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ABSTRACT

CHOICE OF GOD/HIGHER POWER, PERCEPTIONS OF GOD/HIGHER POWER, RELIGIOUS BELIEFS AND BEHAVIORS, AND SOCIAL SUPPORT AS PREDICTORS OF LENGTH OF SOBRIETY, SATISFACTION WITH LIFE, AND QUALITY OF LIFE AMONG PEOPLE RECOVERING FROM ALCOHOL ADDICTIONS IN THREE MIDWESTERN STATES

by

Carlton Martin

Chair: Dr. Elvin Gabriel

ABSTRACT OF GRADUATE STUDENT RESEACH

Dissertation

Andrews University

School of Education

Title: CHOICE OF GOD/HIGHER POWER, PERCEPTIONS OF GOD/HIGHER POWER, RELIGIOUS BELIEFS AND BEHAVIORS, AND SOCIAL SUPPORT AS PREDICTORS OF LENGTH OF SOBRIETY, SATISFACTION WITH LIFE, AND QUALITY OF LIFE AMONG PEOPLE RECOVERING FROM ALCOHOL ADDICTIONS IN THREE MIDWESTERN STATES

Name of Researcher: Carlton M. Martin

Name and degree of faculty chair: Elvin Gabriel, Ed.D.

Date completed: April 2020

Problem

An estimated 12.7% of the US population meet the *Diagnostic and Statistical Manual for Mental Disorders* (*DSM-IV)* (American Psychiatric Association, 1994) criteria for Alcohol Use Disorder (AUD). The annual cost to the society, including emergency room visits, lost days at work, and accidents on the road is in the billions. The impact of this disorder on the family, the community, and the individual is immeasurable. A growing body of literature supports an association between religious and spiritual beliefs and behaviors and recovery from alcohol addiction. This project is an investigation of this association. The goal is to offer some clarity on what works in recovery and what does not.

Method

Participants' personal data were collected, including information about their religious beliefs and behaviors, and their relationship with AA and a higher power. Participants completed a survey asking about their choice of a higher power, their perceptions of God/higher power, their religious beliefs and behaviors, and their level of social support. They were asked to answer questions about the length of time they had been sober, their satisfaction with life since being sober, and the quality of their lives as a measure of a sense of well-being. MANCOVA was used to analyze the data. This statistical model seemed most appropriate since it allowed the researcher to analyze the impact of the independent variables (types of belief in God or a higher power, perceptions of God/higher power, religious beliefs and behaviors, and social support) on the three dependent variables (length of sobriety, satisfaction with life and quality of life) while controlling for age, gender and level of education.

Results

MANCOVA was used to analyze the data. The results indicated a mixed picture of what works in recovery. Choice of a higher power was not significantly associated with long-term recovery. Perceptions of God/higher power were not significantly associated with long-term recovery. Religious beliefs and behaviors were significantly associated with length of sobriety, which means that participants who scored higher on the Religious Background and Behavior scale also reported longer periods of sobriety. The data showed a strong association between social support and satisfaction with life, quality of life, and length of sobriety. Participants who scored high on social support also reported longer periods of sobriety, higher quality of life, and satisfaction with life.

Conclusions

This study helped to clarify the question of what works in recovery. The results from this study indicate clearly that while believing in a higher power as promoted in AA is an important tradition and an important part of the culture, it is social support that stands out as the most significant variable in recovery. Social support was significantly associated with length of sobriety, with satisfaction with life, and with quality of life. This important finding provides the professionals who work with people in recovery with a clear understanding of what works. Thus, treatment programs can focus their recovery programs on building structures of social support around new members to increase their chances of long-term success.

Andrews University

School of Graduate Education and Psychology

CHOICE OF GOD/HIGHER POWER, PERCEPTIONS OF GOD/HIGHER POWER, RELIGIOUS BELIEFS AND BEHAVIORS, AND SOCIAL SUPPORT AS PREDICTORS OF LENGTH OF SOBRIETY, SATISFACTION WITH LIFE, AND QUALITY OF LIFE AMONG PEOPLE RECOVERING FROM ALCOHOL ADDICTIONS IN THREE MIDWESTERN STATES

A Dissertation

Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

by

Carlton Martin

May 2020

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DEDICATION

Dedicated to my children, Benjamin, Jerome, Brandon, and especially my daughter Lyndsy. They gave up so much to allow me to fulfill my dream.

TABLE OF CONTENTS

LIST OF TABLES viii

LIST OF ABBREVIATIONS ix

ACKNOWLEDGEMENTS x

Chapter

1. INTRODUCTION 1

Introduction 1
Purpose of the Study 6
Statement of the Problem 6
Conceptual Framework 7
Conceptualization of Choice of God/Higher Power 8
Conceptualization of Religious Beliefs and Behaviors 9
Conceptualization of Perceptions of God/Higher Power 10
Conceptualization of Social Support 12
Significance of the Study 13
Limitations 15
Delimitations 15
Research Question 15
Definition of Terms 16

2. LITERATURE REVIEW 18

Introduction 18
An Empirical Overview of Choice of God/Higher Power 19
Choice of God/Higher Power as a Predictor of Length of Sobriety 20
Choice of God/Higher Power as a Predictor of Satisfaction with Life 23
Choice of God/Higher Power as a Predictor of Quality of Life 25
An Empirical Overview of Perceptions of God/Higher Power Construct 27
God-image, God-concept 28
Perceptions of God/Higher Power as a Predictor of Length of Sobriety 29
Perceptions of God/Higher Power as a Predictor of Satisfaction with Life 32

Perceptions of God/Higher Power as a Predictor of Quality of Life 35
An Empirical Overview of Religious Beliefs and Behavior 39
Religious Beliefs and Behavior as a Predictor of Length of Sobriety 40
Spiritual Change Mechanisms 41
Religious Beliefs and Behavior as a Predictor of Satisfaction with Life 47
Religious Beliefs and Behavior as a Predictor of Quality of Life 49
An Empirical Overview of Social Support 52
Social Support as a Predictor of Length of Sobriety 52
Social Support as a Predictor of Satisfaction with Life 55
Social Support as a Predictor of Quality of Life 56
Structural support 58
Functional support 59
General/global support 60
Summary of the Literature Review 60

3. METHODOLOGY 61

General Introduction 61
Research Design 62
Population and Sample 63
Hypothesis 64
Definitions of Variables 64
Independent Variables 64
Dependent Variables 66
Demographic Variables 67
Instruments 67
Procedure 69
Data Analysis 70
Summary 70

4. RESULTS 71

Introduction 71
Participants 71
Variable Descriptions 72
Hypothesis Testing 76
Summary 79

5. SUMMARY, DISCUSSION, AND RECOMMENDATIONS 80

Introduction 80
Purpose of the Study 80
Summary of the Literature Review 80
Methodology 85

Population and Sample 85
Summary of the Methodology 85
Summary of Findings 86
Sub-Research Question 1 87
Findings 87
Discussion and Implications 88
Sub-Research Question 2 89
Findings 89
Discussion and Implications 89
Sub-Research Question 3 91
Findings 91
Discussion and Implications 91
Sub-Research Question 4 93
Findings 93
Discussion and Implications 93
Sub-Research Question 5 95
Findings 95
Discussion and Implications 96
Sub-Research Question 6 97
Findings 97
Discussion and Implications 97
Sub-Research Question 7 100
Findings 100
Discussion and Implications 100
Sub-Research Question 8 102
Findings 102
Discussion and Implications 102
Sub-Research Question 9 103
Findings 103
Discussion and Implications 104
Sub-Research Question 10 105
Findings 105
Discussion and Implications 105
Sub-Research Question 11 107
Findings 107
Discussion and Implications 107
Summary of Results 108
Sub-Research Question 12 110
Findings 110
Discussion and Implications 110
Summary and Discussion of Major Findings 112
Recommendations for Practice 113
Recommendations for Future Research 115

APPENDICES

A. Demographic Variables And Survey 116
B. IRB Approval Letter 123

REFERENCES 125

VITA 141

LIST OF TABLES

1. Participant Demographic Characteristics 73

2. Descriptive Statistics for Continuous Variables (n = 120). 74

3. Multivariate Effect of Independent Variables and Gender on Recovery including Satisfaction with Life, Length of Sobriety, and Quality of Life. 77

4. Significant or Marginal Univariate Effects of Independent Variables and Gender on Length of Sobriety, Satisfaction with Life, and Quality of Life 78

LIST OF ABBREVIATIONS

AA	Alcoholics Anonymous
AGLOC	Alcohol-Related God Locus of Control scale (Murray, Goggin, & Malcarne, 2006)
AOD	Alcohol and other drugs
AUD	Alcohol use disorder
BMMRS	Brief Multidimensional Measure of Religiousness and Spirituality
DAF	Divine attachment figure
DDD	Drinks per drinking day
NA	Narcotics Anonymous
NSDUH	National Survey on Drug Use and Health
PDA	Percentage (or proportion) of days abstinent
RBB	Religious Background and Behavior Questionnaire (Connors, Tonigan, & Miller, 1996)
RR	Rational Recovery,
SWLS	Satisfaction with Life Scale

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CHAPTER 1

INTRODUCTION

Introduction

Humans have long sought ways to alter consciousness and change their moods as a way of coping with life's difficulties. It has been noted that fruits, rice, and grains were first processed into wine about 8,000 years ago in China. The people of early Mesopotamia enjoyed wine as much as people of modern times enjoy water. These human actions seemed to evolve naturally over time; with increased usage came the potential for abuse and dependence (White, 1998; White & Kurtz, 2008).

In the early history of alcohol and drug use in the United States, the sobriety "circles" formed by various Native American tribes seem to be the first recorded attempt of recovery from alcohol and other drug dependency. These sobriety circles later developed into Alcoholic Mutual Aid Societies, a type of abstinence-based Native American cultural revitalization movement in the 1800s (White, 1998). As early as 1845, Fredrick Douglas, out of concern for the African Americans and his own past "intemperance," as he called it, signed a pledge of abstinence and became involved in promoting temperance among African Americans. He called for abstinence as an important part of the preparation of African Americans for freedom and citizenship.

In 1867 the Martha Washington Home in Chicago marked the first institution in America that specialized in the treatment of inebriate women. This marked a cultural shift

from a strictly male-centric approach to treatment. This was quickly followed by the new alcoholic mutual aid societies, called the Ribbon Reform Club. In 1879 Dr. L. Keeley was the first person to provide treatment through an institution. He set up a number of institutions throughout the United States called the Keeley Institutes. He announced that "Drunkenness is a disease and I can cure it," (White, 1998). The result was that for the first time alcohol addiction was franchised and treated privately for profit. Another important outcome of Keeley's institutes was that people began to challenge the prevailing notion in society that alcoholism was a moral problem and should be treated through the penal system solely.

Between 1907 and 1913, the first of two sets of state laws was passed calling for the mandatory sterilization of defectives: the mentally ill, the developmentally disabled, alcoholics, and other addicts (White, 1998). The second set of laws was the "Harrison Tax Act" which brought opiates and cocaine under federal control and placed physicians as gatekeepers for access to these drugs. The first law affected addicted people's relationship with their immediate community, in that the addicted person was now called defective legally. The second law affected addicted people's relationship with their medical providers. The providers had all the power and determined treatment directions and goals. A few years later the Supreme Court (Webb v. the United States) declared that it was illegal for a physician to maintain an addict on their customary dose; that it was not good faith medical practice under the Harrison Act, and was thus an indictable offence. About 25,000 physicians were indicted for violations between 1919 and 1935 (Lukas, 2013). During this period, morphine maintenance clinics were established to care for the so-called "incurable" and medically infirm addicts. The Harrison Law affected these

clinics also and almost all of them closed under threat of indictment. As a result, most addicts had no place to turn; the exceptions were the wealthy, who continued to have access to special treatment in private clinics for pay.

The years that followed these medical and legal periods in recovery were very difficult for addicts. They were devalued, judged, and imprisoned in large numbers. These attitudes contributed to the opening of the Shadel Sanatorium and the introduction of aversive conditioning as part of the treatment of alcoholics. During this period, William Wilson and Dr. Bob Smith marked the beginning of Alcoholics Anonymous (AA), a peer support group movement, and published the book *Alcoholics Anonymous (aka The Big Book)*, which was probably the most significant event in the history of the recovery movement. (White, 1998).

Currently, in the United States approximately 23.5 million Americans are addicted to alcohol and drugs (Substance Abuse and Mental Health Services Administration [SAMHSA], 2019). This figure represents one in 10 Americans over the age of 12. Each of these people is connected to friends and family members who are affected by the person who is living with addiction, and therefore affected by the pain, fear, and chaos brought by addition. Approximately 25% of patients seen by primary care physicians have an alcohol or drug problem. (Jones, Knutson, & Haines, 2003). Between 20% and 50% of all hospital admissions are related to the effects of alcohol abuse or addiction (Greenfield & Hennessy, 2004, Mckay, Koranda, & Axen, 2004; Miller, 2002). As many as 24% to 31% of patients seen in emergency rooms and possibly 50% of all patients with severe injuries that require hospitalization have an alcohol use disorder (AUD) (D'Onofrio & Degutis, 2004). Substance abuse is the number one cause of

preventable death in the US, killing more people each year than any other preventable cause of death. AUDs are the third leading cause of premature death in the United States. The cost of addiction to the individual, families, and society is enormous and often not adequately captured in discussions about addiction and recovery.

Recovery is the only hope for the millions of people who are struggling with addiction to alcohol and other drugs. AA and Narcotics Anonymous (NA) are the most effective of all recovery treatment approaches (Glaser & Ogborne, 1982; Saxe 1983). Studies by Vaillant (1983) and Vaillant and Milofsky (1982a, 1982b) found that self-help in the form of AA involvement was more useful than clinical treatment in maintaining abstinence. Alford (1980) found that programs modeling those of AA had more successful outcome rates than those using other therapeutic models; Project MATCH (Kaskutas, 2009) found that, when compared with other treatment approaches, AA was more successful in helping addicts stay sober and maintain their recovery than the techniques of Cognitive Behavioral Treatment, Twelve Step Facilitation, and Motivational Enhancement Therapy (Kaskutas, 2009).

The foundation of the AA model is spirituality, defined in the first three steps of the program, which discuss surrendering to a "higher power" (Alcoholics Anonymous, 2001). In AA the individual determines who or what the higher power is. Each individual has three specific categories from which to choose a higher power. Category 1 is choosing to have a relationship with a transcendent being as their source of strength and help. For some this is the most important decision they make in their recovery process. They perceive God as the source of initiating recovery, the strength to maintain recovery, and that this relationship with God as their higher power can help them change their

destructive behaviors. Category 2 is choosing to pick any random object as their higher power; this might include a spouse, a child, another family member, or a thing. For example, some people have chosen a tree as their higher power. In the beginning of their recovery they plant a tree and watch it grow as they progress in recovery. In Category 3 individuals choose not to acknowledge or commit to a higher power.

Investigators of the relationship between spirituality and addiction recovery found that increased spiritual practices are associated with long-term addiction recovery (Carter, 1998; Ellison, 1991; Flynn, Joe, Broome, Simpson, & Brown, 2003) and with maintenance of treatment gains (Koski-Jannes & Turner, 1999). Kaskutas, Weisner, and Caetano (1997) found that when a spiritual awakening was reported as a result of their AA involvement, individuals were nearly four times more likely to be abstinent three years post-treatment than those who reported no spiritual awakening. Furthermore, Morgan (1992) found that recovering individuals who had a relationship with a higher power stayed sober longer, worked harder in the community, and gave back more to newly recovering individuals. The question that has not yet been answered is whether there is an effect associated with the choice of a higher power. Do people in recovery who have a relationship with God as their higher power experience a different quality of recovery as opposed to those who make a different choice? Do they stay sober longer? Do they participate more in the community, including going to church regularly and volunteering in the church and outside community? Do they work harder to repair broken relationships with family members and children whom they have hurt while using alcohol?

Purpose of the Study

The purpose of this study was to determine whether choice of a higher power, perceptions of a higher power, religious beliefs and behaviors, and social support were predictors of length of recovery, quality of life, and satisfaction with life for individuals subscribing to one of the three different groups in AA: (a) those who chose to have a relationship with God as their higher power, (b) those who chose to have a random object as their higher power, and (c) those who chose not to have a higher power. Participants in each group were identified as addicted to alcohol and in recovery through AA. Although many variables have been employed in gauging the efficacy of recovery programs, none have utilized choice of higher power as a predictor.

Statement of the Problem

Addiction to alcohol and other drugs is a serious problem in the United States, and the cost in human life and resources is enormous and growing each day. Tens of thousands of people each year lose their lives and countless families are left devastated by the loss of their loved ones due to addiction to alcohol and/or other drugs. The Mayo Clinic found that 70% of Americans are taking one or more prescription drugs; 13% of the population is taking some type of opioid. Americans make up 5% of the world's population, but consume 80% of opioids and 99% of the hydrocodone, the opiate found in Vicodin. The cost to society is enormous: 510 billion dollars annually on treatment, emergency room visits, and loss of productivity; the damage done to families is immeasurable. The truth is that addiction to alcohol and other drugs kills. The only way out of addiction is recovery. The recovery model is still in an infant stage of development. Up until now, those who were once addicted themselves returned to work

with other people who were trying to recover. Some of these helpers were formally trained, others were not, but most of them had years of experience being sober and had a deep understanding of the recovery process.

A new movement in recovery has evolved away from the early approach of recovering addicts working with other addicts to a position of greater reliance on the neuroscience of addiction and recovery. One of the major concerns of researchers, psychologists, therapists, and counselors is the high rate at which recovering people fail in their recovery attempts, and "fall off the wagon," as they say in recovery. In the United States 12% of the population abuse alcohol or other drugs, but only 3% are in treatment of any kind (Laudet, 2007). Of those entering treatment for alcohol and other drug addiction, more than 70% of the people will fail in their recovery attempt (White, Wampler, & Fischer, 2001).

Conceptual Framework

The conceptual foundation of this research is based on the work of three theorists: Carl G. Jung, Christina Grof, and Howard Clinebell. These three theorists proposed concepts that form the basis of religiosity and spirituality in alcohol recovery.

The work of Carl G. Jung, Christina Grof, and Howard Clinebell formed the foundation of the conceptual framework for this project (Brown, 1985; Clinebell, 1963, 1998; Grof, 1994). Jung was born in 1875 in Switzerland. His father was a pastor in the Swiss Reformed Church and exposed the young Carl to many hours of Bible teachings. Jung was a contemporary of Freud, who is considered to be one of the most significant thinkers in psychology and psychiatry. Jung developed his own thinking about human personality, which has many similarities with that of his mentor Freud, but was different

in many respects. He argued that the human personality consists of the ego, the personal unconscious, and the collective unconscious.

Conceptualization of Choice of God/Higher Power

Carl Jung, in his letter to William Wilson, a New York stockbroker and one of the founders of AA, noted that alcoholism was a spiritual problem and should be addressed as such. Jung wrote: "Alcohol in Latin is *spiritus*, and you use the same word for the highest religious experience as well as for the most depraving poison. A helpful formula therefore is: *spiritus contra spiritum*" (Alcoholics Anonymous, 1984). Carl G. Jung's response to William Wilson's query (1987) forms the basis of the foundation of AA. At a later date, after Wilson inquired about advice Jung had given to one of his patients, Jung instructed William Wilson, saying, "Craving for alcohol is equivalent to the spiritual thirst of our being for wholeness, expressed as the union with God" (Jung, 1961/1975). This concept of equating the craving for alcohol with the craving for a relationship with God in order to be whole is at the heart of the first three steps in AA. In step 1, "we admit that we are powerless"; for Step 2, "we come to believe in a power greater than ourselves"; and in Step 3, "we turn ourselves over in surrender to God as we understand Him to be." These three steps form the basis of the variable Choice of God/Higher Power for this study.

AA is the most sought after source for help from alcohol and other drug problems (Miller, 1998; Room & Greenfield, 1993; Weisner, Greenfield, & Room, 1995). As previously mentioned, AA is a spiritually-based program. As the AA *Big Book* states "The fact is just this, and nothing less: That we had deep and effective spiritual experiences which have revolutionized our whole attitude toward life, toward our

fellows, and toward God's universe" (Alcoholics Anonymous, 2001, p. 25). Addiction to alcohol was viewed as a spiritual problem (AA World Service, 1973/1976; Booth, F. L., 1984; Goldsmith & Knapp, 1993; Kurtz, 1982; Miller, 1998; Smith, 1994; Warfield & Goldstein, 1996; White, et al, 2001). Jung was insightful in his identification of the core problem of the alcoholic/addict. Buxton, Smith, and Seymour (1987) noted that "as humans we struggle with the truth that we don't have control over many areas of our lives, and the existential anxiety that that produces causes the alcoholic/addict to try to transcend this reality through alcohol and other drugs."

Conceptualization of Religious Beliefs and Behaviors

Christina Grof's (1994) theories on spirituality, attachment, and addiction set the perimeters for sobriety, healing, and wellness in recovery. She was born in Roanoke, Virginia on December 30th, 1941 and grew up in Hawaii. Her stepfather physically and sexually abused her as a child for many years; later this experience informed her thinking about spirituality, human suffering, and recovery. Grof is a transpersonal theorist who found success combining transpersonal theory with the spiritual teachings of AA. In her work on addiction and recovery Grof noted, "a fervent thirst for wholeness, as well as the discomfort with it, is the underlying impulse behind addictions" (Grof, 1994, p. 17). The need for wholeness goes beyond drinking and using other drugs; as she pointed out, "it is a need for a relationship with a transcendent God" (Grof, 1994, p. 18). The recovering addict might stop drinking or using other drugs. Addicts might try to hold down a job and live in the community on their own again, but have they really recovered? Are they struggling each night not to give in to the impulse to go to the bar and drink again, or head down to the street corner and get some drugs? The answer is no. Recovery is more

than abstinence from drugs and alcohol. According to Grof, it is a new way of being in the world. Recovery is a transformed life, lived well in the community (Grof).

