevents you from doing what you need to do?	1	2	3	4	5
4	How much do you need any medical treatment to function in your daily life?	1	2	3	4	5
5	How much do you enjoy life?	1	2	3	4	5
6	To what extent do you feel your life to be meaningful?	1	2	3	4	5

		Not at all	Slightly	Moderately	Very	Extremely
7	How well are you able to concentrate?	1	2	3	4	5
8	How safe do you feel in your daily life?	1	2	3	4	5
9	How healthy is your physical environment?	1	2	3	4	5

		Not at all	Slightly	Somewhat	To a great extent	Completely
10	Do you have enough energy for everyday life?	1	2	3	4	5
11	Are you able to accept your bodily appearance?	1	2	3	4	5
12	Have you enough money to meet your needs?	1	2	3	4	5
13	How available to you is the information you need in your daily life?	1	2	3	4	5
14	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5

		Not at all	Slightly	Moderately	Very	Extremely
15	How well are you able to get around physically?	1	2	3	4	5

The following questions ask you to say how good or satisfied you have felt about various aspects of your life over the over the **last two weeks**.

		Very Dissatisfied	Fairly Dissatisfied	Neither Satisfied nor dissatisfied	Satisfied	Very satisfied
16	How satisfied are you with your sleep?	1	2	3	4	5
17	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
18	How satisfied are you with your capacity for work	1	2	3	4	5
19	How satisfied are you with yourself?	1	2	3	4	5
20	How satisfied are you with your personal relationships?	1	2	3	4	5
21	How satisfied are you with your sex life?	1	2	3	4	5
22	How satisfied are you with the support you get from your friends?	1	2	3	4	5

23	How satisfied are you with the conditions of your living place?	1	2	3	4	5
24	How satisfied are you with your access to health services?	1	2	3	4	5
25	How satisfied are you with your transport?	1	2	3	4	5
26	How often do you have negative feelings such as blue mood, despair, anxiety, or depression?	1	2	3	4	5

APPENDIX V: LOSSES EXPERIENCED BECAUSE OF SOMEONE ABUSING SUBSTANCES INVENTORY

Losses Experienced Because of Someone Abusing Substances

Loss is a part of life for everyone. For those of you who have a significant person in your life who abuses substances, you may have experienced losses as a result of their substance use. Below is a list of possible losses you may have experienced as a result of your loved one's substance use. Please check "yes" to each of the losses you have encountered and check "no" to those losses you have not encountered. All answers for confidential and anonymous.

Loss Experience	Yes	No
1. Divorce or separation		
2. Physical abuse		
3. Sexual abuse		
4. Verbal abuse		
5. Witnessed violence		
6. Self-esteem damaged		
7. Loss of support from others		
8. Child(ren) lost through divorce or separation		
9. Marriage ended		
10. Romantic relationship ended		
11. Friendship(s) ended		
12. You lost your independence		
13. Social life suffered		
14. You lost your job		
15. Loss of material possessions		
16. Decrease in status		
17. Experienced physical health problems		
18. Loss of goal or dream		
19. Financial problems		
20. Homelessness		

21. Memory problems		
22. Loss of ability to think clearly and logically		
23. Spiritual connections lost or damaged		
24. No longer have meaning in life		
25. You were a victim of crime		
26. Your significant person committed crime		

APPENDIX VI: MULTIDIMENSIONAL SCALE OF PERCEIVED SOCIAL SUPPORT

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the "1" if you Very Strongly Disagree
Circle the "2" if you Strongly Disagree
Circle the "3" if you Mildly Disagree
Circle the "4" if you are Neutral
Circle the "5" if you Mildly Agree
Circle the "6" if you Strongly Agree
Circle the "7" if you Very Strongly Agree

1. There is a special person who is around when I am in need.	1 2 3 4 5 6 7
2. There is a special person with whom I can share joys and sorrows.	1 2 3 4 5 6 7
3. My family really tries to help me.	1 2 3 4 5 6 7
4. I get the emotional help & support I need from my family.	1 2 3 4 5 6 7
5. I have a special person who is a real source of comfort to me.	1 2 3 4 5 6 7
6. My friends really try to help me.	1 2 3 4 5 6 7
7. I can count on my friends when things go wrong.	1 2 3 4 5 6 7
8. I can talk about my problems with my family.	1 2 3 4 5 6 7
9. I have friends with whom I can share my joys and sorrows.	1 2 3 4 5 6 7
10. There is a special person in my life who cares about my feelings.	1 2 3 4 5 6 7
11. My family is willing to help me make decisions.	1 2 3 4 5 6 7
12. I can talk about my problems with my friends.	1 2 3 4 5 6 7

