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An Exploratory Investigation of the Alcoholics Anonymous Sponsor: Qualities, Characteristics, and Their Perceived Importance

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AN EXPLORATORY INVESTIGATION OF THE ALCOHOLICS ANONYMOUS SPONSOR: QUALITIES, CHARACTERISTICS, AND THEIR PERCEIVED IMPORTANCE

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VITA

The author was born in Tacoma, Washington, January 16, 1953. He received his Bachelor of Science degree from Bentley College in 1978, a Masters in Business Administration from the University of Chicago in 1980, and a Masters of Arts in Community Psychology from DePaul University in 2009.

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CHAPTER I:
INTRODUCTION

Substance use disorder (SUD) with alcohol or other drugs (AOD) affects a large segment of the adolescent and adult population of the United States and despite prevention and treatment efforts, prevalence has remained relatively stable over the past eight years. The 2010 National Survey on Drug Use and Health (NSDUH) estimated 22.1 million individuals or approximately 9% of the population aged 12 or older fit the DSM-IV criteria for abuse or dependence of AOD (Substance Abuse and Mental Health Services Administration (SAMHSA), 2011). In 2002, approximately 22.0 million individuals were similarly diagnosed in the 2002 NSDUH survey (SAMHSA, 2003). Overall, approximately 1 in 11 individuals aged 12 or older would satisfy the DSM-IV criteria for SUD, and the trend has not shown material improvement.

In 2010, the number of individuals receiving treatment for a SUD was less than 20% of the estimated prevalence. The 2010 NSDUH reported 4.1 million persons engaged in some type of SUD treatment with approximately 41% treated for alcohol only, 35% for alcohol and drugs, and 24% for drugs only. In addition, 1.0 million individuals expressed a need for specialty treatment but did not get treatment (SAMHSA, 2011). Importantly, duration of abstinence has found to be predictive of better life outcomes including greater employment, social support, housing stability, friendships, spirituality, and lower rates of incarceration and general mental distress (Dennis, Foss, & Scott, 2007).

Treatment for SUD can take place in multiple settings. Of the treatment settings measured, self-help groups (SHG) were the single largest with 2.3 million individuals or 56% of those receiving treatment identifying a SHG as a treatment setting. SHG is defined within the NSDUH as a non-professionally led group including or similar to Alcoholics Anonymous (AA) or Narcotics Anonymous (NA). Approximately 24 % or 1.0 million persons had a residential stay at an inpatient rehabilitation facility. The second largest setting reported was outpatient services at a rehabilitation facility which numbered 1.7 million individuals (SAMHSA, 2011). Overall, SHGs are a significant contributor to SUD treatment on both a standalone and affiliated basis.

Most SHGs utilize a 12 step recovery process that was first developed by AA, and subsequently codified with the publication of *Twelve Steps and Twelve Traditions* in 1953 (AA, 2008). However, alternatives are also available. Women for Sobriety (WFS) has a program consisting of 13 affirming statements in their "New Life" Acceptance Program (WFS, 2012); Self Management and Recovery Training (SMART) consists of a program emphasizing four main subject areas (e.g. building and maintaining motivation; SMART, 2012); and Moderation Management (MM) operates with a nine step process for achieving moderate drinking behaviors (MM, 2012). Most treatment settings and referrals are oriented to 12-step principles and the vast majority of empirical research on SHGs has been with 12-step groups (Kelly, 2003). Self-help group participation can include individuals across the treatment and recovery spectrum, from those who are currently engaged in SUD to those in long-term remission. A study of SHG

attendance in 2008 found that approximately 5 million (2.0% of the population, age 12 and older) went to a SHG meeting (SAMHSA, 2008). Of those who attended, 45% named alcohol only as the reason, 22% named drugs only, and 33% named alcohol and drugs. Men (67%) and females (33%) participation was approximately equivalent to their prevalence rate. The abstinence rate for the prior month for SHG attendees was 45.1%, thus while a significant proportion of SHG participants may be in some stage of SUD recovery, the majority of participants had not been abstinent a minimum of 30 days (SAMHSA, 2008).

The connection between SHG and formal treatment is best exemplified by the "Minnesota Model" which was initiated in 1949 (Hazelden, 2012). This model serves as a foundation for much of the private and public formal treatment that occurs today (Baldacchino, Caan, & Munn-Giddings, 2008; Kelly, 2003; Roman & Blum, 1999). One of the core elements of treatment is to attend lectures on AA's Twelve Steps, and patients are typically referred to attend AA meetings post treatment (Humphreys, 1997). SHG, therefore, are an integral part of the treatment structure today for SUD.

Due to the anonymous nature of many of these organizations, actual counts of individual participation are difficult to enumerate but the largest self-help group organization for SUD is Alcoholics Anonymous which estimates its membership at 2.13 million worldwide and 1.29 million in the United States (AA, 2012). The approximate number of groups totals 114 thousand worldwide and 59 thousand in the US. The next largest SHG, Narcotics Anonymous (NA), had an estimated 25 thousand groups worldwide in 2007 (NA, 2008). For comparison,

Women for Sobriety states they have hundreds of groups meeting regularly (WFS, 2012). AA and NA tend to be the subject of the greatest amount of scientific research, because of their relative size and the integration of 12-step philosophy with more formal treatment modalities.

Although not formally codified in the AA recovery program, sponsorship is an integral element in AA. AA's founders Bill W. and Dr. Bob's used the phrase, "Alcoholics Anonymous began with sponsorship" (AA, 2010, p. 7) at their initial meeting. In AA, sponsors share as equals their own experiences with other individuals. This relationship offers more personal and continuous support for an individual member than the group meeting provides, and finding a sponsor is especially encouraged for a newcomer to AA. The sponsor is expected to encourage a confidential and comfortable interchange and act as a sympathetic, understanding friend (AA, 2010). In studies of AA, research on sponsorship has been relatively limited and has focused generally on the presence or absence of a sponsor (Witbrodt, Kaskutas, Bond, & Delucchi, 2012; Young, 2012). The present study will investigate the qualities and characteristics of sponsorship within the AA framework.

Overall, SUD affects over 20 million individuals in the United States and for these individuals, SHG provide significant and pervasive treatment, as well as recovery resources. Due to their presence and influence, most empirical research on SHG has been with AA or NA and/or has investigated in general a 12-step model.

Key AA Principles

AA has only one membership requirement—the "desire to stop drinking", which includes today, the desire to stop using drugs as well (AA, 1984, p. 2). This singular focus on a motivation to change, without regard to any other individual characteristic, exemplifies their stated purpose which "is to stay sober and help other alcoholics achieve sobriety" (AA, 1984, p. 2). In achieving their purpose, members of AA are expected to "share their experience, strength, and hope." This temporal sequence of shared past experiences, current strengths, and future aspirations are directed towards the solving of a shared problem and achieving a shared goal, that of recovery.