Recovery affects people's relationships with their family, their community, and the world around them. White (2007) described recovery as "an experience through which individuals, families, and communities impacted by severe alcohol and other drug (AOD) problems utilize internal and external resources to voluntarily resolve these problems, heal the wounds inflicted by AOD-related problems, actively manage their continued vulnerability to such problems, and develop a healthy, productive, and meaningful life." Grof (1994) summarized the point more plainly, "…as individuals practice the steps (as part of their recovery experience) with support from other recovering people, they begin to move toward a spiritual way of being" (p. 20). Honestly and consciously dealing with one's vulnerability, staying healthy, being productive, and living a meaningful life is exactly what is addressed in AA.

Conceptualization of Perceptions of God/Higher Power

Howard Clinebell (1998) writes about humans seeking wholeness and how that search is related to chemical addiction. Clinebell argued that early childhood neglect and trauma disconnect children from themselves, creating a spiritual void that is later filled by alcohol, drugs, and behavioral addictions (Clinebell, 1963). He noted that these early experiences can affect the way a person perceives God and relates to God. He emphasized the need for a recovery which has at its center the spiritual education, and development of the individual. He described this development as teaching the addicted person about religious practices and routines. He noted that these religious practices and

routines help recovering addicts reconnect to themselves and to the community with social support which is essential to spiritual healing (Clinebell, 1963).

These three theorists contributed in major ways to the creation of a more acceptable recovery environment for people suffering from chemical abuse and highlighted the importance of spirituality in recovery. Their ideas formed the basis of the AA model of spiritual recovery and peer support that exists today.

Many researchers in the field of addiction and recovery view addiction as a maladaptive attempt to cope with a spiritual problem, which affects other areas of the addict's life. "Addictions are attempts to shortcut and outsmart our finitude by illusion of chemical transcendence," says Clinebell (1998, p. 270). Faced with the truth of our essential limitations and finitude as a human person, yet yearning to transcend this truth, the alcoholic/addict experiences existential anxiety. She/he experiences what could be understood as a religious and spiritual hunger, which has the potential to lead to a deep affiliation with God (Clinebell, 1998). Clinebell indicated that for the addict this hunger is hijacked. In a futile attempt "to satisfy deep inner conflicts and hungers" the alcoholic/addict constructs, piece by piece, a "pseudo-religious solution" (Clinebell, 1963, p. 121).

AA brings two core insistences to the task of recovery, namely, the acceptance of essential limitation and the need to live in humble mutuality (Kurtz, 1982). For many, this is precisely the point that Carl G. Jung was suggesting in his letter to William Wilson: *"spiritus contra spiritum*" (Jung, 1961/1975). This prescription clearly encourages the development of spirituality or a relationship with a transcendent being (or higher power) as an antidote to alcoholism, but it can also apply to drug abuse. Moreover,

this implies that acceptance of one's limitations in the world is essential to recovery, that no one is God. This acceptance of one's limitations allows the individual to be receptive to the idea of surrendering to a higher power, which in turn will allow the addict to experience a transcendent relationship.

Conceptualization of Social Support

Clinebell (1998) noted that, hopefully, through this transcendent relationship the recovering person finds a new identity, a new purpose for being, and a more stable life. He argued that the new transcendent relationship includes a new fellowship. Grof (1994) noted that it is in this new fellowship that the recovering individual finds healthy long-lasting support. Further, she pointed out that the reactions of church members and members of AA groups are important in helping recovering people as they develop their new identity. The recovering person finds the support and acceptance they need to begin to grow. The path to this transcendent experience is outlined in the 12-step program of AA, especially steps 4 and 5, which directly address managing and maintaining social support. Step 4 prepares the individual to cope with the new community with honesty and humility; Step 5 encourages an honest attempt to make amends and seek forgiveness from those who were harmed by the recovering person's actions.

In AA the 12 Steps are 12 statements, which are used as a guide to aid recovering alcoholics in their spiritual development and personal growth. They are

1. We admitted we were powerless over alcohol—that our lives had become unmanageable.
2. Came to believe that a Power greater than ourselves could restore us to sanity.

3. Made a decision to turn our will and our lives over to the care of God as we understood Him.
4. Made a searching and fearless moral inventory of ourselves.
5. Admitted to God, to ourselves, and to another human being the exact nature of our wrongs.
6. Were entirely ready to have God remove all these defects of character.
7. Humbly asked Him to remove our shortcomings.
8. Made a list of all persons we had harmed and become willing to make amends to them all.
9. Made direct amends to such people wherever possible, except when to do so would injure them or others.
10. Continued to take personal inventory and when we were wrong promptly admitted it.
11. Sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of His will for us and the power to carry that out.
12. Having had a spiritual awakening as a result of these Steps, we tried to carry this message to alcoholics and to practice these principles in all of our affairs.

Significance of the Study

This study can provide new tools and insights to counselors, clinicians, and lay-people in recovery. Clinicians are able to assess clients' spiritual needs; with evidence-based tools, they can improve their facilitation of the spiritual needs of those clients, in recovery support groups such as AA and other 12-step programs described below. AA is

a recovery program designed to support people seeking sobriety from alcohol addiction. Addicts meet hourly, daily, and weekly with other recovering addicts who are available to give support and guidance. Part of the curriculum teaches recovering members ways to develop their spiritual lives. This study could help counselors and lay leaders to be better equipped to guide members through this spiritual development. The 12-step program is a spin-off from the AA program. In 12-step program meetings are strictly about the 12 steps outlined in the *Big Book* (AA, 2001). Members meet weekly and report their progress following the steps. They discuss difficulties they encounter while trying to follow the steps; more experienced members share their experiences with the struggling member. These meetings are different from AA meetings in that they don't have the members sharing; most of the members have some time in recovery. These programs (AA and 12-step) are essential to recovery in the US, regardless of the theoretical orientation of the treatment program. Referral of alcohol-dependent patients to AA and 12-step programs is the norm (Humphreys, 1997; Kelly, Yeterian, & Myers, 2008).

A current movement seeks to shift the focus of recovery from a model of maintenance for the addicted person to a more sustained recovery management model (Dennis, Scott, & Funk, 2003; Flaherty, 2006; McKay, 2005; McLellan, Lewis, O'Brien, & Kleber, 2000; White, Boyle, & Loveland, 2002). This is a step in a new direction in the treatment of addiction, which is to move away from treatment maintenance to recovery support. White (2007) noted that, "there is growing evidence that the alcohol-and-other-drugs-problems arena is on the brink of shifting from longstanding pathology and intervention paradigms to a solution-focused recovery paradigm." The results of this

project will contribute to this movement by providing insights about the role of a relationship with a transcendent higher power to sustaining recovery.

Limitations

There were four limitations to this study. The first was that participants were all members attending AA meetings in three Midwestern states in the US. This restricted generalizability to populations of people recovering from alcohol addiction in other regions of the country. The second was that participation in the study was restricted to alcoholics. People addicted to other drugs and substances were not included. The third was the lack of diversity among those who participated, which limited generalizability to other racial and ethnic groups. The fourth was the use of surveys to collect data. In responding to questions on these instruments, some respondents may not have been motivated to provide truthful answers about their recovery experiences.

Delimitations

This study was delimited to people in three Midwestern states in the United States, who were in recovery from alcohol addiction. People recovering through other self-help groups, and from other drugs, were not included.

Research Question

Are (a) choice of God/higher power, (b) perceptions of God/higher power, (c) religious beliefs and behaviors, and (d) social support, predictors of (a) length of sobriety, (b) satisfaction with life, and (c) quality of life among people recovering from alcohol addiction in AA?

Definition of Terms

The 12-Step Program: A statement containing 12 declarations which is used as a guide to help newly recovering persons develop a spiritual life and learn how to maintain this spiritual life. (See 12 statements above).

Choice of God/Higher Power: Groups in AA and NA meetings are grounded in some type of a belief in a higher power. These types or categories of beliefs include (a) belief in God as the initiator and sustainer of their recovery; (b) belief in some random object as one's personal help in recovery; and (c) choosing not to have a belief in a higher power (Murray, Malcarne, & Goggin, 2003).

Perceptions of God/Higher Power: The belief that God (or another higher power) is the primary responsible party who initiates and maintains recovery (Brown & Peterson, 1990; Huckstadt, 1987).

Religious Beliefs and Behaviors: A measure of the practices the participant uses, based on the 12-step tradition, as a guide through life. Practices may include attendance at churches, mosques, temples, and other places of worship. Other practices could be reading religious texts and engaging in daily prayer and meditation as part of the recovery and maintenance process (Watkins, 1997).

Social Support: Determination of positive involvement in the sober community, including a variety of positive relationships established and maintained in the recovering community, and the family and friends involved in positive support of the recovery (Laudet, Morgen, & White, 2006).

Satisfaction with Life: A measure of subjective wellbeing, in which the individual assesses their life on selected domains, including social relationships, support systems,

health, and living circumstances (Diener, Emmons, Larsen, & Griffin, 1985; Pavot, Diener, Colvin, & Sandvik, 1991).

Quality of Life: The level of joy and ease with which the recovering person is living a sober life (Rudolf & Watts, 2002; White, et al., 2001).

Length of Sobriety: A simple measure of the number of days, months, and/or years the recovering person has gone without using alcohol or abusing other drugs (Kaskutas, Bond, & Humphreys, 2002).

CHAPTER 2

LITERATURE REVIEW

Introduction

Alcohol addiction is a serious problem in the United States. It is estimated that 15.1 million Americans adults' ages 18 and older struggle with AUD. This number does not include the hundreds of thousands of young people under 18 who are abusing alcohol daily (National Institute of Alcohol Abuse and Alcoholism, 2015). Researchers describe AA as the most successful treatment program for people trying to recover from AUD (Kastutas et al., 1997; Miller & McCrady, 1993; Project MATCH, 1997; Weisner et al., 1995). However, AA includes many different elements such as spirituality, religiosity, and different levels of social support. This study will examine whether one's choice of belief in God or a higher power, perceptions of God or a higher power, religious beliefs and behaviors, and social support are predictors of length of sobriety, satisfaction with life, and quality of life among people attending AA meetings in the United States.

According to the latest data collected by the National Institute of Mental Health there are 23 million American above the age of 12 years who are addicted to alcohol and other drugs (SAMHSA, 2019). This number excludes people addicted to nicotine found primarily in the many forms of tobacco. Moreover, as staggering as these numbers are they reflect only a part of the problem; they fail to tell the story of the human toll that addiction inflicts on the individuals, their families, and their communities. These sobering

consequences include loss of self-respect, social problems (e.g., marital, family, friendships, physical altercations, and legal issues), financial problems, health issues, and even death (Alcoholics Anonymous, 2001; Chartier & Caetano, 2010). The magnitude and scope of addiction to alcohol and other drugs make recovery necessary; AA is one of the most effective ways to treat alcoholics (Pagano, Friend, Tonigan, & Stout, 2004; Tonigan & Conners, 2008).

An Empirical Overview of Choice of God/Higher Power

AA is one of the most successful treatment programs available in the United States for individuals recovering from alcohol abuse disorder (Project MATCH, 1997; Tonigan & Conners, 2008). The foundation of the AA recovery process, as stated in its main text, *The Big Book,* is the 12 Steps. The 12 Steps are statements, which are used as a guide for spiritual development. Step 2 reads; "came to believe that a power greater than ourselves could restore us to sanity." Here in step 2 the recovering individual is encouraged to choose a higher power and to develop a relationship with that higher power. Step 3 introduces the individual to the idea of "God as we come to know Him" (AA, *The Big Book*, p. 25). The new member is allowed to choose "God" as their higher power, meaning a transcendent being outside of themselves. Or they could choose any random object as their higher power, such as a tree, their children, their spouses, or something else. Or they might decide not to have any higher power at all, and just depend on their will and their commitment to the recovery process.

In light of the above understanding of Steps 2 and 3 in AA, researchers have relied on Pargament's construct of individual coping styles. According to Pargament et al., (1988) individuals are able to cope with problems based on three beliefs about how

individuals and God control events. In selecting solutions to problems, individuals are guided by whether they perceive themselves, God, or both, to be responsible for solving the problem. These coping styles include the deferring style (active God, passive self), the self-deferring style (passive God, active self), and the collaborative style (active God, active self); a fourth style was added later reflecting a belief in a passive God and a passive self. Thus, when faced with a problem, individuals with a deferring style will believe that personal action will have limited influence on the outcome and attribute responsibility for solving the problem to God. The individuals with the self-directing style will believe that personal action is more important to the final outcome than God's action. Those with the collaborative style will attribute the outcome to personal action and God's intervention.

Using the above model, Spalding and Metz (1997) found the collaborative style is a better predictor of quality of life, but not of length of sobriety.

Choice of God/Higher Power as a Predictor of Length of Sobriety

Murray et al. (2003) examined participants' choice of God or a higher power and its impact on their length of sobriety and satisfaction with life. There were 144 participants who were all members of AA and attended meetings at least once weekly. They were drawn from several AA programs in Northern Califorinia. The group included 89 men and 55 women, whose average age was 40.3 years ranging from 20 to 72 years. The reported continous lengths of sobriety ranged from 3 days to 327 months. Caucasian respondents represented 89% of the sample, 7% were Hispanic Americans, and 5% were African Americans.

The researchers used several measures in this study. To study perceptions of God or a higher power, they used the Alcohol-Related God Locus of Control scale (AGLOC), a 12-item Likert-type measure designed to measure one's perceptions of God's or a higher power's control over their drinking behavior. At the beginning of the AGLOC, respondents are asked to choose (or describe) a phase that best describes their higher power (e.g., God, higher power, other, etc). Participants are then asked to use this concept of God or a higher power while completing the scale. Scores can range from 12 to 72; the higher the score the greater the perceptions of God's or a higher power's control over alcohol consumption. The coefficient alpha in this sample was .89.

Length of sobriety was measured by asking participants to indicate the number of months or years they have gone without using alcohol. Quality of life was measured using the Satisfaction with Life Scale (SWLS; Diener et al., 1985). This five item Likert-style scale measures perceptions of well-being and life satisfaction. Responses are scored from 1 (strongly disagree) to 7 (strongly agree) and summed for each participant; higher scores reflect greater satisfaction with life. Evaluation of this measure yielded good internal consistency ($\alpha = .87$) and adequate test-retest reliability ($r = .69$). Finally a cover sheet asked participants for age, ethnicity, AA participation, length of sobriety, and similar demographic variables.

Choice of God or a higher power while in AA was not related to length of sobriety and quality of life. As they looked further into the data they found that invividuals who reported a higher self-directed attitude in treatment showed longer sobriety (7.73 years). These results are limited by the population from which they obtained the sample, which was a small section in Northern Califorina who might experience religiosity and

spirituality differently from the rest of the country. Participants were asked at AA meetings to volunteer to participate, which restricted the group to people who might be eager to answer questions. Finally, the participants were mostly Caucasian men coming from a small community in California, which means the results have to be interpreted narrowly and carefully.

These limitations may have contributed to the finding of no relationship beween choice of God/higher power and length of sobriety. A further review of current literature on alcohol addiction and recovery show spirituality and religious practices are consistent protective factors for recovery from alcohol addition (Buxton et al., 1987; Chappel, 1992a, 1992b; Clinebell, 1998; Corrington, 1989; Morgan & Jordan, 1999; Peteet, 1993). Studies by Morgan (2008) show a strong relationship between a God or a higher power and the length of sobriety.

Kaskutas et al. (2003) looked at a similar sample with a larger sample size measuring participants at the beginning of treatment and again at Year 1. Those who chose God as their higher power were more likely to be sober than the group choosing other as their higher power, and than those who had just a belief in the recovery process. Again at year 3, the group with God as their higher power had a larger proportion of participants who were sober than in the other two groups. They even found that when participants were members of the other two groups at year 1, but had a spiritual awakening and switched to the God or a higher power groups, they remained sober longer. The present project will examine the impact of choice of God or a higher power on length of sobriety and the role of satisfaction with life and maintenance of sobriety.

Choice of God/Higher Power as a Predictor of Satisfaction with Life

Satisfaction with life is an important indicator of well-being and contentment with life; thus it serves as an important outcome measure for studies of behavioral change (Bowling, Farquhar, Grundy, & Formby, 1993; Mroczek & Spiro, 2005), reflecting how well a person is functioning in the major areas of their lives including relationships, health, work, income, spirituality, and leisure (Diener, 1984). At times during recovery an individual might stop drinking alcohol but might still be miserable in their lives. In AA this is called being “dry drunk.” They fight with their families, continue to be dishonest, and live very chaotic lives (Laudet, 2007). Such a person is much more likely to relapse and abandon the effort to quit drinking because they are so miserable without the alcohol. One important aspect of choices made in AA is discovering spirituality and its impact on personal growth, development, and satisfaction with life.

Longshore, Anglin, and Conner (2009) observed that religiosity and spirituality in AA involve making a choice about God as higher power and includes some kind of denominational affiliation (e.g., Protestant, Roman Catholic, or Jewish), frequency of attendance at services, acceptance of doctrinal beliefs and norms, and social interaction with fellow attendees. Current research observes that choice of a higher power can be a powerful antagonist of addiction, especially when it comes after a spiritual awakening (Longshore et al., 2009; Morgan, 2002). On the other hand, a choice that leads to a sense of God as harsh, judgmental, and quick to punish has shown the opposite effect; the recovering person becomes discouraged, filled with self-hatred, and develops a pattern of repeated relapse and recovery (Kaskutas et al., 1997; Miller & McGrady, 1993; Weisner et al., 1995).

Currently no studies exist which examine the relationship between choices of higher power in AA and satisfaction with life; therefore, this study will be groundbreaking in this area, especially if the results show a positive relationship.

Flynn et al. (2003), looked at the relationship between choice in addictions in general and the impact on satisfaction with life. Using 432 participants drawn from 18 outpatient methadone treatment programs they classified them into two groups: recovering and non-recovering. The two groups were defined strictly by biological and self-report measures of no opioid or cocaine use, less than daily use of alcohol, and no arrest or illegal activity during the year prior to the first interview. Participants were 277 men and 155 women, ranging in age from 18 to 64; 25% of the men had completed college or some trade school as had 35% of the women. The majority of the group, 75%, were attending some kind of support group at least twice a month, 20% were attending meetings daily.

Using MANCOVA to analyze the data, they found that 28% of the participants in the recovery group at year 5 reported that they relied upon personal motivation, treatment experience, their choice of God as their higher power, family, and work. They reported higher levels of satisfaction with life when compared with the non-recovering group. On measures of overall well-being, the recovering group at year five who had chosen God as their higher power had higher scores of well-being, reported more meaningful lives, had better health, and maintained longer job stability (Flynn et al., 2003).

The design of this study is a limitation. Most of the questions were one directional, so that a higher score always represented a positive outcome or relationship. Therefore, people who gave high scores to each item, without thinking through the

questions, might have a false positive score. In addition, some of the variables weren't clearly defined, e.g., for "choice of God," participants may have been choosing and defining "God" in many different ways from what the researchers intended to measure. While the participants were recruited from many treatment programs in New York City, they were all from methadone programs, which mostly treat people recovering from heroin addiction. Consequently, this is a group mostly dealing with a specific addiction. These results are interesting even if not generalizable because they suggest the possibility that choice in AA (and NA) can have affect satisfaction with life.

Choice of God/Higher Power as a Predictor of Quality of Life

Thanks to the work of Montgomery, Miller, and Tonigan (1995), contemporary research on recovery addresses more than just abstinence from alcohol use and abuse, but is concerned with the salutary effects of recovery through AA. Increasingly, scholars interested in addictive-behavior changes in the context of AA have begun to examine emotional sobriety or subjective adjustment to life. Results from this emerging body of research (Polcin & Zemore, 2004; Zemore & Kaskutas, 2004) have suggested that the salutary consequences of being actively involved in the AA lifestyle may extend beyond improved drinking outcomes to include enhanced psychosocial well-being and generalized improved quality of life.

Foster, Marshall, and Peters (2000) looked at quality of life among 82 participants reporting regular attendance at AA meetings and a relationship with a higher power. These participants were patients in two detox programs in California and New York. Data were collected on participants' socio-economic status and the severity of their alcohol dependence, using the Severity of Alcohol Dependence Questionnaire. Quality of life

was measured using the Life Situation Survey. Participants were tested at entry to the program, at three months, and at six months. Ranging in age from 23 to 65 years, there were 52 males and 30 females. Seventy-five percent were Caucasian, 10% were African American, 10% were Hispanic, and 5% were Asian. Participants were regular AA members attending AA at least once per week. Choices by the participants included God (transcendent being) as their higher power (65%), recovery as their higher power (23%), other as their higher power (7%), and no higher power (5%). Regression modeling and ANCOVA were used to match quality of life with choice of higher power and overall well-being. The results indicated that individuals who chose God (transcendent being) as their higher power scored higher on the length of sobriety measure and reported higher levels of AA meeting attendance and group participation, (which included helping other addicts and sponsoring new members in AA), and attendance more frequently at places of worship. Participants who chose "recovery" as their higher power showed significant reductions in drinking and using (i.e., length of sobriety) at the 6-month measure. However they did not report higher scores on the Life Situations Survey than the other three groups. This suggests that personal commitment to recovery is associated with increased length of sobriety in the 1st year of treatment, but not necessarily associated with quality of life.