APPENDIX VII: DEPRESSION ANXIETY STRESS SCALES INVENTORY (DASS-21)

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.
The rating scale is as follows:

0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me to a considerable degree or a good part of time
3 Applied to me very much or most of the time

1 (s)	I found it hard to wind down	0	1	2	3
2 (a)	I was aware of dryness of my mouth	0	1	2	3
3 (d)	I couldn't seem to experience any positive feeling at all	0	1	2	3
4 (a)	I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
5 (d)	I found it difficult to work up the initiative to do things	0	1	2	3
6 (s)	I tended to over-react to situations	0	1	2	3
7 (a)	I experienced trembling (e.g. in the hands)	0	1	2	3
8 (s)	I felt that I was using a lot of nervous energy	0	1	2	3

9 (a)	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
10 (d)	I felt that I had nothing to look forward to	0	1	2	3
11 (s)	I found myself getting agitated	0	1	2	3
12 (s)	I found it difficult to relax	0	1	2	3
13 (d)	I felt down-hearted and blue	0	1	2	3
14 (s)	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
15 (a)	I felt I was close to panic	0	1	2	3
16 (d)	I was unable to become enthusiastic about anything	0	1	2	3
17 (d)	I felt I wasn't worth much as a person	0	1	2	3
18 (s)	I felt that I was rather touchy	0	1	2	3
19 (a)	I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)	0	1	2	3
20 (a)	I felt scared without any good reason	0	1	2	3

21 (d)	I felt that life was meaningless	0	1	2	3

APPENDIX VIII: CAGE-AID SUBSTANCE ABUSE SCREENING TOOL

The CAGE-AID substance abuse screening tool was adapted from the CAGE alcohol assessment tool to include questions about drug use.

Instructions: Please circle either yes or no to the right of each of the four questions below. Each question will have one answer.

CAGE-AID Substance Abuse Screening Tool

C	Have you ever felt the need to cut down on your drinking or drug use?	Yes	No
A	Have people annoyed you by criticizing your drinking or drug use?	Yes	No
G	Have you ever felt guilty about drinking or drug use?	Yes	No
E	Have you ever felt you needed a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover (Eye-Opener)?	Yes	No

The CAGE-AID screening tool was adapted from the CAGE alcohol assessment tool to include questions about drug use. The target population for the CAGE-AID is both adults and adolescents and can be administered by patient interview or self-report. These tools are not used to diagnose diseases, but only to indicate whether a problem might exist.

When thinking about drug use, include illegal drug use and the use of prescription drugs other than as prescribed.

APPENDIX IX: MARLOWE-CROWNE SOCIAL DESIRABILITY SCALE (M-C FORM A)

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally.

TRUE(T) FALSE(F)

1. It is sometimes hard for me to go on with my work if I am not encouraged. T F
2. I sometimes feel resentful when I don't get my way. T F
3. No matter who I am talking to, I am always a good listener. T F
4. There have been occasions when I took advantage of someone. T F
5. I'm always willing to admit it when I make a mistake. T F
6. I sometimes try to get even rather than forgive and forget. T F
7. I am always courteous, even to people who are disagreeable. T F
8. I have never been irked when people expressed ideas very different from my own. T F
9. There have been times when I was quite jealous of the good fortune of others. T F
10. I am sometimes irritated by people who ask favors of me. T F
11. I have never deliberately said something that hurt someone's feelings. T F

APPENDIX X

Survey Participant Demographics

Age: _____

Gender:
Female (Cisgender female) _____
Male (Cisgender male) _____
Transgender/Gender Nonconforming ____
Prefer to self-describe _____
Prefer not to answer _____

Which of the following best identifies your sexual orientation?

Bisexual: _____ Gay or Lesbian _____ Heterosexual _____
Transgender/Gender Nonconforming _____

What is your race/ethnicity?
American Indian or Alaska Native _____
Asian _____
Black or African American _____
Multiracial _____
Hispanic or Latino _____
Native Hawaiian or Pacific Islander _____
White/Caucasian _____
Other _____

What is your relationship to the person in treatment? (Please check one)
I am the spouse/partner of the person in treatment _____
I am the parent of the person in treatment_____
My parent is the person in treatment _____
I am a friend of the person in treatment _____

How many individuals living with addiction do you support? _____

Including the current treatment, how many times has the person you support here been in treatment? _____

Have you ever received treatment for a mental health issue? _____

Have you ever received treatment for substance abuse? _____

Thank you for your participation! Have a wonderful day.