The foundational process for individual recovery and the organizational principles of AA self-help groups are recorded in the Twelve Steps of Alcoholics Anonymous (see Table 1), and the Twelve Traditions of Alcoholics Anonymous. These two lists represent the fundamental basis of AA; the steps representing the core process by which an individual can construct and sustain an abstinent present, and the traditions which exemplify the singularly focused mission and autonomous operation of AA as an organization.

Table 1

Twelve Steps of Alcoholics Anonymous

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 became 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 the result of these steps, we tried to carry this message to alcoholics, and to practice these principles in all our affairs.

Source: AA, 1984, p. 20

These steps lay out a series of tasks that progress the individual from the initial step of problem acknowledgement, to providing service and finally to assist others in coping with SUD. For the individual pursuing a change from using AOD, to becoming abstinent, and proceeding in recovery, these steps provide a framework that is often iteratively reworked. AA takes an illness or medical disease model perspective towards SUD, such that SUD is a chronic condition that can be remitted (AA, 1984).

The AA organization and the individual SHGs operate by the philosophies outlined in the Twelve Traditions (see Table 2). These guiding principles form the basis for the governance and operation of AA entities. They emphasize the singular purpose of AA, which is sobriety or abstinence, but also promote the need for AA to stay independent of external influences, and to protect the nature of relationships within it which are ultimately non-hierarchical.

Table 2

Twelve Traditions of Alcoholics Anonymous

1. For our group purpose there is but one ultimate authority—a loving God as He may express Himself in our group conscience. Our leaders are but trusted servants; they do not govern.
2. The only requirement for AA membership is a desire to stop drinking.
3. Each group should be autonomous except in matters affecting other groups or AA as a whole.
4. Our common welfare should come first; personal recovery depends upon AA unity.
5. Each group has but one primary purpose—to carry its message to the alcoholic who still suffers.
6. An AA group ought never endorse, finance, or lend the AA name to any related facility or outside enterprise, lest problems of money, property, and prestige divert us from our primary purpose.
7. Every AA group ought to be fully self-supporting, declining outside contributions.
8. Alcoholics Anonymous should remain forever non-professional, but our service centers may employ special workers.
9. AA, as such, ought never be organized; but we may create service boards or committees directly responsible to those they serve.
10. Alcoholics Anonymous has no opinion on outside issues; hence the AA name ought never be drawn into public controversy.
11. Our public relations policy is based on attraction rather than promotion; we need always maintain personal anonymity at the level of press, radio, and films.
12. Anonymity is the spiritual foundation of all our traditions, ever reminding us to place principles before personalities.

Source: AA, 1984, p. 20

The AA recovery model has received significant criticism, most notably for its emphasis on spirituality and masculine language, but its most serious one has to do with whether it's effective. This efficacy vs. placebo issue has received significant research attention over the last 15 years, but conclusive findings are hard to come by due to the nature and complexity of the population, treatment confounds, condition confounds, and sampling limitations, (Kaskutas, 2009; Vaillant, 2005)

Effectiveness of AA

Whether AA really works as a causal paradigm became a question once researchers seemed to provide sufficient evidence that AA was associated with better SUD outcomes. Prior to the existence of empirical evidence that AA participation inferentially was correlated with better on average results, the presumed success of AA was largely anecdotal and only descriptive in nature. But even on the basis of these anecdotal results, AA grew dramatically from its initial beginnings in 1935, to over a million members worldwide by 1985 and over two million as of January, 2012(AA, 2012).

The difficulties of doing empirical work to gauge the effectiveness of AA continue to challenge researchers. Bebbington (1976) outlined a series of constraints that are reflective of both the nature of the disorder and the nature of AA that make the inference of causality an extremely problematic process since essentially double blind randomized experiments are not possible. Most research on AA or 12-step participants since the late 1990's has relied on naturalistic, longitudinal studies (Krentzman, 2007); however, some cross-sectional studies continue to be conducted (e.g. Gabhainn, 2003).

These longitudinal naturalistic studies suggest AA does have an association with better SUD outcomes. For example, in a two year prospective study of males (n= 2319) with alcohol use disorders, and that controlled for motivation, found that AA involvement at Year 1 was negatively associated with Year 2 follow-up alcohol use (McKellar, Stewart, & Humphreys, 2003). The predictive effect was smaller (β = -0.10) than the cross-sectional relationships, but still significant.

Studies further suggest that AA participation is predictive of greater abstinent outcomes. In a long-term, naturalistic study of individuals with alcohol SUD, who self-selected into the four conditions of :1) no treatment; 2) AA only; 3) treatment only; and 4) treatment + AA, greater duration of AA involvement in Year 1 was predictive of higher rates of abstinence, fewer drinking problems, greater self-efficacy, and better social functioning in Year 16 (Moos & Moos, 2006). In another five-year study examining the association of AA and NA meeting attendance on abstinence from opiates, stimulants, and alcohol, results indicated that weekly or greater meeting frequency significantly increased the odds of abstinence (Gossop, Stewart, & Marsden, 2008). A similar one-year study investigating AA engagement and sobriety found that contemporaneous AA engagement was predictive of sobriety (Majer, Jason, Ferrari, & Miller, 2011).

Project MATCH (Matching Alcoholism Treatments to Client Heterogenety), a multi-year, multi-site clinical study, utilized random assignment to investigate three standardized treatment modalities. At the three year follow-up Twelve Step Facilitation (TSF), which is a structured manualized intervention based on the twelve step principles of AA and NA, was, at minimum, comparable in effectiveness with Motivational Enhancement Therapy (MET) or Cognitive Behavioral Coping Skills Therapy (CBT) (Project Match Research Group, 1998). These results provide evidence of TSF's relative effectiveness in a randomized study of treatments. Overall, a growing base of literature has documented an association of the AA program with better outcomes for abstinence (Strassner &

Byrne, 2009). However, the definition of AA treatment and dosage does vary across studies. For example, meeting attendance has sometimes been found to be predictive of sobriety and sometimes not (Gossup et al., 2008; Majer et al., 2011, Tonigan, 2001). Complexities in defining an operational definition of engaging in the AA program continue to plague researchers trying to develop suitable measurement instruments (Tonigan, Connors, & Miller, 1996).

When applying the most rigorous scientific criteria possible, questions remain regarding whether AA is actually effective. In an editorial outlining some of the issues, Sharma and Branscum (2010) cite how the potential benefits of AA and the program's unique characteristics make it difficult to resolve the issue of scientific effectiveness. A review of AA and other 12 step scientific studies by the Cochrane Collaboration (an international organization focused on evidence based health care practices) also stated that AA may help patients in treatment for SUD, but no research indisputably has determined AA to be beneficial (Ferri, Amato, & Davoli, 2006).