The findings of Kelly, Magill, & Stout (2009) are similar, in that AA participation positively predicted rates of self-efficacy, which positively predicted rates of length of sobriety. The meditational effect of self-efficacy was found in multiple other studies. In addition to self-efficacy, common factors such as commitment to abstinence, active coping efforts, and primary appraisal (i.e., evaluation of consequences of substance use)

were found to mediate the effects of AA participation (such as AA attendance, sponsorship, and step-work) and the length of sobriety for adults (Kelly et al., 2009).

Limitations of this study include a small sample size; most of the participants were Caucasian and college educated. They regularly attended AA meetings, all coming from one geographical location in the country. These limitations restrict generalizability to other groups, and other parts of the country, where AA participation and understanding of its principles might be different. Also, the study did not include a non-AA recovering group as a control group. Many people seem to recover in the end, if they get into some kind of support group, AA or not, religious or non-religious.

An Empirical Overview of Perceptions of God/Higher Power Construct

Perceptions of God are related directly to the God image and God concept which an individual develops through their relationships with significant others over the course of life (Davis, Moriarty, & Mauch, 2013). Oftimes these perceptions are informed and shaped by religious teachings and personal experiences (Pagament, 1997). Essentially, the way an individual learns to attach to and interact with significant others will corresponds to how the individual attaches and interacts with God (Hall & Edwards, 2002). Therefore, although a person may have explicit beliefs, or a God concept, about God or another divine attachment figure (DAF), implicit relational knowledge gained from human attachments will inform the way God is perceived and experienced emotionally, that is, the God image (Hall & Edwards, 2002). As demonstrated by Hall and Edwards, implicit relational knowledge and adult attachment style informs an individual's way of relating to God (or other divine figure) and the religious community.

God images and God concepts are important components of the internal working models that contribute to how God is experienced (Davis et al. 2013).

God-Image and God-Concept

God image and God concept refer to the sets of mental/neural representations that construct and continually influence a person's experience of his or her relationship with a DAF, that is, any divine person including God, Allah, and others. Specifically, God images are the internal working models that prescribe the character of the DAF and the nature of the relationship between the DAF and the self (Davis et al., 2013). God images are informed by implicit relational knowledge typically acquired through relationship with early caregivers (Hall & Edwards, 2002). God images allow for an emotional experience with the divine, resulting in heart knowledge or an experiential representation of the DAF (Davis et al., 2013; Zahl & Gibson, 2012). In general, God images allow for a bodily-felt, emotional, mainly nonverbal, and implicit experience of the DAF (Davis et al., 2013).

For members of AA, the relationship with a DAF or higher power is an important part of recovery. As the AA 12 Steps (AA, 2001) indicate, admiting powerlessness and surrendering to a higher power are essential steps in AA recovery. However, discrepancies between members' God concepts and God images may result in difficulty trusting a higher power. The proposition is that congruence between God concepts and God images is essential not only to spiritual health, but contributes to mental health as it relates to alcohol addiction. The study by Robinson, Brower, and Kurtz (2003a, 2003b) alludes to discrepancies between God images and God concepts in individuals struggling with alcohol misuse.

In recent years, the field of psychology has explored the possibility of changing the God images people hold. Results from empirical studies have been mixed. While Thomas Murray et al. (2003) found that a manualized group treatment resulted in changes in God images and attachment to God (as measured by the Attachment to God Inventory (Beck & MacDonald, 2004)), a more rigorous study by Rasar, Garzon, Volk, O'Hare, and Moriarity (2013) using the same treatment was not able to replicate these results. Additional empirical research is encouraged to explore avenues for changes in God images and God attachments. Given the strong spiritual underpinnings of AA and its emphasis on spiritual mechanisms of change, empirical research regarding the relationship between God-image/God-concept discrepancies and alcoholism recovery may be instructive.

Perceptions of God/Higher Power as a Predictor of Length of Sobriety

The idea of God or a supernatural being that who created all things and is in control of the affairs of humans is a popular idea in many religious circles. Views about God vary in and among religious groups. In the United States, few Americans see God as a force for good in the world. The Pew Research Center found that, in Christianity, 1 in 4 people believe that God created the world, but is not involved directly in the affairs of mankind (Taylor, Morin, Parker, Cohn, & Wang, 2009). Among evangelicals and African American protestants God is perceived as authoritative and engaged as a positive force in the world, but He is viewed as being more interested in judging human behavior and thus must be feared (Taylor, et al., 2009). How individuals construct their ideas of God, whether as a loving forgiving father or as a judge exacting judgement of His people, is

directly related to the question of whether sprituality and religiousity have a protective effect for people in recovery from alcohol dependence.

An important outcome of the protective affect of perceptions of God or a higher power is length of sobriety or abstinence. The most common sought-after goal in recovery is sobreity; however, past and current research demonstrate inconsistent results about which variables are associated with sobriety or abstinence. Morgan (1995) noted that long-term recovery in alcohol dependence treatment is the exception and not the rule.

Kubicek, Morgan, & Morrison (2002), in a study conducted in Illinois, questioned why some people are able to achieve long-term sobriety, while others struggle for many years and fail to attain long-term sobriety? They recruited subjects through the network of AA meetings, Rational Recovery (RR) meetings, and spontaneous remitters who were recruited through doctors, ministers, and therapists, using a convenience sampling technique. Spontaneous remitters are people who stop drinking and using drugs on their own, without any aid or help. Flyers were distributed at local meetings of AA, phone contact was made to the organizers of RR (a self-help group unaffiliated to AA) to enlist participants, and letters were sent to contacts such as doctors and ministers soliciting participants. The goal was to obtain between five and ten participants from each of the three groups. No spontaneous remitters were recruited. Eight women and five men were recruited, with three men and four women in the AA group, and four women and two men in the RR group. Participants ranged in age from 33 to 68 years with a mean of 46.9 years. Mean educational level was 15.3 years. Continuous years in sobriety was 6.5 to 13.5 years with a mean length of sobriety of 9.4 years.

Alcoholism was defined according to *DSM-IV* criteria for alcohol dependence. Length of sobriety meant continued and total abstinence from alcohol. Long-term recovery referred to six or more years of continuous sobriety. Data was collected through in-person interviews, followed by a detailed, methodical analysis of the transcribed interviews to isolate common themes or characteristics of recovery, and to identify factors related to maintenance of long-term sobriety (Kubicek et al., 2002).

The findings showed that 11 of the 13 subjects identified that social support, such as having family members, friends, and community in their lives, was the most significant factor in sustaining long-term sobriety. All but three subjects identified God or a higher power as a reason for their success and long-term sobriety. They perceived God or a higher power as a source of strength and hope when they experienced stress and difficult situations; that perception helped them feel that they were not alone (Kubicek et al., 2002). These findings are consistent with Kelly et al. (2009) demonstrating the protective impact of a positive perception of God or a higher power.

The limitations of this study include the small sample size; therefore the findings must be interpreted carefully and cannot be generalized to other populations. The findings need to be replicated with a larger sample, perhaps with different statistical methods to corroborate the results. Thirdly, all the subjects had longer periods of sobriety than the average person in treatment today. This may be a special small group of people with some other factors involved; perhaps these subjects were deeply religious people already. White & Kurtz (2008) found associations between how a group of 232 AA members perceived God, their length of sobriety, and the quality of their recovery. They

observed that individuals who perceived God as helpful, forgiving, and a source of strength reported higher levels of spirituality, inner peace, and hope.

Through their review of the research, Kelly et al. (2009) found that self-efficacy, or the confidence to abstain from alcohol in various situations, mediated the relationship between AA attendance and drinking outcomes. Specifically, AA participation positively predicted rates of self-efficacy, which predicted length of sobriety (Kelly et al.). This mediational effect of self-efficacy was observed in multiple studies. In additon, other common factors such as commitment to abstinence, active coping efforts, and primary appraisal were found to mediate the effects of AA participation and length of sobriety for adults (Kelly et al.). Primary appraisal is evaluation of the consequences of substance use; AA participation includes attendance at meetings, sponsorship, and working through the steps.

Perceptions of God/Higher Power as a Predictor of Satisfaction with Life

AA is rooted in religious beliefs about the power of God. Bill W., co-founder of AA, reported having a life-changing spiritual experience which jumpstarted his recovery from alcoholism (AA, 2001). Stories of these life-changing spiritual experiences from recovering addicts are common (Robinson, Pierce, Webb, & Brower, 2008). Miller and C'deBaca (2001) called this life-changing experience a quantum change and it is as though an individual experiencd an unexpected, vivid, benevolent, and enduring personal transformation. Some people may be resistant to AA because of these reports, feeling spiritual experiences are too mystical and fantastical for them. However, as evidenced from the studies reviewed here, spirituality is a significant mechanism of behavior change

in AA. If spirituality predicts better drinking outcomes and greater satisfaction with life, then it is beneficial to explore other means for cultivating spirituality.

The quality and impact of one's spiritual and religious experiences is determined by one's perceptions of God or a higher power. Corrington (1989) was unable to establish a relationship between length of time in AA, perceptions of God or a higher power, and spirituality but did find that higher scores on positive perceptions of God or a higher power were associated with greater contentment with life.

White et al. (2008) designed a study to investigate whether perceptions of God or a higher power were associated with indicators of successful recovery (e.g., longer periods of abstinence, more recovery-oriented behaviors, higher quality of recovery, and greater satisfaction with life). The study recruited 252 participants from court-ordered (n = 40) and voluntary inpatient treatment facilities (n = 40), halfway houses (n = 36), aftercare groups (n = 26), and AA meetings (n = 109) in a Southwestern state. There were 183 males and 69 females with an average age of 36 years (SD = 11.97). Ethnic groups included Caucasians (72%), African Americans (8.4%), Hispanics (18.4%), and others (1.2%). Religious affiliations included Protestants (56.4%), Catholics (17.2%), others (16.3%), and none (10.0%). Average length of recovery was 31 months (ranging from one day to 32 years). The distribution of recovery times was skewed toward the shorter times. Although the mean length of recovery was almost 31 months (SD = 52.48), 61.7% of the group had less than one year of sobriety.

They used multiple instruments, including the Spritual Health Inventory, the Surrender Scale (Reinert, 1997), the Life Orientation Test (a measure of optimism) (Scheier, Carver, & Bridges, 1985), a Substance Use And Recovery Questionnaire, and

the Identity Style Inventory (Berzonsky, 1989). The Spiritual Health Inventory is revised from a previous version (Chappel, 1995) in a Likert-type format in which higher scores reflected greater spiritual well being and healthier perceptions of God. A factor analysis of this revised and shortened version revealed two factors. One reflected an internal locus of control, that is, a sense of purpose, gratitude, humility, forgiveness, and a belief in a higher power; the second was an external locus of control, including attendance at religious services and activities and events beyond one's control. Chronbach's coefficient alpha for the scale in the current study was .84. For the Surrender Scale, higher scores inicated greater acceptance of things as they are and less defiance of authority. The Life Orientation Test (optimism) measures one's perception of God; individuals with a higher degree of optimism were predicted to have a greater sense of faith and hope. The coefficient alpha was .83. The length of recovery, that is the length of time since the date on which alcohol or other drugs were used last, was used as the length of sobriety. Recovery behaviors were assessed with a 28-item questionnaire reflecting recovery-oriented actions or cognitions. Recovery quality or quality of life used a five-item measure. These tools examined the degree of complusion to drink or use, a rating of how others would describe their recovery, and the degree of inner peace on a continuum of 0 (*no peace*) to 100 (*a total sense of peace*) (White et al. 2008).

The team attended AA meetings, asked for volunteers, amd gave a brief presentation stating the goals of the study and answering questions. Questionnaires were completed on-site, with the exception of AA members who were given stamped envelopes in which to return the completed packets. Over 90% of the on-site participants

completed the questionnaires; 40% of the mail-in participants completed and returned them. MANCOVA was used for analysis.

Length of sobriety was associated with a positive perception of God, F (4, 232) = 17.84, $p < .001$ (Wilks' Lambda = .77). Participants who had longer periods of soberiety scored high on perception of God as a souce of strength, suggesting that individuals who reported higher inner peace, forgiveness, and perceptions of God as helpful, appeared to have higher quality of life and stayed sober longer. Individuals with higher quality of life scores had higher scores on spirituality measures. This suggests that how God is perceived can affect the quality of an individual's recovery, which in turn affects inner peace, hope, faith, and length of recovery.

Perceptions of God/Higher Power as a Predictor of Quality of Life

Robinson et al. (2003a, 2003b) conducted a comparison study investigating differences in spirituality between 90 participants from an outpatient alcohol recovery program and a national sample polled in 1998 using General Social Survey 9. The national sample was not necessarily individuals struggling with addiction. The majority of participants were male (64.4%), Caucasian (74.2%); and employed at least part-time (66.6%). The mean age was 38.7 years. Ninety percent of the participants from the outpatient sample had been to at least one AA meeting. To measure spirituality, the quantitative measure was the Brief Multidimensional Measure of Religiousness and Spirituality (BMMRS) from the Fetzer Institute & National Institute on Aging (Fetzer Institute, 1999). The qualitative measure was a self-report form of interview (Robinson et al.). The BMMRS is a self-report inventory with 33 items assessing several domains of spirituality such as daily spiritual experiences, beliefs and values, forgiveness, and

positive and negative religious and spiritual coping strategies (Fetzer Institute, 1999). The BMMRS has been shown to exhibit variable reliability between item domains (α = .54 to .91); acceptable validity was demonstrated for about 80% of between-domain correlations, ($p < .01$) (Idler et al., 2003).

In comparison to the national sample, Robinson et al. (2003a, 2003b) found that outpatient participants were more likely to report having no religious preference (outpatients, 32.2%; national sample, 14%). Despite this trend, outpatient participants were more likely than the national sample to report having had a “spiritual or religious experience that changed your life” (outpatient sample = 54%, national sample = 39.1%) (Robinson et al., 2003b, p. 8).

Daily spiritual experiences included six items (a) I feel God’s presence, (b) I find comfort in religion, (c) I feel deep inner peace, (d) I desire to be closer to God, (e) I feel God’s love, and (f) I am touched by the beauty of creation. Compared to the national sample, outpatient participants reported more frequently feeling God’s presence, finding comfort in religion, desiring to be closer to God, and being touched by the beauty of creation. However, the outpatient sample experienced feeling deep inner peace and God’s love less frequently than did the national sample. Significant differences in responses about daily spiritual experience items were found amongst outpatient participants. Outpatient participants who had a life-changing religious or spiritual experience reported feeling inner peace, desiring to be closer to God, and feeling God’s love more frequently than those who had not had a life-changing religious or spiritual experience (Robinson et al., 2003a, 2003b).

Beliefs and values were examined with three items pertaining to a general outlook on life: (a) I try to carry my beliefs into all my other dealings in life, (b) I believe in a God who watches over me, and (c) I feel a deep sense of responsibility for reducing pain and suffering in the world. Aspects of forgiveness were examined with three items: (a) I have forgiven myself, (b) I have forgiven those who have hurt me, and (c) I know that God forgives me. The outpatient sample scored lower on all three forgiveness items compared to the national sample. Forgiveness scores did not differ among outpatient participants based on endorsement of a life-changing religious or spiritual experience (Robinson et al., 2003a, 2003b).

Positive and negative religious and spiritual coping strategies were examined with a set of three items for each type of coping. For positive coping the items were (a) I think about how my life is part of a larger spiritual force, (b) I work with God as partners, and (c) I look to God for strength, support, and guidance. The items for negative coping included (a) I feel God is punishing me, (b) I wonder if God has abandoned me, and (c) I try to make sense of life without God. There were no differences between the outpatient participants and the national sample on their employment of positive religious and spiritual coping. However, outpatients who had a life-changing religious or spiritual experience tended to utilize positive religious and spiritual coping skills more than outpatients who had not had a life-changing religious or spiritual experience. As a result, the outpatients who had a more positive religious and spiritual coping style reported higher scores on the quality of life scale. Overall, the outpatient sample tended to engage in more negative religious and spiritual coping than the national sample (Robinson et al., 2003a, 2003b).

Given the study's cross-sectional design, the generalizability of the results was limited. Inferences about the spirituality of alcoholics may be made, but only for those seeking treatment. Additionally, the study sample was quite homogenous (e.g., 64.4% male, 74.2% Caucasian, 66.6% employed), and participants were recruited from only one treatment site (Robinson et al., 2003a, 2003b). Nevertheless, tentative conclusions may be made from the results.

Based on the results from the Robinson group, it can be concluded that life-changing spiritual or religious experiences are not uncommon to treatment-seeking alcoholics, these experiences do affect spirituality. Alcoholics seeking treatment may have greater interest in being closer to God and thus report more frequently feeling God's presence, taking comfort in religion, and feeling touched by the beauty of creation when compared to the general population. However, alcoholics seeking treatment may have more difficulty experiencing deep inner peace, feeling God's love, being forgiving toward the self, and feeling forgiven by God when compared to the general population. It is important to mention that having life-changing spiritual or religious experiences seems to increase experiencing God's love (Robinson et al., 2003a, 2003b).

A curious finding is that although alcoholics seeking treatment may desire to be closer to God and even frequently feel God's presence and find comfort in religion, they seem to be more self-critical, less self-compassionate, and less sure of God's forgiveness than the general population. Treatment-seeking alcoholics seem to experience God as a more punitive being than the general population does (Robinson et al., 2003a, 2003b). This dynamic of spirituality among treatment-seeking alcoholics seems to present a conflicted experience in regards to a higher power. This conflicted experience may reveal

inconsistent experiencing of positive God images or discrepancies between participant God images and their God concepts. For example, it seems likely that alcoholics who reported experiencing God as present and loving would believe God to be forgiving. However, felt emotional experiences of God as punitive may have left individuals with a sense of ambivalence toward God; that is, I wonder if God has abandoned me and I try to make sense of life without God, resulting in unforgiveness toward the self. In turn this would affect the quality of the individual's life (Watkins, 1997).

An Empirical Overview of Religious Beliefs and Behavior

In the United States believing in and practicing religion is very common, and is commonly used to treat and help people recover from alcohol abuse (Brown & Peterson, 1990). Religious beliefs and behavior are associated with lower alcohol consumptions and longer periods of sobriety (Bazargan, Sherkat, & Barzargan, 2004; Brown, 1990; Chitwood, Weiss, & Leukefeld, 2008). Religious beliefs can be described as belief in a God and time spend in contemplation of said God, including reading scared texts and time devoted to prayer and meditation. Religious behavior, on the other hand, can be defined as belonging to a social group and adopting the teachings and doctrines of the group as a guide for living. This would include regular attendance at church, other organized and regularly scheduled meetings, and/or living a certain way in the community, such as sober living and having sober friends. Fetzer Institute (2003) noted a significant negative relationship between religious behavior and problem behavior. They suggested that this is based on the social support that a religious organization's members provide each other and the social ties by which the religious individual is integrated within the conventional community.

Religious Beliefs and Behavior as a Predictor of Length of Sobriety

Specific AA practices refer to cognitive and behavioral changes specific to AA, including principles of surrender, forgiveness, and the 12 steps (Kelly et al., 2009). In the studies they reviewed, specific AA cognitions such as acceptance of powerlessness, belief in a higher power, and commitment to AA predicted better long-term drinking outcomes, at 6 and 12 months post discharge. AA-specific activities including reading AA literature, having a sponsor, and attendance at AA meetings mediated the effects of 12-step involvement on abstinence. However, other more common factors, not necessarily related to AA, like commitment to abstinence, intention to avoid high-risk situations, and substance-specific coping also predicted better drinking outcomes. Despite the known salutary effects of specific AA practices, Kelly et al. concluded that the specificity of AA mechanisms of change could not be confirmed in the literature at that time. Although apparently participants usually showed changes in AA-specific variables during treatment, it was unclear whether substance use outcomes were mediated by AA-specific variables or other, more general therapeutic variables (Kelly et al., 2009).

In their review, Kelly et al. (2009) found studies that supported the importance of AA-specific social factors in promoting long-term abstinence. Specifically, friendship quality, network support for abstinence, and the size and quality of their social network were found to partially mediate the relationship between 12-step or AA involvement and length of sobriety. Furthermore, studies showed that AA-specific social network support, meaning support from fellow AA members, seemed to be an important part of long-term recovery. Given the literature reviewed, AA-specific social networks appear to be an important mechanism of change within AA. However, Kelly et al. encouraged future

researchers to conduct more rigorous studies to address issues of temporality and specificity in the research. They also suggested that further research examine how social mechanisms contribute to change by comparing and contrasting social changes to other types of change (e.g., psychosocial treatments, psychosocial processes) and exploring how social mechanisms interact with change at levels such as the neurobiological level.

Spiritual Change Mechanisms

Kelly et al. (2009) found mixed results related to the mediating effect of spirituality on the relationship between AA participation and abstinence. The studies reviewed provided a rather complex and somewhat contradictory set of results. AA attendance was correlated with increased spirituality; long-term AA sobriety was correlated with endorsement of religiosity. However, spirituality was not found to be directly responsible or necessary for abstinence. Thus, Kelly and colleagues concluded that more research is needed to determine the role of spirituality in recovery through AA atttendance.

Kelly et al. (2009) reported significant limitations of their literature review of the mechanisms of change. While a substantial body of literature addressed common factors, AA-specific cognitive and behavior changes, and social and spiritual mechanisms of change, many of these studies were conducted with participants who were enrolled in treatment prior to the studies. Therefore, these studies did not meet the criterion of temporality adequately when determining causality of proposed mechanisms of change. Kelly et al. also acknowledged that not all of the studies used statistically rigorous measures for calculating the effects of the mechanisms of change. They recommended

further exploration of AA's mechanisms of change. The following studies represent some of the subsequent research.