As rebuttal to this assessment of the current empirical support for AA's effectiveness, Kaskutas (2009) matched current research studies and findings with six criteria for establishing causality in an epidemiological framework. These six general guidelines are: 1) relationship between exposure and outcome, e.g. correlation between AA and abstinence, 2) a dose-response relationship, 3) consistency of association, e.g. AA meeting attendance consistently predicts, 4) temporally correct sequencing, e.g. AA precedes abstinence, 5) the ability to rule out other explanations or specificity, and 6) plausibility. Overall, Kaskutas (2009)

concluded that experimental evidence or specificity was the weakest link in an argument for causality. As noted by Bebbington (1976), the AA program inherently has qualities that make it extremely difficult to assess from the perspective of manipulated, randomized, blind experimentation. Empirically, what is known is that millions of individuals at least partially attribute their sobriety to AA by continuing to attend meetings and engage in 12 step practices.

In this discussion of effectiveness, it's important to note that AA does not claim effectiveness for those who don't have strong motivation to achieve abstinence and for those who won't work the program (AA, 2012). Thus, AA's claim on effectiveness is a relative one; that is, given these conditions AA can help. The Project MATCH study suggests, given randomized individuals in outpatient status, TSF or AA can help at least as well, if not better, than two other treatment modalities.

In summary, rigorous scientific studies of AA and causality have not resulted in a decisive conclusion that AA causes abstinence, but a number of studies have found AA involvement to be associated with better outcomes over periods of time ranging from cross-sectional studies to 16 and even 60 years (Moos & Moos, 2006; Vaillant, 2005). Given the complexity and nature of the disorder, this lack of specificity should not be unexpected but one of the ways to better understand and evaluate the effectiveness of AA is to examine the possible underlying mechanisms through which AA may operate. Since even AA would not claim to be for everyone with a SUD, understanding the mechanisms by

which AA may work would help inform future research on both individual differences and possible advances in treatment methods.

Mechanisms of AA

The AA program offers an array of potential mechanisms by which to understand how AA might work to help an individual with SUD abstain from AOD use (Allen, 2000). Moos (2008) outlined four theoretical bases for the SHG to help an individual with a disorder: 1) social control, 2) social learning theory, 3) behavioral choice, and 4) stress and coping. Briefly described, social control is simply an externally provided, normative framework by which individuals guide their behavior. This framework may provide goals, monitoring, and feedback which is helpful for an individual seeking behavioral change. As an example, for an AA member, this may be associated with meeting attendance and such activities as working the 12 step process.

Social learning theory encompasses such topics as role models, exemplars, practice, and the presence of consequences, both punitive and rewarding. An example in AA would be an individual's choosing a sponsor based upon the sponsor's desirable achieved state.

Behavioral choice reflects an individual's adoption of a behavior based upon some perceived advantage. Since behavior change is a critical element of SUD treatment and recovery, the degree to which SHG's might promote and sustain positive behaviors may be critical to their ultimate effectiveness.

Stress and coping was the fourth theoretical construct discussed by Moos (2008). SHGs were possible contributors to greater self-awareness, the

development of greater internal resources including self-efficacy, and coping skills acquisition. These four constructs provide an insightful basis for understanding how the mechanisms of AA might work to benefit an individual with SUD, however, since they are not mutually exclusive and over-identify potential measureable characteristics—e.g. a sponsor who represents a role model, provides social control, provides rewarding feedback for good behavioral choices, and teaches coping skills—this section will speak to the four constructs as more discretely measurable mediators of AA are discussed.

Social Support

Social support has numerous theoretical and operational definitions, but generally can be considered the voice and weight of continuous (though not necessarily permanent) interpersonal relationships. SHGs provide a clear boundary of social support of their members in the pursuit of a common goal due usually to a common condition or shared experience. Simply stated as a testable hypothesis, do relationships formed within the umbrella of the AA program help predict future abstinence?

A study of 2,337 male veterans treated for substance abuse measured SHG involvement and its association with two dimensions of the individual's friendship social network and substance abuse outcomes (Humphreys, Mankowski, Moos, & Finney, 1999). SHG involvement, friends' support for abstinence, size of friendship network were all predictive of substance abuse outcomes and the social network variables mediated or substituted for about 70% of the SHG involvement variance associated with substance abuse outcomes.

Overall, this study suggested that SHG involvement was predictive of changes in the composition of a friendship network and its size. Greater SHG involvement suggested greater network size and reduced support for substance use. Both of these social network measures were predictive of substance use outcomes.

In a one year study of a more heterogeneous sample (42% female), this relationship of SHG (AA) involvement being predictive of support for drinking, size of support network, and SUD problem severity was replicated (Kaskutas, Bond, & Humphreys, 2002). In addition, this study found differences depending upon the definition of alcohol related outcomes. AA based support was more predictive of abstinent behavior than other measures (e.g. total annual drinks, average number of drinks, negative consequences, dependence symptoms). In a follow-on three year analysis of this sample focusing on abstinence, AA support levels and changes in AA support levels were predictive of abstinent behavior (Bond, Kaskutas, & Weisner, 2003). Both of these studies suggest AA may be associated with changes in social control (e.g. norms) and social learning.

An interesting cross-sectional study examined the relationship between SHG meeting attendance frequency and social network characteristics (Davey-Rothwell, Kuramoto, & Latkin, 2008). A sample of 931 heroin and cocaine users self-reported on their attendance at SHG meetings, and the size and meeting attendance behavior of their social networks. Those individuals attending SHG meetings frequently were associated with larger networks that were composed of individuals who were also attending more frequently. These results are supportive of the shared variance in previous studies and may also be suggestive

of feedback dynamics or interactions between social networks and SHG involvement.

A recent study utilizing the Project MATCH data for individuals in the outpatient and aftercare treatment conditions modeled AA attendance at 3 months as a predictor of possible mediators at 9 months ultimately predicting 15 month alcohol use outcomes (Kelly, Hoeppner, Stout, & Pagano, 2011). This temporal sequencing was intended to provide greater evidence of mediation mechanisms of AA on substance use outcomes. Both of the social network variables, pro abstinent and pro drinking, were significant mediators of AA meeting attendance. The authors concluded that AA is associated with multiple pathways for improving an individual's odds of abstinence and adaptive changes in social networks were found to be of significant importance.

A comprehensive literature review of social network variables in AA (Groh, Jason, & Keys, 2008) summarized 24 studies with respect to their design and findings on AA and social support. Their main conclusion was that AA involvement was associated most strongly with specific functional support from friend networks, however, many other forms of support—e.g. recovery helping—benefitted from AA involvement.

Overall, these studies suggest a strong association between an individual's involvement in AA and the composition and size of their recovery specific social network. Both of these are predictive of better SUD outcomes and some evidence suggests, they are better predictors of abstinence than more general SUD problem

measures (e.g. average drinks, drinking days, etc.). Given the purpose of AA is to help its members achieve sobriety; this is suggestive of some empirical success.

Self-Efficacy

Self-efficacy was first conceptualized by Bandura (1977) as an integrative theory to predict and operationalize behavior change. Generally, self-efficacy describes an individual's belief, confidence, or expectation that they can achieve a desired outcome. Self-efficacy has both general and specific forms and in research on SUD, self-efficacy has been a significant predictor of an individual's future drinking or drug use behaviors (Kadden & Litt, 2011). In a meta analysis of 11 research projects' results, Forcehimes & Tonigan (2008) concluded self efficacy was a significant predictor of abstinence.