Kelly, Hoeppner, Stout, and Pagano (2012) investigated the mechanisms of behavior change within AA. They conducted a multiple mediator analysis using archival data from Project MATCH (Mattson, et al., 1993) to determine the mediating effects of (a) self-efficacy (i.e., confidence in one's ability to abstain from drinking), (b) spiritual/religious practices, (c) depression, and (d) social networks on the relationship between AA attendance and drinking outcomes. Project MATCH was a treatment matching study which assigned adult participants to one of three treatment groups: cognitive-behavioral therapy (focused on skills development), motivational enhancement therapy which incorporated motivational interviewing techniques, or twelve-step facilitation designed to promote AA principles and affiliation. Archival data was collected for outcomes at baseline (i.e., intake) and 3-, 9-, and 15-month follow-ups (Kelly et al., 2012).

Alcohol use was calculated in percentage of days abstinent (PDA) and drinks per drinking day (DDD) using the Form 90 interviews (Kelly et al., 2012). Form 90 has shown good reliability for measures of alcohol use in test-retest studies (Tonigan, Miller, & Brown, 1997). AA attendance was calculated as the percentage of days meetings were attended within 90 days of each assessment and was measured using Form 90 (Kelly et al., 2012).

The mediating variables discovered included (a) self-efficacy or confidence to abstain from drinking in the midst of negative affect, (b) self-efficacy, or confidence to abstain from drinking in high-risk social situations, (c) spirituality/religious practices, (d)

depression, and (e) pro-abstinent social networks (i.e., number of pro-drinking members in social network). Measures for these variables included the Alcohol Abstinence Self-Efficacy Scale, the Religious Background and Behavior (RBB) Instrument, the Beck Depression Inventory, and the Important People and Activities Instrument (IPA). Mediation analyses were conducted using Structural Equation Modeling (SEM) (Kelly et al., 2012).

Two subscales from the Alcohol Abstinence Self-Efficacy Scale were used to measure (a) negative affect or confidence to abstain from drinking in the midst of negative affect and (b) social/positive or the confidence to abstain from drinking in high-risk social situations about abstinence (Kelly et al., 2012). Both subscales have been shown to have good reliability (negative affect: α=.88, social/positive: α=.82; DiClemente, Carroll, Connors, & Kadden, 1994).

The Religious Background and Behavior (RBB) Instrument was used to assess religious beliefs and behaviors (Kelly et al., 2012). The RBB was specifically developed for Project MATCH (Mattson et al., 1993) and shown to have good internal validity and reliability with both Project MATCH and test-retest samples (α= .86 for the Project MATCH sample; α= .85 test, α= .86 retest (Connors, Tonigan, & Miller, 1996).

Depressive symptoms were assessed with the Beck Depression Inventory, which has good internal consistency and construct validity (Kelly et al., 2012). Participant social networks were evaluated using an adapted version of the Important People and Activities Inventory. Participants were asked to identify significant individuals in their social network, rate the level of support received from these individuals, and denote the

frequency of contact with them. The Important People and Activities Inventory also had participants identify the drinking and drug use of these individuals (Kelly et al., 2012).

Structural Equation Modeling (SEM) was used to evaluate the data; multiple imputation was used to address missing data; they found that collectively the six mediators (a) confidence to abstain from drinking in the midst of negative affect, (b) confidence to abstain from drinking in high-risk social situations), (c) spirituality/religious practices, (d) depression, (e) social networks: pro-abstinent (the number of pro-abstinence members in the social network), and (f) social networks: pro-drinking (the number of pro-drinking members in the social network) contributed to 43% and 51% of the effect of AA attendance on PDA for the outpatient and aftercare samples respectively. The six mediators contributed to 67% and 55% of the effect of AA attendance on the number of DDD for the outpatient and aftercare samples respectively. In general, AA attendance influenced PDA more than DDD for both the outpatient and aftercare samples. However, the six mediators explained more of AA's effect on DDD than on PDA for both samples (Kelly et al., 2012).

Although the six variables, negative affect, social-positive, spirituality/religious practices, depression, social networks (pro-abstinent), and social networks (pro-drinking) collectively mediated the effect of AA attendance on drinking outcomes, only some of the mediating variables predicted drinking outcomes individually. Higher self-efficacy in social situations and a lower number of pro-drinking social network members at 9 months post-treatment predicted length of sobriety (both PDA and DDD) at 15 months post-treatment for both outpatient and aftercare samples. The number of pro-abstinent network members predicted both PDA and DDD for the outpatient sample, but only PDA for the

aftercare sample. Spirituality/religiousness predicted alcohol measures for the aftercare sample, but not for the outpatient sample. Self-efficacy in the midst of negative affect predicted DDD for the aftercare sample. and was the best predictor of DDD in the aftercare sample. Greater depression predicted lower PDA and higher DDD for the outpatient sample (Kelly et al., 2012).

As the results indicated, the six variables did not yield the same effects across samples. For the aftercare sample, the social variables including (a) number of pro-drinking network members (23%), (b) number of pro-abstinent network members (15%), and (c) social self-efficacy (23%) were responsible for 70% of the mediational effect of AA attendance on PDA. Spirituality/religiosity explained 22% of the mediational effect of AA attendance on PDA (Kelly et al., 2012).

The six variables contributed more evenly to the mediational effect of AA attendance on DDD, (a) the number of pro-abstinent network members (11%), (b) number of pro-drinking network members (16%), (c) negative affect-related self-efficacy (20%), (d) self-efficacy in social situations (21%), (e) depression (11%), and (f) spirituality/religiousness = 21%). For the outpatient sample, an overwhelming 91% of the effect of AA attendance on PDA was explained by the social variables (a) number of pro-drinking network members (33%), (b) pro-abstinent network members (31%), and (c) social self-efficacy (27%); nd 85% of the effect of AA attendance on DDD was explained by social variables (a) number of pro-drinking network members (27%), (b) number of pro-abstinent network members (17%), and (c) social self-efficacy (39%). Spirituality/religiosity and the negative affect-related variables (a) depression and (b)

negative affect-related self-efficacy did not contribute to the mediational effect of AA attendance on drinking outcomes for the outpatient sample (Kelly et al., 2012).

Kelly and colleagues (2012) concluded that the strongest mediational pathways between AA attendance and length of soberiety were social constructs. A conclusion could be that spirituality/religiosity is important to the recovery of more severely addicted individuals. However, these conclusions must take into account the study's limitations.

As they noted, the participants were self-selected into AA. This self-selection may be correlated with other factors that may yield mediational effects. Additionally, the researchers were unable to control the times at which constructs were measured, providing less control over the constructs. They also noted that constructs were measured concurrently, without accounting for the possibility that constructs may interact. The construct of spirituality measured in the study may not have been congruent with AA's concept of spirituality. The results regarding the effects of spirituality may not adequately reflect the changes in spirituality taking place within AA. Lastly, Kelly and colleagues (2012) acknowledged there could be more mediators of change within AA that were not accounted for in this study.

As exhibited by the literature reviewed above, AA appears to be an efficacious treatment for alcoholism. However, the particular mechanisms of change within AA appear to be complex. Kelly et al. (2012) found that the social mechanisms of change within AA played a key role in mediating the effects of AA attendance on drinking outcomes for both outpatients and more severe aftercare patients. However, religious beliefs and behaviors were only shown to be important for the recovery of the aftercare patients, not the outpatients. This finding is curious considering AA's contention that

spirituality is essential to recovery. The complexity of AA and its mechanisms of change exhibited here require a deeper exploration of the social and spiritual mechanisms of change within AA.

Religious Beliefs and Behavior as a Predictor of Satisfaction with Life

Recovery from alcohol abuse is not only the cessation of using alcohol. Professionals and treatment providers are concerned with the "subjective well-being of the recovering individual" (Pavot et al., 1991). An equally important aspect of subjective well-being is the cognitive life satisfaction as discussed by Diener et al., (1985) which they called satisfaction with life and for which they developed a scale: The Satisfaction with Life Scale (SWLS). Satisfaction with life can be defined as a global evaluation by a person about their subjective life experience related to their health, safety, family situation, and employment. Hence, it is a subjective judgment rather than some "externally imposed" objective standard (Diener et al., 1985, p. 71).

Religious beliefs and behaviors have shown mixed results as predictors of satisfaction with life (Robinson, Krentzman, Webb, & Brower, 2011). Over the past decade multiple studies have shown a positive relationship between religious beliefs and behaviors and satisfaction with life. Laudet and colleagues (2006) conducted a cross-sectional study of the long-term impact of religious beliefs and behaviors on satisfaction with life and the implications for length of sobriety. Participants were recruited from several AA programs around New York City. Fliers were distributed in AA meetings; volunteers were asked to seek out fellow members who would like to participate. After two months of recruiting they had 235 participants, 145 males and 90 females. Of the

group, 60% were Caucasian, 21% African American, 13% Hispanic, and 6% who described themselves as other.

Participants received a packet with multiple instruments including the Religious Beliefs and Behavior Scales (Tonigan, Toscova, & Miller, 1996), the Satisfaction with Life Scale (SWLS) by Diener et al, (1985), and the Quality of Life Scale. On the cover of the packet participants were asked to choose statements which best described them before coming to AA; on the next page they were asked to choose statements that best described their lives as they were that day.

SEM was used to analyze the data. Relationships were found between high religious involvement (including daily prayers and meditation, weekly church attendance, high concerns about feeling God's love, and forgiveness) and satisfaction with life but not with quality of life. People who reported low self-worth and a sense of stress at the beginning at treatment reported present satisfaction with life but very little change in quality of life. The authors suggested that the people reporting no changes in quality of life could still be struggling with family and economic hardships, which might impact their scores on the quality of life scale (Laudet et al., 2006).

The limitations of this study affect the generalizability of the findings. Conducted in New York City, the religious and spiritual practices might be very different from recovering AA members in other parts of the country. The sample population was a majority of Caucasian males. They tended to score lower on measures of spirituality and religiosity than any other Laudet et al., 2006).

The findings above are consistent with the findings of Kaskutas et al., (2003). They studied a group of AA members from AA treatment programs in Northern

California, following 587 recovering individuals for a period of three years, measuring them at the beginning of treatment, after the 1st year, the 2nd year, and the 3rd year. They found a large proportion of the participants were still attending AA. Within the data they found a weak relationship between religiousness and satisfaction with life, but a modest relationship with their quality of life.

Religious Beliefs and Behavior as a Predictor of Quality of Life

Religious beliefs and behaviors typically play a positive role in adjustment and better health (Brady, Peterman, Fitchett, Mo, & Cella, 2000), because alcohol abuse takes a toll on the whole person, including the spiritual, emotional, mental, physical health, and well-being of the addicted individual. Culliford (2002) noted that religious beliefs and behavior appear to function as protective factors or buffers that mediate or moderate the relationship between life stressors and quality of life. Commitment to spiritual beliefs and engaging in religious behaviors can give hope, strength, and provide meaning during stressful times (Galanter, 1997).

In New York City, Laudet et al., (2006) recruited 353 individuals who had been in recovery for at least one year through newspaper advertising and posting flyers at the local gyms, libraries, coffee shops, and other sites, asking for volunteers. The goal was to examine the impact of spirituality, general social support, recovery support, religious practices, life meaning, and 12-step affiliation as buffers which mediate the relationship between life stress and overall quality of life satisfaction.

Using a semi-structured instrument, they conducted one-on-one interviews, collecting demographic data and administering multiple instruments to test these variables:

a) Dependence severity with the Mini International Neuropsychiatric Interview, a short structured diagnostic interview developed in the United States and Europe.
b) Clean time using a drug and alcohol use history with a list of 13 substances based on the Addiction Severity Index for each substance ever used.
c) Stress: participants were asked to choose a response to the question, “Overall, how stressed have you been in the past year?” with a scale of 0 (*not at all*) to 10 (*extremely*).
d) Stressful life events, with an 11-item inventory which had been developed by the first author.
e) Recovery support; the Social Support for Recovery Scale was used; it consists of 11 items on a Likert-type scale.
f) Social support, using a 23-item Social Support Appraisal Scale, measuring the degree to which a person feels cared for, respected, and involved with friends.
g) Spirituality, life meaning, and religious practices were measured by the Spirituality subscale of the Spiritual Well-being Scale. This subscale consists of 6 items rated on a Likert-type scale where 1 (*strongly agree*) to 4 (*strongly disagree*).
h) Twelve-step affiliation was addressed on two dimensions: meeting attendance and involvement in 12-step suggested activities. Meeting attendance was the number of 12-step addiction recovery meetings

attended in the past year; 12-step involvement was the number of 12-step activities participated in during the past year including having a sponsor and sponsoring someone else.

i) Quality of life satisfaction of the participants was the primary dependent variable, measured with the following item "Overall, how satisfied are you with your life right now?" answered on a visual scale with 1 (*not at all*) to 10 (*completely*) (Laudet el al., 2006).

SEM was used to analyze the data and to test the appropriateness of the model using maximum-likelihood estimation within AMOS 4.0. The results were noteworthy. Spirituality, life meaning, religiousness, and 12-step affiliation buffer stress and enhance quality of life among recovering persons. Stress levels decrease as time in recovery increases. Factors that enhance quality of life include spirituality, social support, recovery support, life meaning, and 12-step program attendance. Religious beliefs and behaviors and life meaning enhance coping, confer hope for the future, and provide a heightened ability to resist the opportunity to use substances (Laudet et al., 2006).

There are limitations to this study; the sample was non-random using a cross-sectional design. The first concern restricts generalizability; the second cannot speak to causation or to the mechanisms underlying the stress-buffering effects of the domains studied. Single items were used to measure stress and quality of life satisfaction; this might not be enough to capture the complexity of these main variables.

This study demonstrated a clear relationship between religious beliefs and behaviors and quality of life. As Stanton Peele (1985) wrote, addicts improve when their relationships to work, family, and other aspects of their environment improve. Quality of

life is critical to maintaining sobriety and returning to wellness; an understanding of how quality of life is associated with religious beliefs and behavior will only improve how we care for people dealing with alcohol abuse and dependence. Interestingly, social support stands out in the study as one of the more important variables enhancing quality of life.

An Empirical Overview of Social Support

Social support has been associated with positive outcomes in a number of areas: medicine, family life, marriage, and addiction and recovery (Caplan & Caplan, 2000). Countless studies have shown the positive benefits of having a solid support system during recovery including the difference it makes for long-term recovery and quality of life satisfaction. Social support is beneficial in two ways; indirectly, by buffering stress in difficult times and directly by providing assistance, emotional support, and a sense of belonging which can alleviate or buffer stress while improving satisfaction with life (Laudet & White, 2008). Research findings by Havassy, Hall, and Wasserman (1991) found that substance users with lower levels of social support had higher rates of relapse; while substance users with higher levels of social support had reduced substance use and lower rates of relapse. This is consistent with the findings of Brennan and Moos (1990) who found that social support was linked to better quality of life for people abusing alcohol and for people dealing with mental disorders.

Social Support as a Predictor of Length of Sobriety

Groh, Jason, and Keys (2008) reviewed the literature exploring alcohol-specific support, defined as social support specifically pertaining to alcohol consumption (versus spirituality or friendships). Several studies focused on alcohol-specific social support and the relationship to length of sobriety, finding fairly consistent results. A group

investigating individual involvement in AA or other mutual-help groups which insist on establishing and maintaining relationships with other people in recovery (i.e., individuals involved with AA/NA, sponsors) found less support for substance abuse and more support for abstinence in the social network. Additionally, 12-step facilitation groups were found to be helpful for individuals who started treatment with less social support for abstinence than their counterparts. The conclusion is that AA and other mutual-help groups do seem to provide alcohol-specific support that may be lacking in the social network and that this support is associated with length of sobriety (Groh et al., 2008). In the fellowship of AA, members are encouraged to seek one-on-one support from sponsors who typically are members farther along in their recovery (AA, 1968). In a prospective study, Tonigan and Rice (2010) investigated the effects of sponsorship on length of sobriety, as part of a parent study exploring AA-related behavior change. Participants included 253 alcohol-dependent adults as defined by the *DSM-IV*. Some participants also reported illicit drug use. Participants were recruited from community-based AA groups, outpatient substance abuse treatment facilities, through word of mouth, and advertisements (Tonigan & Rice, 2010).

Alcohol use was measured with Form 90 and medical tests, including urine toxicology screens and breathalyzer tests. Form 90 has shown good reliability for measuring of alcohol use in test-retest studies. Form 90 calculated drinking outcomes in PDA and DDD. Sponsorship was measured by one item from the AA Involvement self-report questionnaire (Tonigan & Rice, 2010).

Almost half of the participants had an AA sponsor at intake and about 40% had a sponsor at each of the follow-up marks (3-, 6-, 9-, 12-month follow-ups). Hierarchical

logistic regression and hierarchical linear regression analyses were used to determine the effect of sponsorship on drinking outcomes. Having a sponsor during the first 3 months of treatment predicted length of sobriety ($p < 0.01$) during months 4 to 6. Interestingly, sponsorship at 7 to 9 months did not predict drinking outcomes at month 12 of treatment (smallest $p < 0.12$) (Tonigan & Rice, 2010).

Tonigan & Rice's post hoc analyses used independent t-tests to assess differences in 12-step completion (i.e., surrender steps 1 - 3, action steps 4 - 9, maintenance steps 10-12) between participants who reported having sponsors and those who did not. No mean differences were found in the number of steps completed for participants at 6 months based on their sponsor status at 3 months. However, sponsor status at 9 months was related to step completion at 12 months. Those who had sponsors at 9 months were more likely to have completed any of the 12-steps than those who did not have sponsors at 9 months (surrender steps, $t\,(96.76) = 2.91$, $p < 0.01$; maintenance steps, $t\,(85.92) = 1.91$, $p < 0.06$; and action steps, $t\,(107.62) = 2.02$, $p < 0.05$). These results demonstrated that early sponsorship seemed to promote greater abstinence; continued sponsorship promoted completion of step-work (Tonigan & Rice, 2010).

The study's limitations included its lack of exploration of the different aspects of the sponsor-sponsee relationship (e.g., frequency of meeting between sponsor and sponsee, perceived benefit of having a sponsor) and the high correlation between the abstinence measures (Tonigan & Rice, 2010). While it may be concluded that early sponsorship and continued sponsorship yield salutary effects for length of sobriety and participation in AA, the researchers were not able to explain how sponsorship provided benefits for recovery.

Social Support as a Predictor of Satisfaction with Life

Empirical evidence has linked social support to increased health, happiness, and longevity (Berkman, 1980; Lin, 1986). People suffering from alcohol dependence who have little social support have some of the highest relapse rates (Humphreys & Noke, 1997; Noone, Dua, & Markham, 1999). Moreover, alcohol dependence and abuse is associated with loss of family relationships; close friendships; little, or at times no, contact with children; and negative relationships with the community (Green, Fullilove, & Fullilove, 1998). In recovery the reverse takes place. The work of the recovering person is to try and rebuild some of these broken relationships, and in turn develop a social network which enhances satisfaction with life and increases abstinence (see Granfield & Cloud, 2001; Moos, Finney, Ouimette, & Suchinsky, 1999).

Laudet et al., (2006) looked at stress and satisfaction with life among recovering persons, investigating the roles of social support, spirituality, religiousness, life meaning, and 12-step affiliation as recovery capital, buffering stress and enhancing life satisfaction. The objective attempt to answer two questions: (1) does satisfaction with life improve over time? (2) Do factors previously identified as buffering stress and promoting stable recovery contribute to enhancing quality of life among recovering persons?

Recruiting was conducted in New York City through media advertisements placed in free newspapers (e.g., the Village Voice) and flyers posted throughout the community in libraries, coffee shops, and YMCAs, over a one year period beginning in March of 2003. They maintained a toll-free telephone number to which interested persons were directed. Callers were screened briefly (10 – 12 minutes), with information collected on selected demographic variables and their past and present drug and alcohol use.

Eligibility criteria for the study included (a) fulfilling for a year or longer the *DSM-IV-TR* criteria for substance abuse or dependence on any illicit drug, (b) self-reported abstinence of at least one month, and (b) not being enrolled in residential treatment. Seven hundred and two unduplicated screens were conducted; 353 were eligible (Laudet et al., 2006).

They used multiple measures including dependence severity with the Mini International Neuropsychiatric Interview. Clean time was measured from a comprehensive history of drug and alcohol use. Overall stress was measured by asking participants to respond to a question on a Likert-type scale; "Overall, how stressed have you been in the past year?" with 0 (*not at all*) to 10 (*extremely*). An instrument developed by the first author measured stressful life events. Recovery support was measured using the Social Support for Recovery Scale, an 11-item scale in a Likert format. A 23-item Social Support Appraisal measures the degree to which a person feels cared for, respected, and involved with friends, family, and the community. Recovering individuals with high rates of social support also reported higher levels of satisfaction with life, and stayed sober longer.

Social Support as a Predictor of Quality of Life

As shown by Kelly et al. (2009) and Kelly et al. (2012), social mechanisms of change appear to be important components of the recovery process. Specific social aspects of the AA program are explored in the following studies as they relate to quality of life for recovering individuals. Special attention is given to the sponsorship relationship.