Research on the relationship of AA and self-efficacy has generally found that SUD related self-efficacy and AA involvement share some variance in predicting SUD outcomes. This relationship has been investigated conceptually with self-efficacy operating as a mediator between AA involvement and SUD outcomes by Connors, Tonigan, and Miller (2001) where AA participation predicted both self-efficacy and abstinence with self-efficacy also as an intervening variable. Their results included moderate to strong direct effects for both AA and self-efficacy with a significant but small indirect effect for AA through self-efficacy.

Similar results were found in a later investigation of longer term longitudinal results of the Project MATCH sample examining alcoholic typologies. For both Type A (lower severity, later onset of SUD) and Type B

(more family history, earlier onset, greater dependence), AA participation predicted self-efficacy and abstinence, with the indirect path of AA to abstinence through self-efficacy accounting for approximately 40% of the variance shared by AA participation and abstinence (Bogenschutz, Tonigan, & Miller, 2006). These results were approximately equivalent to Connors et al. (2001).

In a simultaneous test of multiple mediators of AA attendance, AA was predictive of self-efficacy and days abstinent. Approximately 40% of the total mediated effects (self-efficacy, spirituality, depression, social network) were captured by self-efficacy (Kelly et al., 2011). This investigation of AA involvement, self-efficacy, and abstinence with a national sample of individuals in recovery showed that AA involvement was predictive of both self-efficacy and abstinence.

Overall, there has been empirical evidence of a relationship with AA involvement and abstinent specific self-efficacy which would be consistent with Moos conceptualization of the SHG providing for the acquisition of coping skills. These would enhance an individual's self-belief in an ability to cope without using AOD or to deal with a risky or tempting situation. Importantly, abstinent specific self-efficacy has been a strong predictor of better SUD outcomes.

Spirituality

Spirituality has a significant role in the AA program, as the 12 Steps consist of a process to achieve "spiritual awakening" (AA, 1984, p.20; Galenter, 2007). The program argues for a need for a "spiritual transformation" to recover from SUD and interestingly, this topic was discussed and confirmed in an

exchange of letters between AA founder Bill W. and Carl Jung in 1961 (AA, 2010). This emphasis on spirituality has resulted in alternative SHG's, e.g. Self Management and Recovery Training, but in an investigation of religious beliefs and AA, atheists and agnostics who participated in AA demonstrated similar drinking outcome results to those with a belief in a God (Tonigan, Miller & Schermer, 2002). Participation rates, however, or AA involvement were lower for those without a belief in a God. Thus, individuals who were agnostic or atheist were less likely to start or persist with AA, but if they did, they experienced comparable results to other AA participants.

An investigation of spirituality as a mediator of AA utilized the Project MATCH data and a lagged design to better understand possible temporal sequencing of AA participation, changes in spirituality, and future AOD outcomes (Kelly, Stout, Magill, Tonigan, & Pagano, 2011). AA attendance in zero to three months was modeled with a spirituality score in months' seven to nine for predicting alcohol outcomes in months' 13 to 15. Across two samples and two dependent variables, AA attendance was predictive of alcohol use outcomes and spirituality. The indirect path of AA through spirituality accounted for approximately 26% of the variance of AA overall for the aftercare group and 14% of the outpatient group. These results suggest changes in spirituality are associated with AA involvement and better drinking outcomes.

In a study that included AA participants, a moderation drinking group, and a community sample of individuals with alcohol dependence, changes in spirituality were predictive of changes in drinking behaviors even after controlling

for AA involvement (Robinson, Krentzman, Webb, & Brower, 2011). These results supported spirituality changes as a possible mechanism for AOD use changes. In addition, the strongest spiritual effects were found for forgiveness of self although other aspects of spirituality were also significant (e.g. negative religious coping, purpose in life). In a clinical study of outpatient clients, researchers found significant relationships between spirituality measures, AA involvement, and abstinent specific self-efficacy which suggest shared relationships among AA, spirituality, and a strong predictor of future abstinence (Carrico, Gifford, & Moos, 2007; Piderman, Schneekloth, Pankratz, Maloney, & Altchuler, 2007).

Research on a sample of individuals who were dually diagnosed with mental and substance use disorders examined affiliation with their Double Trouble in Recovery (DTR), SHG's with spirituality, and hope (Magura, Knight, Vogel, Mahmood, Laudet, & Rosenblum, 2003). DTR follows the 12 step paradigm. Both hope (r = .18) and spirituality (r = .26) were significantly related to DTR affiliation.

This empirical evidence supports spirituality as a broad structure associated with individuals making transformative changes in AOD use behavior. Empirical research is beginning to utilize finer distinctions of spirituality in measuring relationships. Theorists are also working to better formulate models of changes in substance use behaviors and the components of spirituality so that concepts such as forgiveness and hope have more prominence (Lyons, Deane, & Kelly, 2010). Finally, with respect to Moos (2008), four categories of SHGs

contribution to behavior change, spirituality has been often associated with stress and coping.

Anger, Depression, and Impulsivity

AA involvement has been studied in relationship with other conditions that may be predictive either causally or symptomatically of substance misuse. On average, individuals with SUD generally score higher on such dimensions as anger and depression (Kelly, Stout, Tonigan, Magill, & Pagano, 2010) than the general public. To the degree that these conditions are causal in nature, AA involvement may predict changes in these conditions which are then associated with better SUD outcomes.

In a longitudinal analysis of the Project MATCH sample, researchers found a significant negative trajectory on anger scores (Kelly et al., 2010). On average over the 15 months studied, anger scores declined from the 98th percentile of the general population to the 89th. This reduction, however, was not significantly related to alcohol use outcomes (all *p's* > .07) or to AA attendance. These results create an interesting set of possible explanations that inform the direction of future research. For example, since this sample was entering treatment, does anger predict treatment? Does presentment for treatment generate anger? Importantly, however, this research did not find a relationship between anger and AA involvement.

In a similar analysis to investigate the relationship of AA participation with depression, both AA and depression were predictive of future drinking outcomes (Kelly, Stout, Magill, Tonigan, & Pagano, 2010). In addition AA

attendance was predictive of depression. This relationship did not hold when concurrent drinking behavior was introduced. In effect, concurrent drinking behavior captured the significant variance between depression and AA. While this makes causality arguments problematic (and they were a priori due to the sample), this illustrates the difficulties of rigorous mediation analysis: Does concurrent drinking behavior fully "mediate" AA participation's relationship with depression or is it simply a more informative (greater shared variance) intervening variable? Regardless of the causal chain, AA participation was related to both reduced depression levels and better drinking outcomes in this study.