Groh et al. (2008) conducted a meta-analysis of 24 empirical studies examining the social network variables in AA. Articles were gathered through databases, including

PsycINFO, Web of Science, ScienceDirect, using the search terms: social networks, social support, interpersonal relationships, AA, 12-step programs, and self-help groups. They also reviewed article reference lists. Twenty-four empirical articles were included in the review, which explored AA-based social support, AA social networks, and their mediating effect on the relationship between AA involvement and quality of life (Groh et al., 2008).

Social support was considered to be multi-dimensional. The review explored multiple types of support, such as structural support, functional support, general support, alcohol-specific support, and recovery helping. Structural support referred to the size and composition of the social network (e.g., number of network members, types of relationships); and functional support referred to how well network members were able to help one another. Alcohol-specific support referred to support which was specific to promoting abstinence or recovery. General support was non-specific social support which promoted overall well-being or quality of life. Lastly, recovery helping referred to receiving or giving help to fellow AA members (Groh et al., 2008).

Groh et al.'s (2008) review included (a) analysis of the study designs and demographics of the study samples, (b) results of the 24 empirical studies organized by type of social support (e.g., structural, functional, alcohol-specific), and (c) analysis of the mediating effect of social support on the relationships among AA, abstinence, and quality of life. The mean age of participants across the studies was 41.5 years. The majority of the samples reviewed (87.5%) had predominantly male participants (87.5%). The majority of samples (70%) were predominantly Caucasian; however, a significant number of the samples (30%) were predominantly African American. Of the entire

review sample, half of the participants were employed; most participants reported receiving a high school diploma (mean years of education completed was 13 years). Most of the studies were published in the 1990s (41.7%) or 2000s (41.6%). The majority of the participants originated from convenience samples (62.5%) recruited from diverse settings such as the community at large, inpatient and outpatient treatment centers, aftercare programs, recovery homes, AA groups, and referral centers (Groh et al., 2008).

Most of the study designs were longitudinal (58.3%) or cross-sectional (41.7%); less than one quarter of the studies used random assignment. Although the majority of the studies focused on the treatment of alcohol misuse, some examined treatment effects for other substances. Common independent variables included the following types of social support: structural, functional, general, and alcohol-specific support, as well as recovery helping. Social support was measured with various inventories, 20.8% of which were not standardized (Groh et al. 2008).

Structural support

As previously stated, structural support refers to the composition of the social network including the number of network members, and the social bonds within network relationships. Attendance at mutual-help groups (e.g., NA, AA) was shown to help maintain and had the potential to increase the number of close friendships in the social network. Additionally, mutual-help group attendance increased the number of 12-step friendships in the social networks. However, the less rigorous studies did not show effects of AA involvement on social network composition, such as the number of sober friends, number of friends, significant others, school/work colleagues, and other within the social network. A possible conclusion is that AA or other 12-step group attendance

does not always change the composition of the social network; it is likely to help maintain and increase the number of friendships in the social network. This increase in friendships within AA was associated with reported increases in quality of life (Groh et al., 2008). This finding may suggest that as recovering people increase their circle of friends, they increase their overall quality of life. Friendship comes with increased networking, more human resources, and more helpful ideas if the person is stressed out and struggling with life.

Functional support

Groh et al.'s (2008) review also examined functional support, which includes the quality of support and the impact of the support received by social network members for the individuals involved with AA or other mutual-help groups). Studies revealed that AA involvement predicted greater friendship quality such as higher frequency of contact with friends and more close friends, and feelings of support within and from relationships. Mutual-help group members seemed to provide more supportive friendships compared to those not affiliated with mutual-help groups. Although AA attendance was not found to predict increases in spouse/partner or relative social resources, AA members with fewer partner/spouse resources (e.g., poor relationship with partner/spouse) tended to be more involved in AA than their counterparts with higher quality relationships with their partner/spouse. Groh et al. (2008) concluded that the relationship enhancement effects of AA were limited to relationships more superficial and less complex than family relationships; and that the AA community supplements relational resources that may not otherwise be present in the social network.

General/global support

General or global support refers to a more global assessment of social support, combining both structural and functional supportive elements. Groh et al.'s review found that 12-step (e.g., AA, NA) group attendance, or treatment which was supplemented by 12-step group attendance, predicted greater general support from friends. One study suggested that having an AA sponsor was related to higher general social support. While another study did not show that AA attendance predicted gains in general social support, a plausible conclusion is that AA or 12-step attendance does predict general social support, particularly if it is from friends, and having a sponsor may increase general social support (Groh et al., 2008). However, more research is needed.

Summary of the Literature Review

The reviews above suggest a mixed picture of recovery from alcoholism. In some cases the choice an individual makes in AA seems to have some impact on length of sobriety, but not on quality of life and satisfaction with life. On the other hand, religious beliefs and behaviors are associated consistently with length of sobriety and quality of life (e.g., work stability, improved health) but not with satisfaction with life (a subjective evaluation of one's condition when compared with others). Social support stands out as the most consistent variable associated with length of sobriety, satisfaction with life, and quality of life. This study was an attempt to answer questions about the impact of these variables on overall recovery from alcohol.

CHAPTER 3

METHODOLOGY

General Introduction

The purpose of this study was to examine the reliability of (a) choice of God/higher power, (b) perceptions of God/higher power, (c) religious beliefs and behaviors, and (d) social support as predictors of (a) length of sobriety, (b) satisfaction with life, and (c) quality of life among people in recovery in AA in the United States. A report from the National Survey on Drug Use and Health (SAMHSA, 2019) indicated there are currently more than 24.6 million Americans ages 12 and older who are using illicit drugs. When they included the number of people using and abusing legal drugs such as alcohol, a true sense of the magnitude of the problem emerges. The same report noted that 52.2% of all Americans aged 12 years and older reported being current drinkers of alcohol, which is 113.5 million people. Of that number 16.5% reported they are heavy drinkers. Among young people aged 18 to 25, 37.9% reported being binge drinkers, who are defined as having five or more drinks on the same occasion during at least one day in the last 30 days. Within this group, 11.3% reported they were heavy drinkers. A review of the literature suggests a high rate of comorbidity between alcohol-related disorders and mood and anxiety disorders (Grant et al. 2004). These individuals pay a high cost for their addictions, including loss of self-respect, social problems (e.g., marital and family relationships, friendships, physical altercations, and legal issues),

financial problems, health problems, and mortality (Alcoholics Anonymous, 2001; Chartier & Caetano, 2010; Graham, Annis, Brett, & Venesoen, 1996).

The scope of the problem begs for solutions that will not only help individuals stop using, but also will help them live more contented lives. Thus, this research project focuses not only on the cessation of alcohol addiction, but on the importance of living a satisfied life in recovery.

Research Design

Quantitative

The researcher observed, described, and documented the effects of the independent variables. Data about the variables were collected from volunteer participants who answered a survey, which was designed by the researcher. Current and previous researchers have used quantitative research methods to better understand the variables which are associated with long-term recovery, including spirituality, religious practices, stress, AA attendance and participation, and social support (Dyslin, 2008; Laudet, et al., 2006; McDowell, Galanter, Goldfarb, & Lifshultz, 1996; Miller, 1996). Dr. Vince Clark (2016) examined the differences in brain structures in recovering addicts, discovering how different structures are associated with those who relapse and those who do not.

Comparative

This method gave the researcher insight into how variables differ and what they have in common (Peat, 2001). A MANCOVA was conducted to analyze the data collected. Then, mean scores were compared for each of the three groups and conclusions drawn about them in terms of the predictability of the effects on the outcome variables.

Miller (1996) investigated the role of spiritual development among recovering addicts in New Mexico. He compared addicts who developed spiritual practices as a result of AA attendance and determined how those practices were related to long-term recovery.

Cross-Sectional

Surveys were used to collect data about the effects of a belief in a higher power in each group. Members of AA groups were contacted through an online request, and after giving their consent, received and completed a survey. The data collected reflected their beliefs or non-beliefs in a higher power. The second section of the survey inquired about their length of sobriety, level of well-being, and satisfaction with life as measures of success in recovery. Recovery success is a latent variable. The first independent variable, choice of a higher power, had three levels: (a) belief in a relationship with God as one's higher power, (b) belief in any random object as one's higher power, and (c) having no belief in anything. The other independent variables include (a) perceptions of God/higher power, (b) religious beliefs and behaviors, and (c) social support. The three dependent variables include (a) length of sobriety, (b) satisfaction with life, and (c) quality of life.

Population and Sample

The population for this study was comprised of individuals who attended AA meetings in three Midwestern states within the United States. Caucasians represent the majority of the population in these states, with African Americans, Latino Americans, Asian Americans, and others making up the minority populations.

The sample was drawn from members of AA organizations throughout the Midwestern United States who are in recovery from alcohol abuse and are attending meetings regularly. A convenience sampling procedure selected male and female

participants who were at least 21 years of age and participating in AA meetings throughout the Midwestern United States, including urban and rural residents. The project investigated four independent variables and three dependent variables (4 x 3), for a power of .80; a medium effect size; with a sample size of 100-110. Incomplete surveys were discarded from the final data analysis.

Hypothesis

Research Hypothesis: Choice of God/higher power, perceptions of God/higher power, religious practices, and social support have a positive effect on length of sobriety, satisfaction with life, and quality of life among individuals recovering from drug and alcohol abuse, when age, gender, and level of education are controlled.

Null Hypothesis: Choice of God/higher power, perceptions of God/higher power, religious practices, and social support have no effect on length of sobriety, satisfaction with life, and quality of life among individuals recovering from alcohol addiction, when age, gender, and level of education are controlled.

Definitions of Variables

Independent Variables

There were four independent variables in this study. The first was choice of a higher power, defined as the state of accepting something as true, and attributing hope and confidence in this truth to help in recovery. Choice of a higher power is a categorical variable. The survey item was "which of the following best describes your personal experience? (a) I believe in God as a part of my recovery, (b) I believe in other as a part of my recovery, and (c) I believe in recovery."

The second independent variable was a measure of perceptions of God/higher power, and defined as a personal understanding of a transcendent being and how this transcendent being does or does not intervene in recovery. The AGLOC was used to measure this variable, with 12 items, using a Likert scale 1 (*strongly disagree*) to 4 (*strongly agree*). Participants can score anywhere from 12 to 48. A higher total score indicated a greater belief in God as a personal higher power. The items included statements such as (a) in some situations when I feel helpless, God helps me not to drink; (b) God helps me to keep from drinking when things are bad; (c) God participates in my decision not to drink; (d) God plays a role in whether my alcohol use increases or not; (e) God plays a role in whether I drink or not (See Appendix A).

The third independent variable was religious beliefs and behavior, which is an important concept in AA and NA, where religious behavior is considered the heart of the change of lifestyle deemed necessary to maintain recovery. Conceptually, religious behaviors or practices are outlined in *The Big Book* (2001) in the 12 Steps. They include daily prayer, regular reading of religious writings, attending worship or support meetings, and giving service in the community. The Religious Background and Behavior (RBB) scale (Connors et al., 1996) uses 12 items to measure religious activities during the past year. Activities are measured as frequencies of thinking about God, prayer and meditation, attendance at worship services, reading/studying scriptures or other holy writings, and having a direct experience with God. The scale for current behaviors is 1 (*never*) to 8 (*more than once daily*); the scale for lifetime behaviors was 1 (*never*), 2 (*yes, in the past, but not now*), and 3 (*yes, and I still do*); yielding a possible score ranging from 12 to 66. (See Appendix A).

Social support, the last independent variable, was defined as the degree to which people feel cared for, respected, and involved with friends, family, and the wider community. In AA and NA groups the belief is that people who are involved with the community, in touch with family and friends, and giving back in the community tend to stay sober longer and enjoy recovery more than those who isolate themselves (Laudet, et al., 2006). The Social Support Scale, a 19-item scale using Likert format, was used to measure the degree to which a person feels cared for, respected, and involved with friends, family, and others. Items were rated on a scale of 1 (*none of the time*) to 5 (*all of the time*). A sample item is "Someone you can count on to listen to you when you need to talk or someone to give you good advice in a crisis" (see Appendix A).

Dependent Variables

Length of sobriety was a simple measure of the length of time a person has gone without using or taking a drink. A short list of time periods was given; participants indicated which period of time best represented how long it had been since their last drink or usage. These periods were represented as 1 (*0 - 1 year*), 2 (*1 yr. - 2 yrs*.), 3 (*2 yrs. - 3 yrs*.), and 4 (*3 yrs. and above*).

The quality of life variable was defined as a personal reflection on one's emotional wellbeing in regard to personal health, finances, relationships in the community, sense of support, and ability to support oneself in the community. Here, it was measured by the SF-12 short form, a 12-item questionnaire (Smith & Larson, 2003). Sample statements include (a) in general, would you say your health is . . . excellent, very good, good, fair, or poor; and (b) Does your health limit you in these activities? If so, how much? Choices included activities such as moving a table, pushing a vacuum,

bowling or playing golf, or climbing several flights of stairs. Other items asked about limitations from pain, the degree to which health affected activities, and how participants felt The range for the total scale was 12 to 50 (Appendix A).

Satisfaction with life was defined as an individual's subjective experience as it relates to his/her lived experience. The Satisfaction with Life Scale (SWLS; Diener et al., 1985) uses five items asking participants to score responses from 1 (*strongly disagree*) to 7 (*strongly agree*). Scores can range from 5 to 35, where the higher the score the more satisfied the participant (Appendix A).

Demographic Variables

Participants were asked to indicate their age within categories, gender (females were assigned a value of 0 and males a value of 1), and highest educational level attained.

Instruments

The constructed survey included age, gender, educational level, type of believer, and length of time in recovery. Several instruments were used to measure the variables: the Alcohol-Related God Locus of Control scale (AGLOC) (Murray, Goggin, & Malcarne, 2006), the Religious Beliefs and Behavior (RBB) questionnaire (Connors, Tonigan, & Miller, 1996), the Satisfaction with Life scale (SWLS) from Diener et al., (1985); the MOS Social Support Survey (Sherbourne & Stewart, 1991), and the Short Form-12 (SF-12) (Smith & Larson, 2003). Descriptions and validation of the instruments follows.

The AGLOC scale is a 12-item self-report measure assessing perceptions of God/higher power's role in recovery from alcoholism. Murray et al., (2003) administered this scale to 144 recovering alcoholics attending AA meetings. Exploratory factor

analysis yielded a two factor solution with one factor, cessation, attributing the control over the initial cessation of drinking to God; and the other, maintenance, attributing control over one's continued maintenance of sobriety to God.

The RBB questionnaire assessed participants' religious practices during the past year (Connors et al., 1996). This instrument measures frequency of (a) thinking about God; (b) prayer or meditation; (c) attending worship services; (d) reading/studying scriptures or holy writings; and (e) having a direct experience with God. The choice of answers ranged from never to once a day; they obtained a Cronbach's Alpha of .81.

The SWLS (Diener et al., 1985) measured perceived quality of life. This five-item Likert-style scale measures perceptions of well-being and life-satisfaction. A representative item is, "In most ways my life is close to ideal." For each item participants rated their agreement with the statement. Responses were scored from 1 (*strongly disagree*) to 7 (*strongly agree*), and were summed for each participant; higher scores reflect greater satisfaction with life. Psychometric evaluation of this measure yielded good internal consistency ($\alpha = .87$) and acceptable test-retest reliability ($r = .69$). In addition, the construct validity of the SWLS was established through high correlations with other measures of life satisfaction. The coefficient alpha for their sample was .83.

The fourth instrument was the MOS Social Support Survey (Shelborne, et al., 1991). This scale measures the degree to which a person feels cared for, respected, and involved with friends, family and other people. Items are rated on a Likert-type scale, 1(*none of the time*) to 5 (*all of the time*). Sample items are "Someone to help you if you are confined to bed." and "Someone to share your most private worries and fears with." The Cronbach's alpha was .92

Quality of life was measured using the SF-12, which is a 12-item version of the Short-Form-36, the most frequently cited quality of life measure (Smith & Larson, 2003).

A cover sheet accompanied the survey to solicit information about age, length of sobriety, ethnic group, education, and whether participation in AA is voluntary or involuntary (i.e., court mandated). The complete survey is in Appendix A.

Procedure

Participants were informed about the type of research before participating in the study. They retained the autonomy to discontinue the survey at any stage of the process. Contact information for the principal investigator, the dissertation chair, and the Institutional Review Board (IRB) of Andrews University were provided; see Appendix B for the IRB approval letter. In the event that any additional information was required, participants had direct access to the project facilitator at QuestionPro. QuestionPro's respondent anonymity assurance methods ensured that anonymity was preserved. No identifying or contact information was made available to the principal investigator; all survey responses were kept confidential.

To avoid human error, the original data were transferred to SPSS directly from QuestionPro's data collection platform. QuestionPro checks IP addresses to ensure that participants only take the survey once; all IP addresses are deleted once the SPSS file was transferred to the investigator; thus, there was no follow-up with participants after completion of the survey. Data were stored in a secure password-protected file on a secure password-protected computer. Additional password-protected backup files were stored on an external USB drive, kept in a secure location by the principal investigator; also, the dissertation methodologist had access to the raw data. After the data were

successfully downloaded, backed up, and stored securely, the original files were deleted from QuestionPro. The Andrews University IRB policy requires that survey data be stored for a minimum of three years; following this mandatory storage period, the data will be deleted in a secure manner.

Data Analysis

The data were collected from QuestionPro, an online data collection company. SPSS was used to generate descriptive statistics, and MANCOVA was used to analyze the data. This statistical model is appropriate because it allows analysis of the impact of the independent variables (choice of God/higher power, perceptions of God/higher power, religious beliefs and behaviors, and social support) on the three dependent variables (length of sobriety, satisfaction with life, and quality of life) while controlling for age, gender, and level of education.

Summary

In 2015, about 88,000 Americans died from alcohol related causes (Centers for Disease Control, accessed 2017). Millions of Americans still abuse alcohol and other drugs daily. This study attempted to contribute to the solution to this deadly and growing epidemic of chemical addiction. AA has been amongst the most successful approaches clinicians have to help clients. The spiritual foundation of AA is undeniable; a belief in a higher power is an important part of the recovering person’s experience. This project tried to answer the question of whether having a belief in God and being in a relationship with a higher power increases the quality of one’s recovery, and prevents the cycle of relapse and restart, as is often the pattern in treatment today.

CHAPTER 4

RESULTS

Introduction

Millions of Americans are struggling with alcohol and drug addiction. Many of those enter treatment each day; 60% of them will fail (Hubbard, Craddock, & Anderson, 2003; McLellan et al., 2000). This study examined the relative influence of four independent variables: (a) choice of God/higher power, (b) perceptions of God/higher power, (c) religious beliefs and behaviors, and (d) social support, on individuals recovering from alcohol abuse through AA. A MANCOVA was conducted to examine the overall impact of these variables on recovery success as measured by the outcome variables: (a) length of sobriety, (b) satisfaction with life, and (c) quality of life.

Participants

There were 324 participants who attempted to complete the survey; however, 204 did not answer all the questions, so their data was excluded from the final list of participants. The participants had been given the option of discontinuing their participation at any point; many of them might have been exercising that right. A note of interest in the data is that many of the participants who dropped out were scoring very high on religious beliefs and behavior and on God's actions in their lives, but they did not answer any of the questions about Quality of Life and Satisfaction with Life. After these respondents were deleted, 120 participants remained in the study.

There were 120 participants who completed the survey *(n* = 120). Of all the participants 64.2% (77) identified themselves as female, and 35.8% (43) identified themselves as male. Age groups included 21.7% (*n* = 26) who reported they were between the ages of 21 and 30; 29.2% (*n* = 35) reported ages between 31 and 40; 21.7% (*n* = 26) reported they were between the ages of 41 and 50; 12% (*n* = 18) reported they were between the ages of 51 and 60; and 12.5% (*n* = 15) reported they were aged 60 and above. See Table 1 for a demographic description of the participants.

Although the group was heavily weighted toward Caucasians, who were 79.2% (*n* = 95) of the participants, there was some diversity within the group. African Americans made up 9.2% (*n* = 11) of the group, Hispanic Americans were 5% (*n* = 6), Asian Pacific Islanders made up 5% (*n* = 6), and the "Other" group made up 1.7% (*n* = 2). In terms of education, the majority of the participants were well educated in that 25.8% had completed some college, 19.2% had four-year college degrees, 10% had master's degrees, and 3.3% had doctoral degrees. Only 23.3% had completed high school only, and only one (0.8%) did not complete high school (see Table 1).

Variable Descriptions

The first independent variable is choice of a higher power, which is defined as the state of accepting something as true and attributing hope and confidence in this truth to help in recovery. Overall, most of the respondents choose God as their higher power, 49.2% (*n* = 59); those who believed in "other" as their higher power or a random choice were 35.8% (*n* = 43) of the sample; and last, those who believed in recovery itself, none, or were unsure comprised 15% (*n* = 18) of the sample (see Table 1).

Table 1.

Participant Demographic Characteristics

Variable	Category	*n*	Percentage
Gender	Male	43	35.8
	Female	77	64.2
Age	21 – 30	26	21.7
	31 – 40	35	29.2
	41 – 50	26	21.7
	51 – 60	18	15.0
	60 and above	15	12.5
Ethnicity	African American	11	9.2
	White Caucasian	95	79.2
	Hispanic	6	5.0
	Asian Pacific Island	6	5.0
	Other	2	1.7
Education	Some high school	1	.8
	High school grad	28	23.3
	Post high school	6	5.0
	Some college	31	25.8
	Associate Degree	13	10.8
	Four-year degree	23	19.2
	Some postgraduate	2	1.7
	Master's Degree	12	10.0
	Doctorate	4	3.3
Choice of God/higher power	God as HP	59	49.2
	Random HP	43	35.8
	No HP/unsure	18	15.0
Length of sobriety	0 to 6 months	25	20.8
	6 months to 1 year	10	8.3
	1 year to 2 years	8	6.7
	2 years to 3 years	3	2.5
	3 years or more	74	61.7

Table 2

Descriptive Statistics for Continuous Variables (n = 120)

Variable	**Mean**	**Median**	**Skewness**	***SD***	**Range**
Perceptions of God/higher power	32.6	36	.438	12.6	36
Religious beliefs & behavior	40.2	42	-.261	14.0	54
Social support	65.8	69	-.178	18.0	65
Satisfaction with life	22.0	23	-.325	7.9	30
Quality of life	30.6	31	-.843	4.6	25

Table 2 presents the data about each continuous variable. The second independent variable was perceptions of God/higher power. This variable was defined as a person's personal understanding of the transcendent and how this transcendent being intervenes or not in their recovery. This variable was scored from 12 to 48; the higher the score the greater the perception that God/higher power is helpful in initiating and maintaining their sobriety; a low score meant that the individual did not perceive that God (or a higher power) was helping them with their sobriety (mean = 32.6; median = 36; range = 36; skewness = .438; and *SD* = 12.6.

Religious beliefs and behaviors are important concepts in AA culture. Conceptually, religious beliefs and behaviors are outlined in *The Big Book* as the 12 Steps. They include daily prayer, regular reading of religious writings, attending worship and/or support meetings, and giving service to the community. For religious beliefs and behaviors, analysis showed a range of 54, a mean score of 40.2, median = 42, skewness = -.261, and standard deviation = 14 (see Table 2).

Social support was defined as the degree to which people feel cared for, respected, and involved with friends, family, and the wider community. This variable measured the degree to which a person feels cared for, respected, and involved. The minimum score was 30 and maximum 95, with analysis showing mean = 65.8, median = 69, *SD* = 18, and skewness = -.178. See Table 2.

The length of sobriety (a categorical variable) varied wildly amongst the participants, with most of the participants reporting having been sober for more than 3 years, (61.7%, *n* = 74); a significant group reported they were new to being sober, 0 to 6 months (20.8%, *n* = 25); with the other groups being smaller: 6 months to 1 year (8.3%, *n* = 10), 1 year to 2 years (6.7%, *n* = 8), and 2 years to 3 years (2.5%, *n* = 3). See Table 1.

Satisfaction with life was defined as an individual's subjective view as it related to the lived experience, measured with a five-item scale asking participants to score their responses from 1 (*strongly disagree*) to 7 (s*trongly disagree*). The possible scores ranged from 5 to 35, where the higher scores represented the more satisfied participant. Participants had a mean score of 22, the median = 23, skewness = -325, the *SD* = 7.9, with a range of 30. See Table 2.

Quality of life was another dependent variable in this project, defined as a personal reflection on one's emotional well-being in regard to personal health, finances, relationships in the community, a sense of support, and the ability to support one's self in the community. Participants had a mean score of 30.6, median of 31, skewness = -.843, and *SD* = 4.6. See Table 2.

Hypothesis Testing

The null hypothesis stated that (a) choice of God/higher power in AA, (b) perceptions of God/higher power, (c) religious beliefs and behaviors, and (d) social support will have no significant effect on (a) length of sobriety, (b) satisfaction with life, and (c) quality of life when controlled by gender, age, and years of education.

The Box test of equality (homogeneity of variance) was used to test whether choice of God/higher power in AA, perceptions of God/higher power, religious beliefs and behaviors, and social support were equal across the three control variables. Box's M test was found not to be significant (F [72, 189] = .791, $\rho > .05$, $p = .900$), meaning that equal variance can be assumed among the variables.

MANCOVA was conducted to determine the multivariate effect of choice of God/higher power, perceptions of God/higher power, religious beliefs and behaviors, and social support on the dependent variables length of sobriety, satisfaction with life, and quality of life, for individuals recovering from alcohol abuse disorder. See Table 3. Data was first screened to eliminate outliers. For the main effect of choice of God/higher power, a statistically significant effect was not found (Wilks' Lambda = .926, F [6, 218] = 1.432, $p = .204$, multivariate $\eta^2 = .038$, observed power = .552). For perceptions of God/higher power, a statistically significant effect was not found (Wilks' L = .982, F [3, 109] = .660, $p = .579$, multivariate $\eta^2 = .018$, and observed power = .185). For religious beliefs and behaviors, a statistically significant effect was found (Wilks' Lambda = .926, F [3, 109] = 2.898, $p = .038$, multivariate $\eta^2 = .074$, and observed power = .677). For social support, a statistically significant effect was found, (Wilks' Lambda = .693, F [3,

Table 3

Multivariate Effect of Independent Variables and Gender on Recovery including Satisfaction with Life, Length of Sobriety, and Quality of Life.

Variable	**Wilk's Lambda**	***F***	***df***	***p***	**Partial η^2**	**Observed Power**
Choice of God/higher power	.926	1.432	6, 218	.204	.038	.552
Perceptions of God/ higher power	.982	.660	3, 109	.579	.018	.185
Religious beliefs & behaviors	.926	2.898	3, 109	.038	.074	.677
Social support	.693	16.125	3, 109	.000	.307	1.000
Gender	.905	3.827	6, 218	.012	.095	.126

109] = 16.125, p = .000, multivariate η^2 = .307, and observed power = 1.00). For gender, a statistically significant effect was not found, (Wilks' Lambda = .905, F [6, 218] = 3.827, p = .012, multivariate η^2 = .095, and observed power = .126).

Table 4 shows the results of the effects of the independent variables (a) choice of God/higher power, (b) perceptions of God/higher power, (c) religious beliefs and behaviors, (d) social support, and (e) gender on the dependent variables of (a) length of sobriety, (b) satisfaction with life, and (c) quality of life. MANCOVA showed a statistically significant effect of social support on the dependent variables: length of sobriety (F [1, 111] = 3.235, p = .075, η^2 = .028, observed power = .430) and satisfaction with life (F [1, 111] = 41.413, p = .000, η^2 = .272, observed power = 1.00). A main effect

Table 4

Significant or Marginal Univariate Effects of Independent Variables and Gender on Length of Sobriety, Satisfaction with Life, and Quality of Life.

Independent Variables	**Dependent Variables**	***F***	***df***	***p***	**Partial η^2**	**Observed Power**
Choice of God/ higher power	Length of sobriety	2.826	1, 111	.064*	.048	.545
	Satisfaction with life	1.359	1, 111	.261	.024	.288
	Quality of life	.052	1, 111	.949	.001	.058
Perceptions of God/ higher power	Length of sobriety	3.836	1, 111	.244	.012	.213
	Satisfaction with life	12.737	1, 111	.576	.003	.086
	Quality of life	4.199	1, 111	.648	.002	.074
Religious beliefs and behaviors	Length of sobriety	0.408	1, 111	.524	.004	.097
	Satisfaction with life	2.143	1, 111	.146	.019	.306
	Quality of life	6.389	1, 111	.013*	.054	.707
Social support	Length of sobriety	3.235	1, 111	.075*	.028	.430
	Satisfaction with life	41.413	1, 111	.000	.272	1.000
	Quality of life	2.882	1, 111	.092*	.025	.391
Gender	Length of sobriety	.195	1, 111	.660	.002	.072
	Satisfaction with life	11.330	1, 111	.001*	.093	.916
	Quality of life	.357	1, 111	.551	.003	.091

*Significant at $p < .1$. Note: marginal outcome of p between .05 and .10

was found on quality of life, (F [1, 111] = 2.882, p = .092, η^2 = .025, observed power = .391). The effect size for each of the four independent variables showing significance had different levels of impact. Choice of God/higher power had a moderate effect on length of sobriety, the effect size was small at .048. Religious beliefs and behavior had a moderate effect on quality of life, the effect size is .054. Social support had a significant effect on all three dependent variables; on length of sobriety the effect size was .028; on satisfaction with life the effect size was .272; on quality of life the effect size was .025.

Summary

In this chapter results of the present research were presented. The demographic information of the participants and the descriptive statistics of the variables were described. The null hypothesis was presented and tested; both MANCOVA and ANCOVA were used to analyze the data. MANCOVA results showed significant results related to religious beliefs and behaviors, social support, and gender on the recovery variables of length of sobriety, satisfaction with life, and quality of life. Univariate results showed effects of social support on satisfaction with life, with moderately strong main effects and observed power. Religious beliefs and behaviors showed significant results related to quality of life; and gender showed significant results related to satisfaction with life. Chapter 5 will discuss the implications of these results in light of the research question and the existing research.

CHAPTER 5

SUMMARY, DISCUSSION, AND RECOMMENDATIONS

Introduction

This chapter reviews the content of the previous four chapters. The purpose of the study is presented, along with an abbreviated literature review. Next, the methodology and the findings of this study are described. The chapter then focuses on the findings of the project in the light of the current research literature. Limitations are identified and the implications for practice and future research are explored.

Purpose of the Study

The purpose of this study was to identify indicators of successful recovery from alcohol abuse. The study sought to understand the impact of choice of God/higher power by participants in AA and their perceptions of God/higher power, including what effect their religious beliefs and behavior and social support have on the longevity of their sobriety, their satisfaction with life, and their quality of life. This study contributes to the literature by furthering the understanding and insights of clinicians, counselors, and researchers on factors that facilitate and sustain long-term recovery from alcohol addiction.

Summary of the Literature Review

The failure or relapse rate for people seeking recovery from alcohol and other drug addictions is shockingly high, between 40 and 60%, McLellan et al., (2000).

Researchers, psychologists, counselors, and professionals in the field of recovery try to understand the variables at work. They ask the question: What do we know about what works and what doesn't work in recovery? Researchers are giving increased attention to the mechanisms at work in AA as they continue the search for a more reliable path to long-term recovery. Some of these mechanisms include: the choice of a higher power, perceptions of God or a higher power, religious beliefs and behaviors, and social support.

The literature on AUD and recovery appears to paint a clear picture of the protective role of religiosity and spirituality in maintaining sobriety (Brown, 1990; Laudet, 2007). While religiosity and spirituality have been shown consistently to have positive results in facilitating and maintaining sobriety, the exact nature of that relationship is poorly understood. Murray et al. (2003) attempted to further define the relationships among spirituality, control beliefs or choice of higher power, and treatment outcomes by examining perceptions of control related to God or a higher power over alcoholism. They found no significant relationship among individuals who chose God or a higher power (i.e., an external control) and length of sobriety or their satisfaction with life. They found the opposite to be true; individuals who had high internal control and low perceptions of control by God or a higher power showed longer periods of sobriety.

Kubicek and colleagues (2002) explored a broader question concerning recovery from AUD: "Why do some people recover from alcohol dependence, while others continue to drink and become worse over time?" They compared three groups of people recovering from alcohol addiction who were using one of three approaches: AA, RR (a self-help group unaffiliated to AA), and a spontaneous recovery group (people who quit drinking without any aid or support). People who were in a relationship with God or a

higher power identified God or the higher power as their reason for success and long-term sobriety. A limitation of this study was the small sample size (13 participants).

In a naturalistic longitudinal study, Robinson et al. (2011) examined changes in religiosity and spirituality over a 9-month period, establishing a baseline at intake, and collecting data at 3, 6, and 9 months. They had 316 alcohol-dependent participants drawn from a university outpatient treatment program, the VA, a moderate drinking site, and from the community. They investigated changes in religious beliefs and practices, changes in spirituality, and the impact of those changes on drinking outcomes (e.g., sobriety, satisfaction with life, and quality of life). They found an association between positive changes in beliefs, daily spiritual experiences, and private religious and spiritual practices (including forgiveness of self, others, and overall), and participant length of sobriety and satisfaction with life. A negative religious coping style and purpose in life or a sense of meaning were associated moderately with satisfaction with life. No significant associations were found between perceptions of God and positive religious coping styles. The findings of Morgan & Jordan (1999) were consistent, showing that significant positive outcomes were associated with positive spiritual and religious changes in those seeking alcohol and in cravings for alcohol among people in recovery.

Kaskutas, Ye, Greenfield, Witbrodt, and Bond (2008) went further. They compared individuals who attended AA, but were not affiliated with God or religion; individuals who were religiously affiliated; and individuals who had no interest in the spiritual aspect of AA, but attended AA meetings for fellowship and support. They found that respondents who were religiously affiliated and had a spiritual awakening in AA were four times more likely to be sober at the 12-month mark than any of the other

groups. Most of the unsure and secular respondents had quit going to AA meetings by the 12-month mark. At one month, many of the group who had been uncertain of their relationship with God had switched (22%), reporting a spiritual awakening. At year three, twice as many of the respondents who reported a spiritual awakening at year one were still sober. This demonstrated that it is possible to be a member of the AA community and not have any religious affiliation, but it is beneficial to seek a spiritual awakening, as religious affiliation is highly associated with long-term sobriety. While recovery by itself is important and necessary to pursue, attention to the spiritual aspects of life including connection, purpose, and relationships with other people may provide the final side of a recovery triangle which is complete, holistic, and lasting (Chapman, 1991; Morgan, 1992, 1995).

White, Wampler, and Fischer (2008) investigated indicators of spirituality and their association with successful recovery (e.g., longer abstinence, more recovery-oriented behaviors, and higher quality of life). They administered a series of tests to 252 participants recruited from inpatient and outpatient programs in a Southwestern state. In general, they found that individuals in long-term recovery reported higher internal spiritual well-being and optimism scores than those in short-term recovery. Those individuals who were in an active relationship with God as their higher power reported higher levels of religious behaviors, including attending church more frequently, higher AA attendance, regularly reading the sacred text, and praying to the higher power for help. They found that participants reported higher quality of life in recovery and had longer periods of sobriety. The authors noted this was a cross-sectional study, and

therefore the results might have occurred for reasons which may not be determined through this type of design.

Laudet et al. (2006) examined effects of the factors of social support, spirituality, religiousness, life meaning, and 12-step affiliation on quality of life satisfaction in recovering individuals. The goal was to examine how these variables buffer stress and enhance life satisfaction. Multiple studies have shown that high levels of stress are associated with increased drinking and using among both young people and adults (Titus, Dennis, Godley, Tims, & Diamond, 2002; Laudet, Magura, Vogel, & Knight, 2004). Stress is associated with poor quality of life in individuals addicted to alcohol and other drugs (Vaarwerk & Gaal, 2001). Results supported the hypothesis that social support, spirituality, life meaning, religiousness, and 12-step affiliation buffer stress and enhance quality of life among recovering persons. In this study, stress levels decreased as time in recovery increased, and that life satisfaction increased over time. Social support was the standout variable amongst this group. As social support increased, quality of life, satisfaction with life, and life meaning scores all increased. In this sample, 12-step affiliation and attendance did not increase which the authors had expected. The authors noted that not many studies have looked at 12-step affiliation.

Overall, people in recovery who had good social support and experienced life as meaningful reported higher levels of life satisfaction and quality of recovery. The findings here are consistent with the findings of others about the efficacy of social support in promoting physical health, mental health, increased happiness, and the longevity of sobriety (Berkman, 1980; Humphreys & Noke, 1997; Lin, 1986). In the light of these studies, apparently choice of God/higher power in AA programs, perceptions of

God/higher power, religious beliefs and behavior, and social support do impact the length of sobriety, satisfaction with life, and quality of life.

Methodology

The sample for this study was comprised of individuals from three Midwestern states, namely, Illinois, Michigan, and Indiana. They were in recovery from drug and alcohol abuse and were attending meetings regularly. A convenience sampling procedure was used to select male and female research participants, who were at least 21 years of age, from different AA and NA meetings across the three states, including some from cities and some from rural areas. Four independent variables and three dependent variables (4 x 3), were investigated with a power of .80; effect size, medium; and a sample size of 120 participants.

Population and Sample

There were 324 participants who attempted the survey. Of this number 204 did not answer every question and were therefore excluded from the final list of participants. They were given the option of discontinuing their participation at any point; many of them may have exercised that right. One interesting observation in the data was that many of those who dropped out were scoring very high on religious beliefs and behavior and on God's actions in their lives, but did not answer any of the questions on quality of life and satisfaction with life. After these respondents were deleted, the responses of 120 participants were utilized in the analyses.

Summary of the Methodology

This study employed a cross-sectional research design. Participants were asked to complete a survey providing information about their background, including their highest

level of educational achievement and the length of time since they last drank. They were asked about their choice of God/higher power, religious beliefs and behaviors, and level of social support. A number of instruments were administered to each participant.

MANCOVA was used to analyze the impact of (a) choice of God/higher power, (b) perceptions of God/higher power, (c) religious beliefs and behaviors, and (d) social support on the dependent variables of (a) length of sobriety, (b) satisfaction with life, and (c) quality of life. Choice of God/higher power was measured by asking participants to choose a statement that best described their belief: (a) God = transcendent being, (b) the higher power as any random object or person, and (c) other or no higher power, just a belief in recovery. Perceptions of God/higher power were measured using the Alcohol-Related God Locus of Control (AGLOC), developed by Murray et al., (2006). Religious beliefs and behaviors were measured using the RBB developed by Conners, Tonigan, and Miller (1996). Social support was measured using the Social Support Appraisals Scale (Vaux & Harrison, 1985). Length of sobriety was measured by asking participants to indicate how long it had been since their last drink. The sample was collected using convenience sampling. Participants were recruited via QuestionPro, an online service which helps researchers reach targeted populations.

Summary of Findings

Alcohol dependence is a serious and life threatening problem in the United States. According to the NIAAA, (2015) 88,000 Americans (approximately 62,000 men and 26,000 women) die from alcohol related causes annually. The National Survey on Drug Use and Health (NSDUH) found that 15.1 million people age 18 and older met the criteria for alcohol dependence in 2015 (see SAMHSA, 2019). Because of the

consequences of the high rate of alcohol abuse to the individual, the family, and the community, it is imperative that treatment providers, counselors, and psychologists understand what factors contribute to successful sobriety. This study examined the overall impact of choice of God/higher power in AA, perceptions of God/higher power, religious beliefs and behavior, and social support on the length of sobriety, satisfaction with life, and the quality of life of the recovering individual in AA. Surveys were distributed via an online data collection research company, QuestionPro; MANCOVA was used to analyze the data in SPSS.

The results indicate that choice of God/higher power in AA did not affect length of sobriety, satisfaction with life, or quality of life. The study also found that perceptions of God/higher power did not impact the length of sobriety, satisfaction with life, or quality of life. Further, the analysis showed that religious beliefs and behavior did not affect length of sobriety, satisfaction with life, or quality of life. Finally social support did impact length of sobriety, satisfaction with life, and quality of life.

Sub-Research Question 1

Is choice of God/higher power in AA a predictor of length of sobriety among people recovering from alcohol abuse? I hypothesized that choice of God/higher power would predict length of sobriety in people recovering from alcohol addiction.

Findings

A MANCOVA was conducted; the results showed a moderately significant relationship between the choice of a higher power and length of recovery among people recovering from alcohol addiction ($p = .064$, $\eta = .054$); this indicated that having a relationship with a higher power does affect how long participants stay sober.

Discussion and Implications

The current study examined the relationship between recovering peoples' choice of God/higher power, and the effect of that choice on the length of time they are able to stay sober (length of sobriety). The results showed no significant relationship exists between choice of God/higher power and length of sobriety. This finding is consistent with the findings of Morjaria and Orford (2002) as well as Murray et al. (2003). They found the choice of God/higher power had no significant impact on length of sobriety; however, they found that choice of God/higher power may be a protective mechanism, because it promotes pro-social values, which in turn promote a drug-and-alcohol-free lifestyle, which leads to a healthier social support system.

It was expected that recovering people who choose "God" as their higher power would experience longer periods of sobriety, as measured by the variable length of sobriety. The findings found moderate support for this hypothesis. This is inconsistent with the findings of Murray et al. (2003); in their examination of the impact of a God choice on length of sobriety and satisfaction with life, they found no relationship. They did find that individuals with a more self-directed attitude in treatment had longer periods of sobriety than those who reported a more external God-dependent style. However, Morgan (2008) found a strong relationship between choice of God or a higher power and length of sobriety. Some of the inconsistencies in the results may be related to the age of participants and the length of time participants attended AA meetings. Morgan (2008) studied participants who were older and had higher AA attendance rates than in Murray et al., (2003). The participants in this study were more similar to those in Murray et al. (2006), and the findings were similar to theirs.

The foundation of the Alcoholics Anonymous program is its spiritual teachings and religious practices. The results here suggest that the emphasis on choosing a higher power and the establishment of a relationship with God is related to staying sober longer, beginning through what is described as a process of conversion, which Murray et al., (2003) called a self-directed attitude. Psychiatrist Harry Tiebout, M.D., an early student of Alcoholics Anonymous, described choosing God or a higher power in recovery as a conversion process that results in a positive attitude toward reality following an act of surrender. Surrender, he emphasized, is the moment of accepting reality on an unconscious level; accepting that one is powerless over alcohol (Tiebout, 1945, 1949). This surrender/conversion process becomes the locus of control for good decision-making, humility, and abstinence.

Sub-Research Question 2

Is choice of God/higher power in AA a predictor of satisfaction with life among people recovering from alcohol addiction? I hypothesized that choice of a higher power would be a predictor of satisfaction with life. The results of this study indicated that choice of God/higher power had no significant impact on satisfaction with life.

Findings

A MANCOVA was conducted and the findings showed that choice of God/higher power was not a significant predictor of satisfaction with life in people recovering from alcohol addiction, (p = .214).