In a comparison of two sample groups formed by a diagnostic of major depression (MDD) symptomology, researchers studying adult males in treatment within the Veterans Administration found group differences in the first year (Kelly, McKellar, & Moos, 2003). Those individuals with SUD and MDD were less likely to have a sponsor and were likely to have fewer AA friends or AA friendship contacts. By the end of the second year, these differences were no longer significant. The groups had no difference in substance use outcomes in either Year 1 or Year 2, but the MDD condition was likely to persist over the two years that were researched. This study did not find evidence that clinical depression was predictive of future abstinence.

Self-regulation and more specifically, impulsivity, was found to be a predictor of future abstinence in a study of adult individuals in recovery from SUD (Ferrari, Stevens, & Jason, 2009; Ferrari, Stevens, & Jason, 2010) and

overall, impulsivity has been suggested as a predictor and vulnerability marker for SUD (Verdejo-Garcia, Lawrence, & Clark, 2008).

One investigation of AA and impulsivity investigated the duration of AA affiliation in Year 1 with changes in drinking, impulsivity, and a one year status of alcohol use problems (Blonigen, Timko, Finney, Moos, & Moos, 2008). AA affiliation was significantly related to drinking patterns, impulsivity, and the one year status measure. Both impulsivity and drinking patterns also mediated AA and the one year status measure. Overall, greater AA affiliation was significantly predictive of decreases in impulsivity (r = .15) over a one year time period.

These investigations into AA's relationship with various psychological constructs suggest that AA probably operates in a complex, multidimensional fashion that warrants continued research. For example, impulsivity changes may be related to social control, skill acquisition, better behavioral choices, or social learning. Depression may have several differential forms, and depression reduction may be related to hope, skills acquisition, or social support. In addition to a rich array of possible constructs to investigate, many of these constructs may need improved measures (e.g. anger) to sufficiently capture the shared variance of AA, psychological construct, and substance abuse disorder behaviors.

AA Specific Cognitions

The AA perspective on the nature of alcoholism or SUD and the key elements for recovery has important implications on how members view their state. As noted earlier, the only requirement for membership is "the desire to stop drinking" or achieve abstinence (AA, 1984, p 2). The operating assumption of

AA is that of a disease model in that SUD is viewed as being similar to an allergy. These sorts of attitudes are inherent in the AA program, as well as the more formal steps of the 12 step process which speaks to the abandonment of the ego as an effective control mechanism, dealing humbly and honestly with past behaviors and current weaknesses, and the benefit of doing service.

The Addiction Treatment Attitude Questionnaire (ATAQ) was designed to measure nine treatment factors of which seven had sufficient reliability to test against abstinence outcomes (Morgenstern, Bux, LaBouvie, Blanchard, & Morgan, 2002). The processes were measured at treatment discharge and correlated with 6 and 12 month abstinence. Ranked in order of correlation with 6 month abstinence, the significant processes at discharge were: Commitment to abstinence (r = .35), Commitment to AA (r = .34), Intention to avoid high risk situations (r = .33), Identification with other (recovering?) addicts (r = .23), and Powerlessness (r = .20). The two that did not achieve significance were Disease attribution (r = .14) and Higher power (r = .13). These results suggest that goal commitment has a moderately strong relationship with SUD behavior outcomes and that a number of goals may be simultaneously important to an individual in SUD recovery.

In a study comparing cognitive behavioral (CB) and 12-step oriented (TSF) inpatient/residential VA programs, researchers followed nearly 1,900 males with SUD of their substance use outcomes from intake to one year later (Johnson, Finney, & Moos, 2006). Abstinence as a goal (r = .13), 12 step friends (r =.09), and reading 12 step literature (r = .10) were the only significant proximal outcome

variables predictive of future one-year abstinence. But at one year, as a cross-sectional analysis (with a median $r = .30$), the following were significant: disease model belief, alcoholic identity, abstinence goal, 12 step meetings, presence of a sponsor, 12 step friends, reading of 12 step material, and number of steps taken. Thus, abstinence as a goal appears to be an important temporal precedent for AA affiliation and participation. This study also points out how researchers might gain by studying the dynamics of AA participation over time (e.g. presence of a sponsor at discharge vs. at one year).

While the AA program is a largely self-administered, multidimensional, complex, and contextually dependent program, better understanding of the key mechanisms that are beneficial to individuals with SUD may be informing for not only AA and potential AA members, but also other therapeutic modalities. For example, the goal of abstinence appears to be a strong predictor of future AA affiliation, which for AA signifies an important behavioral choice (Kelly, Magill, & Stout, 2009). This conscious goal setting may result in different goals across such treatment modalities as cognitive behavioral or motivational enhancement therapies but continuing to increase the understanding of goal formation and motivation over time would be helpful.

The AA program brings together a broad array of mechanisms by which to potentially influence an individual with SUD. Perhaps due to its grassroots nature, the logic diagram of AA is not clearly defined and discriminately measureable. Instead, the program has a tremendous complexity across at least, several scientific categorizations (e.g. social control, social learning theory,

behavioral choice, coping and skills), which don't immediately lend themselves to the concept of a spiritual transformation, centered from within, guided by a powerful learning, and supported in a multitude of potential social interactions, different across time. Thus, research on the mechanisms of AA should continue, just as the research on AA's effectiveness should continue. The empirical understanding of AA is still relatively rudimentary.

Barriers to AA

The evidence suggests that participation in AA for individuals with SUD is related to better AOD use outcomes, yet utilization of AA does not appear to be essential or universal. In a seven-year longitudinal study of alcohol dependent individuals, the largest group (n = 351, 62% of the sample) rarely if ever attended AA meetings (Kaskutas, Bond, & Avalos, 2009). The other three groups (medium, high, and descending) all achieved better 30-day abstinent rates across all four follow-up time points (~60 to 80% versus ~30% for the largest group).

AA/NA participation was similarly found to significantly increase the odds ratio of abstinence at years 1, 2, and 4 and 5 (Gossop, Stewart, & Marsden, 2005), yet less than 25% (n =35 of N = 142) of the participants utilized a SHG in year 1. A test of a more intensive referral protocol versus a standard recommendation to utilize AA or SHGs did result in higher utilization rates for at least one meeting (p = .048) (Timko & DeBenedetti, 2007). But even with a relatively low hurdle of a single meeting, the utilization rates for intensive referral (77.8%) and standard practice (69.1%) meant roughly 1 in 4 clients declined even single trial of AA post-treatment. In the Project MATCH data, 30% to 40% of the

individuals (segmented by ethnicity) in the outpatient sample utilized AA post-treatment and 60% to 78% of the aftercare sample (Tonigan, Connors, & Miller, 1998). Research on a sample of individuals with drug use disorder found those who started use earlier and had more treatment experience (Brown et al., 2001). This evidence suggests widely varying rates of AA utilization post treatment and also perhaps, a need for a consistent operational definition of utilization or trial.

Dropout rates are another factor in assessing AA's effectiveness. In a study of AA membership in Finland, an estimated 50% of AA attendees stopped going to meetings in the first three months (Makela, 1994). Dropout rates have convinced several researchers and practitioners of the need for meaningful alternatives to AA (Cloud, Rowan, Wulff, & Golder, 2007; Walters, 2002). Dropout rates have also encouraged researchers to study potential factors that may be influencing the likelihood of an individual leaving or persisting with the AA program.