Discussion and Implications

One of the assumptions in AA is that recovering people will experience greater satisfaction with life as they grow in their spiritual development (AA *Big Book*, 2001;

Kaskutas et al., 1997). Satisfaction with life is considered an important endpoint in alcohol treatment. Recovery is more than just going without drugs or alcohol; it is living a contented life without the need for alcohol. I hypothesized that having a relationship with "God" as one's higher power would result in reported higher levels of satisfaction with life. The results showed no association between choice of a higher power and satisfaction with life. This finding is consistent with the finding of Winzelberg and Humphreys (1999). They found that a belief in God or a higher power did not affect recovering persons' satisfaction with life or their length of abstinence.

This finding is consistent with previous findings by Laudet et al. (2006), suggesting that simply choosing a specific higher power does very little to change or improve someone's life in recovery. In addition, Kaskutas et al. (2008) found that people who believe in God and practice a religion were no more likely to report greater satisfaction with life in recovery than did those who were unsure about their belief in God or those who identified themselves as simply spiritual without a connection or relationship with God. Currently there are no studies that examine choice of God or a higher power as a predictor of satisfaction with life. The closest relationship was found in a study by Flynn et al., (2003), finding that recovering people generally reported greater levels of satisfaction with life as they made progress in recovery. Logically, it makes sense that as people recover from their addictions; they regain many of the things they lost. They rebuild trust in the community, they experience better health, and they improve relationships with family members and friends.

Satisfaction with life is an important endpoint measure of recovery in alcohol treatment, indicating the potential for long-term recovery. The hypothesis in this study

was that recovering individuals who chose God as their higher power would report higher levels of satisfaction with life. The results suggest that the relationship between choice of a higher power and satisfaction with life is more complicated. Simply choosing a higher power doesn't make a measurable difference in the quality of one's life nor does it improve the level of satisfaction with one's life. Previous research suggests that satisfaction with life is associated more closely with social support.

Sub-Research Question 3

Is an AA participant's choice of God/higher power a predictor of quality of life among people recovering from alcohol addiction? I hypothesized that choice of God/higher power would be a predictor of quality of life. The results of this project indicate that it is not.

Findings

The results showed that choice of a higher power was not associated with quality of life of the recovering person (p = .407). I hypothesized that participants choosing God as their higher power would score higher on measures of quality of life as they recover from alcohol addiction. The results here suggest that is not the case; the null hypothesis was accepted.

Discussion and Implications

This study found that choice of God/higher power was not associated with quality of life. Choice of a higher power is at the core of the AA recovery program. In AA the choice of a higher power or the choice of God ("as we understand him") is outlined in six of the 12 steps; the last step refers to having a spiritual awakening and carrying this word to alcoholics (Alcoholics Anonymous, 2001). Therefore, the idea of a relationship with a

"higher power" is essential to AA's recovery program; however, it becomes more complicated when the specific choice of a higher power is considered. In AA a person can choose any random object as their "higher power;" they can choose not to have any higher power at all, or they can have God "as they understand Him" to be their higher power. No difference in reported quality of life was found, no matter which choice a recovering individual made.

This was surprising because some research shows that being in a relationship with "God" in AA is a protective factor against relapse (Greenfield, Midank, & Rogers, 2000; Miller, 1998). They argue that this choice encourages religious and spiritual involvement, which results in more social support, more community acceptance, and a greater sense of well-being. The difference between these studies may be related to the nature of the population studied. My study had mostly college students; thereby limiting the results to that population.

This is a departure from the research which repeatedly shows that being in a relationship with God is associated with higher self-worth, greater purpose in life, and an overall greater sense of wellbeing (Matthews, Larson, & Barry, 1993; Matthews, Larson, & Barry, 1995). However, as noted above, many of the participants excluded from the final data analysis were scoring high on the item about God as their choice of higher power. They did not complete the sections of the instrument addressing satisfaction with life and quality of life. Perhaps they were uncomfortable reporting that they were not as satisfied as they thought they should be, or that they were not doing as well as they expected to do.

Recovery is not complete until the alcoholic is free to live without the controlling influences of alcohol (AA*, Big Book,* 2001). This is why quality of life is important as an endpoint measure. Previous research has established that stress is one of the most consistent triggers for relapse (Laudet et al., 2006), affecting quality of life for the recovering person. Helping recovering persons find ways to improve their quality of life is an important step in ensuring long-term recovery (Culliford, 2002; Miller & Thoresen, 2003).

Sub-Research Question 4

Is perception of God or a higher power a predictor of length of sobriety among people recovering from alcohol addiction? I hypothesized that perceptions of God/higher power would be a significant predictor of length of sobriety. The results of this study indicate there is no significant relationship between perceptions of God/higher power and length of sobriety.

Findings

A MANCOVA was conducted; the findings show that perceptions of God/higher power was not related to the length of sobriety (p = .950), indicating that the null hypothesis could not be rejected.

Discussion and Implications

Perceptions of God/higher power was not associated with length of sobriety in this research project. This is inconsistent with some studies, which show that how people perceive God makes a difference in how they relate to themselves and others. Participants were asked to indicate their choice of God/higher power and then answer an item about how their choice of God/higher power influenced their length of sobriety. Significant

numbers of the participants chose God as their higher power, but did not attribute their success in recovery to their choice of higher power.

Perceptions of God or a higher power were not associated with length of sobriety, perhaps because simply believing in God is not enough, or no Christian or believers of other faiths would ever use drugs or alcohol. Research supports the findings that one's perceptions of God or a higher power makes a difference in one's motivation to change or the desire to want to do better in life, which is helpful in the early stages of recovery (Murray et al., 2003).

Current research suggests that there are many different ways in which we perceive God or a higher power. Because of their history, culture, religious traditions, and background, many people perceive God as harsh, judgmental, and punitive. They may be afraid and anxious about their future well-being (Galanter, 1997). This group tends to struggle in treatment; they are more likely to have a greater commitment to religious doctrines and rituals.

But there are those who perceive God or a higher power as a loving God, full of kindness, and always willing to forgive. This group tends to be more open to serving in the community; they seek and accept forgiveness much more easily than those who see God as judgmental and harsh, always looking for a reason to condemn them. They tend to have healthier social relationships, which is in turn associated with long-term recovery.

Foster et al. (2000) found that recovering people who perceived God as kind and loving scored higher on measures of quality of life; they had a more positive attitude about life; and they embraced forgiveness at higher rates than people who perceived God as harsh and judgmental. How people come to perceive God is a complex and

multilayered process, as noted by Pargament (1997). How people come to perceive God is a combination of environmental forces and internal processing. Koenig and Jaswal (2011) noted the importance of early parental relationships and the role of early stressors such as poverty, abuse, and parental death or divorce. They further argued that people perceive and react to all these things differently, and that how these things are perceived can affect how the individual perceives and relates to God.

The implications are that recovering people can get stuck in a certain mindset and resist help and support because they think that they deserve every bad and terrible thing that has happened to them, because it's all part of God's punishment for them. Another important implication is that people who perceive God as harsh and judgmental might show higher levels of anxiety as a result of constantly worrying about making a mistake and God keeping a record of those mistakes.

Sub-Research Question 5

Is perception of God or a higher power a predictor of satisfaction with life among people recovering from alcohol addiction? I hypothesized that perceptions of God or a higher power would be significant predictors of satisfaction with life. The results of this research indicate that this variable is not.

Findings

Perception of God/higher power was not associated with satisfaction with life (p = .357). However, for women there was some marginal difference in the results. Women who perceived God as their higher power reported marginally significant levels of satisfaction with life than did men (p = .085); However, overall the results showed no

association between perception of God/higher power and satisfaction with life for men in recovery from alcohol addiction.

Discussion and Implications

The results in this project are consistent with current findings about perceptions of God/higher power (Flynn et al., 2003; Longshore et al., 2009). Slightly more women than men reported high levels of satisfaction with life. This might be because more women attend church and are able to find other women with whom they can connect.

Perception of God/higher power is related to how God or a higher power is perceived by the recovering person. The idea of a benevolent God who offers forgiveness and a chance to start over after a lifetime of alcohol abuse can be a protective factor in recovery (Morgan, 1995). The recovering person is offered a chance to leave the past behind and try to establish a new identity. Many recovering people identify themselves as church members, survivors, and mentors (Kelly et al., 2009). Addicts hurt people in many ways, often leaving behind disappointed family members, friends, and acquaintances. Finding forgiveness through a higher power can provide the psychological and emotional support needed to try and to start over.

The impact of positive perception of God/higher power can be life changing, in that recovering people can begin to see themselves in a more positive way. People living with guilt and shame can begin to embrace forgiveness as part of their new self-identity (Kelly et al., 2009). Morgan (1995) found that recovering people who perceived God/higher power as a positive force had better outcomes in recovery. They reported higher levels of satisfaction with life, as indicated by the positive changes they were able to make in their lives. On the other hand, the recovering individuals who had a view of

God or a higher power as punitive and judgmental, requiring righteous actions or perfection, also struggled more in recovery. They reported lower levels of satisfaction with life and had higher levels of relapse.

This study found no relationship between perceptions of God or a higher power and satisfaction with life, which may be related to the population studied. Many participants were students who have uniquely high levels of stress and unanswered questions about their own lives at this stage. Many were new to the recovery experience, so even though the group was highly religious, I assume they were still working out their own religious philosophies at this age. "Therefore the way to think about how God is perceived is to think in a more developmental and cultural context rather than in a strictly religious context" (Pargament, 1997, p. 161).

Sub-Research Question 6

Is perception of God/higher power a predictor of quality of life among people recovering from alcohol abuse? I hypothesized that perception of God or a higher power will be significantly associated with quality of life. The results show there is no relationship between perceptions of God or a higher power and quality of life.

Findings

A MANCOVA was conducted to test the effects of the independent variable perception of God/higher power on the dependent variable quality of life; the results indicate no effect (p = .447).

Discussion and Implications

In this research project perception of God/higher power was not associated with quality of life. This finding is inconsistent with the research, which shows a consistent

positive relationship with the way recovering people perceive God or a higher power and the quality of their lives in recovery. For example, Montgomery et al., (1995) found that recovery addicts who perceive God/higher power as a benevolent God, willing to forgive, welcoming, and kind tend to report higher levels of quality of life. They reported being happier and more content with their lives in recovery. They also found the reverse to be true; people who perceive God/higher power as harsh, judgmental, and taking account of all misdeeds, tend to report less time staying sober and lower levels of quality of life (Foster et al., 2000).

The results of the present study are also inconsistent with studies by Longshore et al., (2009) who found that individuals in recovery who attributed their sobriety to the help of God or a higher power also reported higher levels of motivation to stay sober and higher levels of well-being/quality of life. Moreover, Morgan (2002), in a study of recovering alcoholics who attended an AA program at the VA, found that those who reported a relationship with God/higher power were staying sober longer and reported increased quality of life. They were less depressed, less angry, and tended to volunteer at a higher rate to help other alcoholics seeking treatment. Other studies have found significant positive relationships between a supportive God or a higher power and increased quality of life (Kaskutas et al., 1997; Miller & McGrady, 1993; Weisner et al., 1995).

The results cited above clearly point to the importance of perception of God /higher power to improve the quality of life for recovering alcoholics. What all addicts lose while they are living as an addict is their quality of life. These results suggest that the results of this study might be an outlier and that the findings of previous studies are a

better guide to helping alcoholics stay sober, through managing their perceptions of God/higher power and seeking religious and spiritual communities which promote a supportive, forgiving, and accepting God.

The finding of no relationship between perceptions of God/higher power and reported quality of life may be a consequence of eliminating a large number of participants who did not complete the survey. This group reported high levels of God/higher power as their source of strength in recovery. Also, the question might not have been specific enough. In previous studies, when a significant positive relationship was found, the participants were given a clearer choice between a positive, supportive, and benevolent God and a more conservative, judgmental God. Individuals choosing the more benevolent God reported higher levels of satisfaction with life and higher quality of life in recovery (Foster et al., 2000; Longshore et al., 2009).

In treatment programs the idea of God/higher power must be presented in a way that encourages greater success and contentment with life. One study by Robinson et al., (2011) found that some religions were better than others in presenting God/higher power as a source of support and strength to the recovering person. Catholics did a better job than most Protestant religions in presenting a positive and accepting God to recovering addicts. African Americans were more likely than other groups to attribute their recovery and quality of life to God or a higher power. They attend church more often and are likely to stay sober for longer periods of time as a result of church fellowship.

Perceptions of God/higher power are related to the idea of forgiveness. Most alcoholics have suffered significant personal loss to maintain their addiction. They have stolen from family members, walked away from their children, broken the law, sold their

bodies, etc.; as a result they are carrying around much shame and guilt. When presented with a God/higher power who is willing to forgive, who is accepting, supportive, and kind, recovering people can find a sense of relief allowing them to live again without shame and doubt. This sense of relief can change a person's self-worth, enhancing self-esteem, and increasing quality of life.

Sub-Research Question 7

Are religious beliefs and behaviors predictors of length of sobriety among people recovering from alcohol addiction? I hypothesized that religious beliefs and behaviors would be significantly associated with length of sobriety. The results of this study showed that religious beliefs and behavior had no significant effect on length of sobriety.

Findings

A MANCOVA was conducted to test the independent variable religious beliefs and behaviors on the dependent variable length of sobriety. The results showed no significant effect (p = .333).

Discussion and Implications

In this project religious beliefs and behaviors had no effect on length of sobriety. The findings about religious beliefs and behaviors in alcohol recovery are mixed (Longshore et al., 2009). Some findings show that prayer is associated with increased self-esteem, optimism, and satisfaction, but is not associated with length of sobriety (Zemore, 2007).

Religious beliefs and behaviors, including weekly church attendance, prayer, and a belief in a loving God have been associated with increased length of sobriety. This is especially true for African Americans more than Caucasian Americans. This finding was

supported by the findings of Stewart (2001). Religious beliefs and behaviors were strong predictors of length of sobriety for African Americans as compared to Caucasian Americans. Religious beliefs and behaviors are an essential part of recovery because they confirm the sense of self as a new, forgiven person. Recovering people develop a new history of good behaviors, enhancing their self-esteem and self-worth (Zemore, 2007). There is evidence to support the findings of this project. Carroll (1993) found a positive relationship between religious beliefs and behaviors, but Krentzman, Farkas, & Townsend (2010) found no significant relationship between religious beliefs and behaviors and the length of sobriety. Religious beliefs and behaviors are encouraged in AA as an important part of recovery (AA, *Big Book*, 2001). Six of the twelve steps in AA are related to God and a belief in a higher power, step 12 discusses "taking the word to other addicts." The steps describe believing in a power outside of oneself and surrendering to a power greater than oneself as a way to recovery (AA, *Big Book,* 2001). AA remains the most successful treatment program in America today (Pagano et al., 2004).

Religious beliefs and behaviors are closely associated with self-esteem, self-worth, and the development of a new construct of self, which is significantly different from the sense of self the individual had while they were using and abusing alcohol (Zemore, 2007). This is important because self-worth is closely related to self-efficacy which is essential in the early stages of recovery (Murray et al., 2003). Because of this, the recovering individual begins to hope and to imagine a different life.

Sub-Research Question 8

Are religious beliefs and behaviors predictors of satisfaction with life among people recovering from alcohol addiction? I hypothesized that religious beliefs and behaviors would have a significant effect on satisfaction with life.

Findings

A MANCOVA was conducted; the results showed that religious beliefs and behaviors were not related to satisfaction with life (p = .138). This was an unexpected result since most individuals in recovery programs are encouraged to develop a religious life as part of the healing process.

Discussion and Implications

Religious beliefs and behaviors are essential elements in recovery (Ringwald, 2002). Moreover, in recent years, health scientists and clinicians treating addicts have acknowledged the connection between religious beliefs and behaviors and satisfaction with life (Emmons, 1999).

In this study religious beliefs and behaviors had no effect on satisfaction with life. This finding is inconsistent with the findings of Koenig, McCullough, & Larson (2001), who found that religious beliefs and behaviors were related to higher life satisfaction, happiness, and positive effects. Carroll (1999) found that religious beliefs and behaviors were related to positive outcomes of happiness and well-being. Others have found that religious beliefs and behaviors provide a buffer against stress and loneliness, two of the main triggers for relapse in people dealing with alcohol addiction. For example, Landis (1996) reported findings which suggested that spirituality buffers uncertainty in the face

of chronic illness. Reliance on spiritual beliefs and engaging in religious activities can give hope, strength, and provide meaning during stressful periods.

Religious beliefs and behaviors in relationship to satisfaction with life is a relatively new area of academic research, coming after many years of skepticism and neglect from scholars who believed that it was impossible to study religion and others who thought there was no real benefit to the study of religiosity and spirituality and their relationship to satisfaction with life (Miller, 1998). More work is needed to understand the relationship between religious beliefs and behaviors and satisfaction with life.

There is a need for better instruments to measure and capture the nuances of religious faith and behaviors, including behaviors such as praying or studying the sacred word. What are the psychological and emotional processes taking place when a believing person engages in these activities? On the surface these seemingly simple acts may appear insignificant, but they might be triggering deep long-lasting psychological and emotional changes in the person. How do we capture this experience by asking the person to make a choice on a survey?

Sub-Research Question 9

Are religious beliefs and behaviors predictors of quality of life among people recovering from alcohol addiction? I hypothesized that religious beliefs and behaviors will be related to quality of life. The results of this research project found that religious beliefs and behaviors had a significant impact on quality of life (p = .013, η^2 = .054).

Findings

A MANCOVA was conducted and the findings indicated that religious beliefs and behaviors had a significant effect on the quality of life of recovering individuals (p =

.013). Religious beliefs and behaviors are a central component in AA, assuming that these practices enhance the quality of life for members, helping them become more trust-worthy and respected in the community.

Discussion and Implications

Religious beliefs and behaviors were associated with quality of life in this research project. Quality of life is a subjective experience for individuals, related to how they perceive themselves in the context of family, community, health, and the ability to meet their personal needs. In the past, religious beliefs and behaviors have been found to increase a person's sense of well-being and quality of life (Carroll, 1999).

In this study religious beliefs and behaviors were associated with quality of life. This finding was consistent with other findings showing a relationship between religious beliefs and behaviors and improved quality of life. Unterrainer, Huber, Stelzer, & Fink, (2012) found religious beliefs and behaviors were associated with increases in overall quality of life for people recovering from alcohol addiction. Investigating the role of religiousness and spirituality in dealing with stressful situations, a large body of research suggests that religious beliefs and behaviors appear to function as protective factors or buffers which mediate or moderate the relationships between life stressors and quality of life (Culliford, 2002; Fetzer Institute, 1999; Miller & Thoresen, 2003).

This finding of this study is consistent with other research findings about the relationship between religious beliefs and behaviors. Religious beliefs and behaviors have been associated consistently with positive outcomes among people coping with stressful life events, addiction recovery, and end of life issues. Multiple studies have shown that religious beliefs and behaviors are associated with higher levels of quality of

life (Galanter, 1997; Underwood & Teresi, 2002). Others such as Benson and Schumaker (1992), Johnson (2001), Koenig et al. (2001), The Center on Addiction at Columbia University (1998, 1999), and Stewart (2001) found an inverse relationship between involvement in religion (e.g., attending services, praying regularly, studying the sacred word, and considering religious beliefs important) and likelihood of alcohol abuse across life stages.

The importance of encouraging religious beliefs and behavior in people recovering from alcohol addiction cannot be overemphasized. In light of the findings of this research project and the majority of the current research is clear: there are many more benefits for recovering individuals if they have strong religious beliefs and they are taught wholesome religious behaviors.

Sub-Research Question 10

Is social support a predictor of length of sobriety among people recovering from alcohol addiction? I hypothesized that social support would be a significant predictor of length of sobriety. The results of this study indicate that social support is a predictor of length of sobriety.

Findings

A MANCOVA was conducted; the results indicate that social support is a predictor of the length of sobriety (p = .075, η^2 = .028). This result is consistent with current research on social support and length of sobriety in recovery.

Discussion and Implications

Consistently, social support is the variable most associated with recovery success (Kaskutas et al. 2002). The findings of this study are consistent with the findings of

Caplan and Caplan (2000) and Dalgard and Tambs (1997). They found that social support was important in two ways; it provided a buffer against stressful life events and it provided assistance, emotional support, and a sense of belonging, all of which can alleviate stress as well as improve life.

In this study social support was associated with length of sobriety ($p = .075$). People in recovery who reported higher levels of social support reported longer periods of sobriety. The findings in this study are consistent with findings by Kelly et al. (2009) and Kubicek et al. (2002). They found that social support was a strong predictor of long-term sobriety for people recovering from alcohol addiction. Social support involves connecting with others and learning how to get along with others in ways which are not manipulative and/or selfish. Such support includes learning how to ask for help and becoming comfortable accepting help. This is the opposite of the behavior of a person in active addiction, which is self-centered and manipulative.

Social support is essential to short-term and long-term recovery from alcohol addiction. In AA the emphasis is on the religious and spiritual practices established by the founders. Current research suggests that social support has the strongest relationship with length of sobriety (Kaskutas et al., 2002). Kelly et al., (2009) found there were three kinds of support contributing to long-term sobriety. Structural support is when the recovering person is connected with a fellowship of similar people and is able to bond with the group. Functional support includes situations where the recovering person feels accepted as part of the group and is held accountable for modeling recovery behaviors. General or global support includes places where people in the wider community are available to meet the basic social needs of the recovering person; it is essential for long-

term recovery. Global support includes family members, community leaders, and peers who are committed to the recovering person's long-term well-being.