In a one year study of adults with AA experience at baseline, the dropout rate, as defined by at least one meeting in the last 90 days, was 40% (Kelly & Moos, 2003). The researchers examined baseline factors to predict dropout and found 6 significant predictors that roughly corresponded to AA affiliation and social factors. Motivation, disease model belief, and 12-step involvement were negatively associated with dropping out of AA. Having a religious background, attending religious services, and being involved socially were also significant predictors. These results are intuitively appealing since they align with the

fundamentals of the AA program. They are also illustrative of the challenges the concept of a universal SHG would face.

Since individuals may have different treatment experiences that influence their post-treatment AA or SHG activities, a study examined the hierarchical effects of treatment ecology on a sample of 3018 individuals treated at Veterans Administration facilities (Mankowski, Humphreys, & Moos, 2001). Overall, SUD severity and comorbidity were not associated with SHG involvement at one year. Individuals having received a 12-step type treatment program were more likely to be involved in a SHG. Individuals who were in group housing were also more likely to be SHG members. A random effect due to treatment clustering was also significant. This study also found disease model belief, religious beliefs, and the goal of abstinence to be individual predictors. Overall, the findings suggest contextual factors are important in understanding persistence or dropping out dynamics for SHG.

The findings related to utilization and dropout rate have motivated researchers to develop new instruments and programs. In an effort to develop a scale to measure why people drop out; 60 adult males with SUD, who had previously stopped utilizing SHGs, retrospectively reported on a 30 item scale (which was later reduced to 24 items; Kelly, Kahler, & Humphreys, 2010). Analysis identified 7 subscales representing relatively independent constructs: 1) motivation, 2) dislike of group attendees, 3) spirituality, 4) social anxiety, 5) logistics, 6) meeting content/format, and 7) psychiatric barriers (which included not feeling supported or comfortable).

One possible storyline to these findings is that unmotivated individuals are those who have a difficult time even getting to a meeting, and once there are subjected to content they don't like, with members that are disliked, uncomfortable to be around, and non-supportive. Empirical use of this instrument will provide some information on the relative weights on the linkages of these subscales and provide greater insight on their relative contribution to a dropout decision.

An instrument measuring attitudes, social norms, and control was developed to assess an individual's intention to utilize AA (Zemore & Kaskutas, 2009). These variables generally tap acknowledgement of the benefits of AA, having social support from family and others to participate in AA, and having the requisite knowledge and skills to be a successful AA member. This instrument was tested longitudinally over 4 time points and was significantly predictive of 12-step investment.

This same sample participated in a trial of an intervention named Making Alcoholics Anonymous Easier (MAAEZ) (Kaskutas, Subbaraman, Witbrodt, & Zemore, 2009). This program was designed to facilitate a transition from therapeutic care to an individual utilizing AA in post-treatment recovery. The intervention consisted of 6 sessions on the topics of spirituality, principles not personalities, sponsorship, and living sober. Findings suggested MAAEZ participants were more likely to be abstinent at year 1 (78.9% vs. 70.7% for the control, $p = .045$). Additional analyses examined the relationship of MAAEZ with sponsorship and service (Subbaraman, Kaskutas, & Zemore, 2011) which resulted

limited evidence of mediational effects with abstinence. Overall, this research demonstrated the opportunity to better facilitate a continuum of care in transitioning individuals from treatment to post-treatment recovery.

Utilization of AA and retention with AA continue to be important research arenas. This research may be critical to understanding the appropriate positioning of AA as a therapeutic adjunct and post-treatment recovery option as well as the scope and possibilities for suitable substitutes. Clearly, as evidenced by the current utilization and dropout rates, AA is not for everyone, thus better understanding of how everyone and AA interact may be crucial to better long run, overall SUD outcomes.

In summary, empirical evidence supports AA's effectiveness as a SHG program which reduces the likelihood of relapse and promotes abstinence as the preferred behavioral choice for individuals with SUD. The mechanisms through which AA influences an individual's recovery trajectory are numerous and varied, with multiple theoretical bases. The understanding of effectiveness and the mechanisms of operation for AA has progressed but overall, this understanding is relatively rudimentary and tied to concepts that still have potential measurement issues (e.g. why does number of meetings predict in some studies and not others?). The very nature of a SHG protocol calls into questions of utilization, dosage, and dropout rates over time and these issues are still in the early stages of research. Overall, AA provides millions of members a program to achieve and maintain sobriety and it continues to be an important research pathway for a better understanding of the nature and course of substance use disorders and recovery.

Sponsorship

Having a sponsor is a key indicator of AA affiliation, and once new members have made a commitment to engage in the AA recovery program, they are encouraged to find a sponsor promptly. In AA, the sponsor/sponsee relationship is one of equals; the sponsor simply represents an individual with SUD who has made some progress at achieving sobriety and advancing in recovery. Unlike the more public forum of meetings, this relationship is expected to be continuous and personal. The sponsor/sponsee interactions are meant to be comfortable, confidential, candid and sincere (AA, 2010). The role of the sponsor is to convey the AA program and assist the sponsee in achieving sobriety.

AA outlines three major functions that a sponsor should be prepared to minimally undertake (AA, 2010). The first is to be a reliable, available source of information on AA that can be easily accessed by the sponsee. The second is to be an "understanding, sympathetic friend" (AA, 2010, p. 9). Especially for the newcomer, the early presence of personal social support may be critical to adoption of the AA program. Finally, the sponsor should facilitate social networking by the sponsee. The sponsor should introduce the sponsee to other AA members or others in recovery.

In a pilot study to explore the role of AA sponsors, researchers collected data from 28 participants who were currently active as AA sponsors (Whelan, Marshall, Ball, & Humphreys, 2009). Generally, the findings were supportive of the AA perspective on sponsorship. Major qualities and roles clustered around three major dimensions: 1) providing personal, readily available support, 2)

encouraging and guiding 12-step work, and 3) carrying the AA message. Some differences were apparent in the perceived role and usefulness of giving general advice (Whelan et al., 2009), which raised the issue of boundaries.

The nature of AA is to be guided by general principles and to minimize authority and rules so the scope and boundaries of sponsorship are relatively indistinctly defined. For example, should a sponsor lend money to a sponsee? "This is, of course, a matter of individual judgment and decision" (AA, 2010, p.17). AA goes on to emphasize it's not a role of AA to lend money, that it is not a philanthropic organization, and that money has not generally been a factor in an individual achieving sobriety. The guiding advice from AA focuses most strongly on facilitating the sponsee's relationship with the AA program and providing the sponsee with all the resources that AA has to offer. In essence, to be helpful in aiding the sponsee achieve sobriety and recovery.

Risks are inherent in this dyad relationship. AA stresses several pitfalls including: 1) sponsee dependency, 2) misuse of sponsorship as a means to authority, 3) misuse of sponsorship as a quasi-therapeutic counseling role, and 4) imposition of a personally biased AA worldview. All of these may put the sponsee at risk for successful transition to sobriety (AA, 2010). AA, therefore, places great responsibility on both the sponsor and sponsee to be aware of potential harms and to acknowledge their individual responsibilities to engage in a voluntary, mutually useful, relationship.

In a review of descriptive literature on the role of sponsorship, the risk of dependency is highlighted as a natural characteristic of an individual with SUD

(Brown, 1995). The danger is that a sponsee attempts to substitute one dependency for another without contending with the need for substantiative personal change. In addition, as sponsorship is viewed as the bridge between gaining sobriety and having a meaningful recovery, a sponsorship failure can lead to a high risk of relapse. Dependency may encourage other risk enhancing behaviors such as the assumption of authority by the sponsor and exploitation.

These interpersonal dynamics place a responsibility on the sponsor to be mindful of their potential to harm rather than help, and a responsibility on the sponsee, who had voluntarily and initially solicited the sponsor, to evaluate and end an unsatisfactory relationship (AA, 2010). Overall, the sponsor/sponsee relationship is considered to be a necessary factor in the successful use of the AA recovery program and essentially, its function should be to the support the AA mission for both the members.

Role of Sponsorship with AA Mechanisms

Sponsorship plays a key role in AA affiliation. For example one measure of affiliation that has been used in empirical studies is the Alcoholics Anonymous Affiliation Scale (AAAS) (Humphreys, Kaskutas, & Weisner, 1998) which consists of 9 items, two pertaining to sponsorship ("Do you *now* have a sponsor?, Have you ever sponsored anyone?"). Another scale, Alcoholics Anonymous Involvement (AAI) Scale (Tonigan, Connors & Miller, 1996), has 13 items also including whether the respondent has ever been sponsored and/or been a sponsor. In both scales, sponsorship is a significant predictor of the global construct of AA engagement.

In an analysis of AA involvement, social network composition, and abstinence over a three year period after intake into treatment for SUD, having a sponsor was associated with both abstinence and the percentage of the social network encouraging a reduction in drinking (Bond et al., 2003). A 6 month longitudinal study to investigate sponsorship and meeting attendance as prospective indicators of future abstinence found that sponsorship at baseline predicted abstinence rates at both 3 and 6 months (*OR* = 2.49) and that sponsorship at 3 months predicted 6 month abstinence (*OR* = 3.62) (Kingree & Thompson, 2011). Overall, evidence suggests sponsorship is a significant indicator of AA involvement and AOD usage behaviors.

In an effort to test whether social network changes mediate the relationship with sponsorship and abstinence, Rynes and Tonigan (2011) utilized a sample of 115 participants with little past experience with AA and interviewed 4 times over a period of 9 months (0, 3, 6, 9 months). On average, no significant changes in social network composition occurred over time and the abstinent supportive network measure was not predictive of future abstinence although sponsorship was. This study confirmed sponsorship as a predictor of abstinence but the social support results were contrary to expectations (e.g. Groh et al., 2008). For example, an investigation examining social support and AA found that women who had a sponsor had significantly greater personal and total social support (Rush, 2002). These findings provide support for continued research on sponsorship's relation to social support and social network characteristics.

A study to test whether social anxiety was an impediment to utilization of AA found that clinically established criteria for social anxiety estimated prevalence at 37% in a sample of 110 individuals in intensive outpatient treatment (Book, Thomas, Dempsey, Randall, & Randall, 2009). A significant difference was observed in the odds of asking someone to be a sponsor ($p<.001$, OR = 8.20) or speak in a group setting ($p<.001$, OR = 8.23). This study suggests both a powerful role for sponsorship as well as a possible psychological barrier to AA involvement.

An investigation of whether relationship anxiety or relationship avoidance characteristics might influence AA involvement used a sample of individuals with little or no prior AA experience (Jenkins & Tonigan, 2011). While anxiety was not predictive of future sponsorship, relationship avoidance was and in addition, a motivational measure based on readiness to change, problem recognition (self-awareness of SUD) was significantly associated with sponsorship. Another study of social phobia and 12-step facilitation (TSF) found that women with social phobia were less likely to have a sponsor and that that may help explain a difference in effectiveness for TSF for women with social phobia. These studies offer insight on mechanisms operating within AA, social support and social network changes that are important transformative norms. Individuals that have difficulty with these social aspects of AA may be disadvantaged. These insights on individual difference and AA mechanisms, such as sponsorship and social learning, may provide insight on demonstrating AA effectiveness.

Empirical Insights on Sponsorship

Sponsorship has been utilized in numerous empirical studies, most often as an involvement or affiliation measure that is evaluated dichotomously. The development of AA measures (e.g. Humphreys et al., 1998, Tonigan et al., 1996) and other latent involvement models (e.g. McKellar et al., 2003) have supported investigations of AA involvement or engagement as a predictor of SUD outcomes. For example, McKellar et al. (2003) used sponsorship as one of four indicators for AA involvement which was predictive of concurrent abstinence and also was predictive of future abstinence. Research by Kaskutas et al. (2002) on social networks and support had similar results where sponsorship was a significant predictor of AA involvement and AA social support with a subsequent prediction of abstinence.

In an empirical study of sponsorship as a marginal explanatory variable additive to a latent growth curve model of seven-year attendance and abstinence trajectories, having a sponsor was a significant incremental predictor of abstinence outcomes ($\chi^2 = 35.8$, $p < .001$) (Witbrodt, Kaskutas, Bond, & Delucchi, 2012). A less rigorous investigation of early recovery, meeting attendance, and sponsorship suggested that sponsorship in conjunction with frequent meeting attendance resulted in lower likelihood of relapse (Caldwell & Cutter, 1998).

Gomes and Hart (2009), in researching post-treatment AA effects in a Minnesota Model program, found that having a sponsor was positively related to future completion of AA steps as well as abstinence. Additionally, the Project

MATCH data (Cloud, Zeigler, & Blondell, 2004) indicated that having a sponsor was highly correlated ($r = .257$, $p < .01$) with mean proportion days of abstinence. Individuals who met criteria for high attendance of AA/NA meetings also tended to have a positive relationship with their sponsor which in turn significantly increased their odds of abstinence, both concurrently (OR = 16.63, $p < .01$) and prospectively (OR = 9.91, $p < .01$) (Subbaraman, Kaskutas, & Zemore, 2011). Research examining early recovery found that having a sponsor during months the first three months significantly increased the odds of being abstinent at months four through six ($OR = 3.67$, $p < .01$) (Tonigan & Rice, 2010). Overall, these results suggest that sponsorship, as measured in a simple, dichotomous manner, may be a good predictor of SUD behavior, with explanatory power incremental to other measures, as well.