The focus in recovery needs to be about the kind of environment in which people are living and the levels of support available to the recovering individual. Social support should be at the center of each program, making it easier for people to connect with each other in peer groups and mentoring programs. This includes encouraging more AA sponsors. Jackson and Bergeman (2011) found that being a member of a supportive congregation was associated with quality of life and length of sobriety.

Sub-Research Question 11

Is social support a predictor of satisfaction with life among people recovering from alcohol addiction? I hypothesized that social support would be a significant predictor of satisfaction with life; the results of this research support that hypothesis, ($p = .000$, $\eta^2 = .272$).

Findings

Social support was a strong predictor of satisfaction with life in this research project ($p = .000$, $\eta^2 = .272$). People who reported high levels of social support also reported high levels of satisfaction with life. These findings show the impact of social support on satisfaction with life. This effect size ($\eta^2 = .272$), indicates we can be moderately confident of the effect of social support as a predictor of satisfaction with life for people in recovery from alcohol.

Discussion and Implications

These findings are consistent with the findings of Diener, Suh, Lucas, & Smith (1999), who found that church attendance (or social activity) was a greater predictor of

reported satisfaction with life than was a personal belief in God. Recovering people who attend church regularly and find it a form of social activity tended to be more satisfied with their recovery experience and are more satisfied with life as a result. Attending church activities, meeting people, making friends, and helping out seem to increase a sense of satisfaction with life. This is consistent with the findings of Ellison and Fan (2008).

Current research on satisfaction with life among people in recovery paints a mixed picture. One study found that there is an increase in life satisfaction among people in recovery, but a significant decrease when they relapsed (Foster et al., 2000). This is consistent with the findings of the present study, that people who are participating in recovery activities, including attending meetings, having a sponsor, attending church services, and finding new non-using friends stay sober longer and consistently report higher levels of satisfaction with life.

Summary of Results

In this study, participants who reported that they have people in their lives whom they can turn to when they are in distress, sad, or in trouble reported greater levels of satisfaction with life. They attend AA meetings regularly, they have sponsors, and many of them are regular church attendees. These social activities seem to increase their level of satisfaction with life and overall well-being.

In AA meetings people are encouraged to share their experience and be open with others. They are encouraged to form new healthier relationships, including one with a sponsor, who becomes someone whom they can depend upon in any circumstance,

similar to a healthy relationship with a brother or a sister. A mentor is someone who will be there when the recovering person needs guidance, companionship, or face a crisis.

The strongest relationship found in this study was the relationship between social support and satisfaction with life. This is consistent with findings about the importance of social support in recovery from alcohol addiction (Humphreys, Moos, & Cohen, 1997). The current state of addiction recovery in the US is in crisis. Many people seeking treatment will be back in rehabilitation within months of leaving the program; this cycle has continued for many years. Most treatment programs are built on two principles: (a) most addicts need more discipline in their lives and (b) most addicts need to be educated about the dangers of addiction and the importance of personal responsibility. This may be one reason we see this cycle of treatment and relapse. The real need may be for more support in the form of encouragement, fellowship, and unconditional positive regard. This is consistent with the finding of Ellison (1991) who noted that when recovering people feel supported, accepted, and encouraged they make greater efforts to demonstrate pro-social behaviors and stay sober longer.

The results of this finding suggest that treatment programs should focus on building social support around the person dealing with addiction. A new design or approach is needed, built around social support from the individual’s family, friends, and community. In this way the recovering individual is able to observe and relate to models of healthy behaviors. They see people dealing with adversities in life without falling apart; they feel accepted, not because they are good, but because they are valued.

Sub-Research Question 12

Is social support a predictor of quality of life among people recovering from alcohol addiction? I hypothesized that social support will be a predictor of quality of life for people recovering from alcohol addiction. The results of the study support this hypothesis.

Findings

A MANCOVA was conducted and the findings indicate that social support was a significant predictor of quality of life, (p = .092, η^2 = .025). Participants in recovery who had people in their lives on whom they could depend in times of distress and hardship reported higher levels of quality of life.

Discussion and Implications

Quality of life has become an important endpoint measure for many studies on recovery, indicating to some extent the psychological and emotional well-being of the person in recovery (Laudet et al., 2006). The results here suggest that social support from family members, friends, and the community play an important role in maintaining the recovering person. Quality of life was measured using the SF-12 scale and showed an association with social support. Individuals who reported the highest levels of quality of life also reported they had someone in their community on whom they could depend if they had a crisis or were in trouble. They stated they had people whom they could talk to if they were lonely or sad. This is consistent with the findings of Brennan and Moos (1990) and Nelson, Hall, Squire, and Walsh-Bowers (1992) who found that social support was linked to better quality of life among addicts and individuals with mental disorders.

In the AA recovery program, social support is central to success; individuals are encouraged to attend meetings regularly, get a sponsor, and try to repair or restore broken relationships as much as possible. Individuals who are most committed to these activities and actively tied to these forms of social support should begin to experience higher levels of quality of life. In turn, this increases their level of motivation to stay in recovery; now they are not doing it alone. Granfield and Cloud (2001) noted that society glorifies a meritocratic ideology of "pulling yourself up by the bootstraps;" this is largely a "cultural myth" (p. 1566). People need people; this need is most acute in recovery, because the process of addiction can be so horrifyingly damaging to the person's self-worth.

Finally, in early recovery the individual will lose their old drinking friends; loneliness is one of the early triggers for relapse (Ribisl, 1997). Support from peers, especially recovery-oriented support, is critical to alcohol users in the early stages of recovery. The individual may be moving away from drinking associates, but may not yet have a healthier network of support established. Havassy, Wasserman, & Hall (1993); Longabaugh and Lewis (1988); and the Project MATCH Research Group (1997), found that friends' support for alcohol and substance use is a negative predictor for abstinence and quality of life.

AA is a spiritual program, but it is also a very social program; people meet regularly, every day, and every hour. Members can go to as many meetings as they desire; they are encouraged to have a sponsor, who is someone who will be there for them whenever they need a partner. Kelly et al. (2012) found that having a sponsor was associated with positive outcomes in treatment and length of sobriety. This study suggests that recovery is about relationships. The recovering person needs other human

beings to affirm them, to provide emotional support and unconditional acceptance, and to assist in meeting their needs, whatever those needs might be.

Summary and Discussion of Major Findings

A total of 324 participants attempted to complete the surveys, but only 120 were eligible for the study. Two hundred and four were excluded because they did not complete the survey. A noteworthy point here is that many of those who were excluded scored high on choosing God as their higher power and scored high on religious beliefs and behavior, yet had difficulty with the satisfaction with life and the quality of life questions. The final sample included 38% males and 62% females. The sample was somewhat diverse, although the sample was mostly Caucasian (79.2%), with African American at 9.2%, Hispanic American 5%, Asian American 5%, and other 1.7%. Participants in this study had to be 21 years or older. Within the sample 25.8% had completed college, 19% had some college, while 10% had master’s degrees. The population reflected the general educational achievement of the United States. Length of sobriety varied wildly among the sample; most of the sample reported being sober more than 3 years (61.7%), and many reported being relatively new to sobriety at 0-6 months (20.8%).

Overall, participants in this study were very religious; the majority chose God as their higher power (59%), followed by a random higher power (38.8%), and other at 15%. I hypothesized that individuals choosing God as their higher power, who had positive perceptions of God or a higher power, practiced their religious faith, and had social support would stay sober longer, be more satisfied in their recovery experience, and have a higher quality of life overall. However, only social support had an effect on

the length of sobriety, satisfaction with life, and quality of life (social support and length of sobriety, $p = .002$, $\eta^2 = .113$, social support and satisfaction with life, $p = .113$, $\eta^2 = .074$, social support and quality of life, $p = .000$; $\eta^2 = .242$). This finding is consistent with Laudet et al. (2006), who found that social support was associated with reduced stress, longer periods of sobriety, and satisfaction with life. AA is set up as a spiritual program because the core belief is that alcoholism is a spiritual disease and that a spiritual awakening is the key to recovery. (AA *Big Book*, 2001). This study demonstrated that social support is at the heart of alcohol dependence cessation and maintenance. (Laudet et al., 2006) found that social support increases a sense of well-being and a motivation to change, which are important steps in early recovery; see Motivational Enhancement Therapy.

Recommendations for Practice

As clinicians and other professionals help people addicted to alcohol recover, the findings of this study suggest that social support is important to the process. Asking detailed questions about the kind and amount of support in place for the individual is critical to their success in staying sober and maintaining the gains of recovery. Social support provides not only friendship and family healing; it also provides modeling for the recovering person. Counselors and clinicians should design treatment in such a way that every recovering person has the family involved in the care and recovery experience. Every recovery program should include teaching social skills to new members to help them become more comfortable making friends and maintaining relationships in their families and communities.

The recovery community should develop community programs, where recovering people can meet regularly outside AA meetings; they can have coffee and dinners, building sober friendships outside of AA. Most recovering individuals had only using friends and will need to leave them behind if they are to maintain their sobriety. Most will have damaged family relationships and are alone when they come to treatment. Working with recovering individuals in groups might be more effective than individual counseling. Groups allow individuals to become connected to other group members, form new relationships, and widen their support network.

Clinicians and professionals working with people recovering from alcohol dependence should work with them to rebuild family and community relationships. Often so much damage has been done that the individual is not able to rebuild these relationships on their own, because so much trust has been broken and family members might be reluctant to get involved again with the recovering person. In each treatment program there should be a specially-trained person to help repair family relationships as part of the treatment plan.

Another important area that might benefit some individuals, but may not appeal to others is spiritual development or growth as a part of treatment. These activities could include reading sacred texts, prayer and meditation, helping out in the community, seeking forgiveness and offering forgiveness, learning how to be "humble," learning how to be honest and truthful, and related behaviors. All of these are associated consistently with long-term sobriety (Arnold, Avants, Margolin, & Marcotte, 2002; McDowell et al., 1996).

Recommendations for Future Research

This study was limited in terms of the homogeneity of the sample, which restricts the generalizability of the findings to a wider community. For example, African Americans and other minority groups made up a small amount of the sample; therefore the findings cannot be generalized to these populations. African Americans in particular are a very religious group; Miller (1998) found that religious behavior has a protective effect on this population. A future study with a larger minority sample might yield a different set of results and more interesting effects. Conducting this study in person, where people are given time to think through their responses might yield more results; since many of the variables were trending toward significance.

Finally, the field of alcohol dependence research is changing rapidly to include issues of neurobiology, medication, and a more holistic look at the person using. In his book *In the Realm of the Hungry Ghosts*, Dr. Gobar Mate (2010), a Canadian physician and addiction specialist, discusses a biopsychosocial model of understanding and treating the addicted person. He purports that addiction is the result of an interaction of biological, psychological, and social factors. He talks about the importance of early childhood trauma and how it contributes to later addiction. As a first step in enhancing long-term recovery, his prescriptions include changing the social environment of the addicted person so that they feel cared for and supported. He suggested changing the word "addict" to "A human being who has suffered so much that he or she finds drugs and alcohol or some other behavior a temporary escape from that suffering" (p. 78). In many ways this is the spiritual approach to treatment.

APPENDIX A

Demographic Variables and Survey

Age: 1 (21-26); 2 (27-35); 3 (36-46); 4 (47 and above).

Education: Please state highest grade completed in high school…

Please state number of years completed in college: 1 2 3 4 5…more.

Gender: Please circle one:

Male Female

Length of time clean/sober	1 0 – 6 months	2 6mths-1 yr	3 1 yr – 2 yrs	4 2 yrs and above

1. Which phrase best describes your idea of God? (Check one)

1. God 2. Higher Power 3. Other

When completing the questions below, please refer to what you have marked above as your God.

- **Below are statements with which you may agree or disagree**
- **Circle the one number that best represents how you feel about each statement**
- **Please try to respond to the statement <u>even if you have not had any alcohol.</u>**

	Strongly disagree	Slightly disagree	Slightly agree	Strongly agree
2. In some situations when I feel helpless, God helps me not to drink	1	2	3	4
3. God helps me to keep from drinking when things are bad	1	2	3	4
4. God participates in my decision not to drink	1	2	3	4
5. God plays a role in whether my alcohol use increases or not	1	2	3	4
6. God plays a role in whether I drink or not	1	2	3	4
7. God helps me take my mind off my problems so I don't need to drink	1	2	3	4

	Strongly disagree	Slightly disagree	Slightly agree	Strongly agree
8. If someone asked me to try alcohol, God would keep me from trying it	1	2	3	4
9. God helps me handle my problems so that I don't need to drink	1	2	3	4
10. God helps me keep from drinking when I have a lot of problems	1	2	3	4
11. When there are too many problems in my life, God keeps me from drinking	1	2	3	4
12. Most things that affect whether I drink or not happen because of God	1	2	3	4
13. God controls how much I drink	1	2	3	4

14. Which of the following best describes you at the present time?
    a. Atheist: I do not believe in God
    b. Agnostic: I believe we can't really know about God
    c. Unsure: I don't know what to believe about God
    d. Spiritual: I believe in God, but not religious
    e. Religious: I believe in God and practice religion

15. For the past year, how often have you done the following? (Circle one number for each line)

	Never	Rarely	Once a month	Twice a month	Once a week	Twice a week	Almost daily	More than once daily
a. Thought about God	1	2	3	4	5	6	7	8
b. Prayed	1	2	3	4	5	6	7	8
c. Meditated	1	2	3	4	5	6	7	8
d. Attended worship services	1	2	3	4	5	6	7	8
e. Read/Studied holy writings	1	2	3	4	5	6	7	8
f. Had direct experiences of God	1	2	3	4	5	6	7	8

16. Have you ever in your life;

	Never	Yes, in the past but not now	Yes, and I still do
a. Believed in God	1	2	3

	Never	Yes, in the past but not now	Yes, and I still do
b. Prayed?	1	2	3
c. Meditated	1	2	3
d. Attended worship services	1	2	3
e. Read scriptures or holy writings	1	2	3
f. Had direct experiences with God	1	2	3

The following questions ask for your views about your health, how you feel and how well you are able to do your usual activities.
If you are unsure about how to answer any questions please give the best answer you can. Do not spend too much time in answering, as your immediate response is likely to be the most accurate.

17. In general, would you say your health is (Please tick one box.)

Excellent	Very good	Good	Fair	Poor

Health and Daily Activities

18. The following questions are about activities you might do during a typical day. Does your health limit you in these activities? If so, how much? (Please tick one box on each line.)

	Yes limited a lot	Yes, limited a little	No, not limited at all
a. Moderate activities, such as moving a table, pushing a vacuum, bowling or playing other sports			
b. Climbing several flights of stairs			

19. During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of your physical health? (Please answer Yes or No to each question)

	Yes	No
a. Accomplished less than you would like		
b. Were limited in the kind of work or other activities		

20. During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)? (Please answer Yes or No to each question)

	Yes	No
a. Accomplished less than you would like		
b. Don't do work or other activities as carefully as usual		

21. During the past 4 weeks how much did pain interfere with your normal work (including work both inside the home and housework)

Not at all	A little bit	Moderately	Quite a bit	Extremely

Your Feelings

22. These questions are about how you feel and how things have been with you during the past month. For each question, please indicate the one answer that comes closest to the way you have been feeling. (Please tick one box on each line)

How much time during the last month:	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
a. Have you felt calm and peaceful?						
b. Did you have a lot of energy?						
c. Have you felt downhearted and low?						
d. Has your health limited your social activities (like visiting friends or close relatives)?						

23. Please mark a response between 1 and 5 for the one that best describes your situation.

Please mark a response between 1 and 5 for the one that best describe your situation	None of the time	A little of the time	Some of the time	Most of the time	All of the time
24. Someone you can count on to listen to you when you need to talk	○ 1	○ 2	○ 3	○ 4	○ 5
25. Someone to give you information to help you understand a situation	○ 1	○ 2	○ 3	○ 4	○ 5
26. Someone to give you good advice about a crisis	○ 1	○ 2	○ 3	○ 4	○ 5
27. Someone to confide in or talk to about yourself or your problems	○ 1	○ 2	○ 3	○ 4	○ 5
28. Someone whose advice you really want	○ 1	○ 2	○ 3	○ 4	○ 5
29. Someone to share your most private worries and fears with	○ 1	○ 2	○ 3	○ 4	○ 5
30. Someone to turn to for suggestions about how to deal with a personal problem	○ 1	○ 2	○ 3	○ 4	○ 5
31. Someone who understands your problems	○ 1	○ 2	○ 3	○ 4	○ 5
32. Someone to help you if you were confined to bed	○ 1	○ 2	○ 3	○ 4	○ 5
33. Someone to take you to the doctor if you needed it	○ 1	○ 2	○ 3	○ 4	○ 5
34. Someone to prepare your meals if you were unable to do it yourself	○ 1	○ 2	○ 3	○ 4	○ 5
35. Someone to help with daily chores if you were sick	○ 1	○ 2	○ 3	○ 4	○ 5
36. Someone who shows you love and affection	○ 1	○ 2	○ 3	○ 4	○ 5
37. Someone to love and make you feel wanted	○ 1	○ 2	○ 3	○ 4	○ 5
38. Someone who hugs you	○ 1	○ 2	○ 3	○ 4	○ 5
39. Someone to have a good time with	○ 1	○ 2	○ 3	○ 4	○ 5
40. Someone to get together with for relaxation	○ 1	○ 2	○ 3	○ 4	○ 5
41. Someone to do something enjoyable with	○ 1	○ 2	○ 3	○ 4	○ 5
42. Someone to do things with to help you get your mind off things	○ 1	○ 2	○ 3	○ 4	○ 5

43. Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

    7 - Strongly agree
    6 - Agree
    5 - Slightly agree
    4 - Neither agree nor disagree
    3 - Slightly disagree
    2 - Disagree
    1 - Strongly disagree

    ____ In most ways my life is close to my ideal.
    ____ The conditions of my life are excellent.
    ____ I am satisfied with my life.
    ____ So far I have gotten the important things I want in life.
    ____ If I could live my life over, I would change almost nothing.

SF-12 Health Survey

This survey asks for your views about your health. This information will help keep track of how you feel and how well you are able to do your usual activities. Answer each question by choosing just one answer. If you are unsure how to answer a question, please give the best answer you can.

1. In general, would you say your health is:
   □1 Excellent □2 Very good □3 Good □4 Fair □5 Poor

   The following questions are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?

2. Moderate activities such as moving a table, pushing a vacuum cleaner, bowling, or playing golf. □1 □2 □3
3. Climbing several flights of stairs. □1 □2 □3

   During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of your physical health?

	YES	NO
4. Accomplished less than you would like.	□1	□2
5. Were limited in the kind of work or other activities.	□1	□2

During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?

		YES	NO
6.	Accomplished less than you would like.	□1	□2
7.	Did work or activities less carefully than usual.	□1	□2

8. During the past 4 weeks, how much did pain interfere with your normal work (including work outside the home and housework)?
   □1 Not at all □2 A little bit □3 Moderately □4 Quite a bit □5 Extremely

These questions are about how you have been feeling during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the past 4 weeks.

YES, YES, limited limited a lot a little NO, not limited at all

1. All of the time
2. Most of the time
3. A good bit of the time
4. Some of the time
5. A little of the time
6. None of the time

9.	Have you felt calm & peaceful?	□1 □2 □3 □4 □5 □6
10.	Did you have a lot of energy?	□1 □2 □3 □4 □5 □6
11.	Have you felt down-hearted and blue?	□1 □2 □3 □4 □5 □6

During the past 4 weeks, how much of the time have your physical health or emotional problems interfered with your social activities (like visiting friends, relatives, etc.)?

12. □1 All of the time □2 Most of the time □3 Some of the time □4 A little of the time □5 None of the time

APPENDIX B

IRB Approval Letter

February 28, 2018

Carlton Martin
Tel. (815) 670-5791
Email: carlmartbbh@yahoo.com

RE: APPLICATION FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS

IRB Protocol #:18-028 **Application Type:** Original **Dept.:** Graduate Pyschology & counseling
Review Category: Exempt **Action Taken**: Approved **Advisor:** Elvin Gabriel
Title: Perceptions of God/Higher Power, Religious Practices, and Social Support, as Predictors of Length of Sobriety, Satisfaction with Life and Quality of Life in people in Recovery from Alcohol and Other Drug Addictions, in the Mid-Western United States.

Your IRB application for approval of research involving human subjects entitled: *"Perceptions of God/Higher Power, Religious Practices, and Social Support, as Predictors of Length of Sobriety, Satisfaction with Life and Quality of Life in people in Recovery from Alcohol and Other Drug Addictions, in the Mid-Western United States"* IRB protocol # 18-028 has been evaluated and determined: Exempt from IRB review under regulation CFR 46.101 (b) (2). You may now proceed with your research.

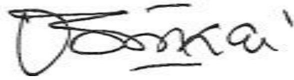
Please note that any future changes (see IRB Handbook pages 12) made to the study design and/or informed consent form require prior approval from the IRB before such changes can be implemented. In case you need to make changes please use the attached report form.

While there appears to be no more than minimum risks with your study, should an incidence occur that results in a research-related adverse reaction and/or physical injury, (see IRB Handbook pages 18-19 this must be reported immediately in writing to the IRB. Any research-related physical injury must also be reported immediately to the University Physician, Dr. Katherine, by calling (269) 473-2222.

We ask that you reference the protocol number in any future correspondence regarding this study for easy retrieval of information.

Best wishes in your research.

Sincerely,



Mordekai Ongo
Research Integrity and Compliance Officer

Institutional Review Board - 4150 Administration Dr Room 322 - Berrien Springs, MI 49104-0355

Tel: (269) 471-6361 Fax: (269) 471-6543 E-mail: irb@andrews.edu

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