Research suggests that having a sponsor is predictive of other recovery outcomes, too. For example, having a sponsor significantly reduced the likelihood of an individual dropping out of AA ($OR = .73$, $p < .01$) (Kelly & Moos, 2003), and the initiation of AA helping behaviors was associated with actively being under sponsor stewardship (Pagano, Zemore, Onder, & Stout, 2009).

Studies have further examined the effects of being a sponsor as a predictor. In a study of 500 individuals who met criteria for drug addiction, those individuals who were sponsors were significantly less likely to relapse ($p < .001$) at one year, while those individuals with sponsors, but who attended NA/AA meetings, were no more likely to be abstinent than those NA/AA participants

without sponsors (Crape, Latkin, Laris, & Knowlton, 2002). While the finding on having a sponsor is inconsistent with previously cited findings, this evidence on the positive relationship with being a sponsor and abstinence corresponds with a study done in Mexico. In this study of 192 individuals, being a sponsor was significantly predictive of abstinence ($\chi^2 = 15.1$, $p < .001$) (Reynaga, Pelos, Taia, Hernandez, & Garcia, 2009). In a survival analysis of relapse post-treatment, those individuals who endorsed either being a sponsor or having completed the 12^{th} step were significantly less likely to relapse over the next 360 days when compared to individuals who did not endorse either criteria (Wilcoxon $\chi^2 = 16.9$, $p < .001$) (Pagano, Friend, Tonigan, & Stout, 2004). These studies suggest the beneficial relationship between being a sponsor, doing service, and reducing the likelihood of relapse.

Sponsorship research has generally utilized dichotomous measures and as a result, the examination of sponsor characteristics has been limited. In regard to mental health factors, Polcin and Zemore (2004) found that psychiatric severity was negatively correlated with the likelihood of being a sponsor. From a demographic perspective, research by Young (2012) found sponsors to be older, more likely married, more likely a parent, and to have higher spirituality scores. While these demographic characteristics are suggestive of individuals with, perhaps, more stable recovery trajectories, this thread of research remains limited yet potentially still useful.

Overall, sponsorship has a significant role in the AA program although the sponsorship process is guided by several general principles rather than a strictly

defined process with comprehensive protocols and rules. Empirical studies of AA often include sponsorship as an indicator of an overall involvement or affiliation measure. These studies suggest involvement is predictive of abstinence. Studies where the relations of sponsorship are uniquely captured have suggested that having a sponsor, especially early in recovery, is significantly related to the likelihood of not relapsing. Being a sponsor is also predictive of better SUD outcomes. As noted above, this research has largely relied on a dichotomous measure of sponsorship, such as "do you have a sponsor?" with a yes or no option to respond. The mechanisms underlying an individual's likelihood of becoming a sponsor have not been broadly studied, but prior research does suggest that a sponsor is likely to have lower psychiatric severity than the general recovery population, and to be older, married, and a parent.

Research on sponsorship appears to be a potential valuable thread of empirical investigation which could include taking a closer look at the relationship of sponsorship to AA mechanisms such as social support, more deeply investigating the roles and functionality of sponsorship, specifically identifying the characteristics leading up to becoming a sponsor, and better documenting resulting benefits in being a sponsor.

The present research attempts to better understand the qualities and characteristics that distinguish an effective sponsor through exploratory methods. This research may inform researchers, clinicians, and practitioners on functions and roles that are influential in the recovery process for an individual with SUD.

Peer Mentorship

The AA sponsorship relationship can be characterized as a mentee initiated, voluntary, peer mentorship. AA sponsees are tasked to choose a potential sponsor based on their perception of self-benefit by having a more personal, continuous relationship with the sponsor. In the AA paradigm, sponsorship is considered important service work.

Research on peer mentorship in other non-AA areas may help to shed light on and help improve understanding of AA sponsorship. We will thus take a look at the findings from several different venues where research of mentor/mentee relationships has been studied.

Recovery from alcohol could be considered similar in some regards to recovery from spinal cord injuries. One study found that when individuals with spinal cord injuries were provided with peer counselors, those who completed the program had significantly better outcomes, as measured by depression and urinary tract infections (Ljungberg, Kroll, Libin, & Gordon, 2011). In addition, the majority had improved self-efficacy. In a similar study of paid peer mentors for individuals with violently acquired, spinal cord injuries, qualitative results suggested mentors provided social, emotional, and instrumental (tangible) support (Balcazar, Kelly, Keys, & Belfanz-Vertiz, 2011). Inferentially, improved results were measured for scales on cognitive ability and occupation. Overall, the mentees, mentors, and hospital staff found the program to be beneficial.

In the area of HIV/STI prevention, the effects of being a sponsor also have been studied. To assess whether being a peer sponsor benefits the sponsor, 169

women were randomly assigned into a peer mentor or control condition. Baseline measurement was culled from three subsequent semi-annual interviews, and the intervention consisted of five group sessions and one individual session. Women who were trained to be peer mentors were significantly less likely to have unprotected sex with a non-main partner and had a reduced likelihood of engaging in high risk, sexual behavior (Davey-Rothwell et al., 2011). These results could be applied to suggest that being an AA sponsor, on average, similarly protects against relapse.

Importantly, mentorship can have iatrogenic effects. Not all mentors or mentor relationships are created equal. In a review youth mentoring studies, while positive effects sizes are found generally, negative effects are measured (Rhodes, 2008). In a study of teenage peer mentorship, mentors were grouped on the basis of attitude towards youth (i.e., either positive or negative) and mentees were group on the basis of their current connectedness with academics (i.e., either connected or disconnected) (Karcher, Davidson, Rhodes, & Herrera, 2010). For connected students interacting with negative mentors resulted in higher negative contribution to their class compared with student controls indicating iatrogenic effects. Thus investigating and better understanding characteristics that influence mentorship relationships might lead to more consistent, positive mentor relationship outcomes.

In a study of academic peer mentorship in a university setting, Colvin and Ashman (2010) interviewed students, mentors, and instructors to gather qualitative data on peer mentors. They concluded that peer mentors play 5 major

roles: 1) connecting link (social/resource), 2) peer leader, 3) learning coach, 4) student advocate, and 5) trusted friend. A literature review compiled ten major characteristics of peer mentors that appeared to have relevance in successful peer mentoring programs in academic settings (Terrion & Leonard, 2007). These characteristics included 1) willingness to commit time and ability, 2) a matching of gender and race, 3) experience, 4) achievement, 5) motivation, 6) supportiveness, 7) trustworthiness, 8) empathy, 9) flexibility, and 10) enthusiasm. Overall, these roles and characteristics of peer mentors may be more generalizable external to academic environments.

Sex Differences

The amount and significance of research studying sex differences in mentor relationships has been relatively minimal. Much of the research has focused on career and mentor relationships in a working environment. For example, Allen and Eby (2004) found that female mentoring relationships were likely to have a somewhat greater emphasis on psychosocial matters than male mentoring relationships. This finding carried over to the male relationship having a more focused career orientation. A weak but significant interaction of gender was detected when measuring coaching as a mentoring function (Ragins & Cotton, 1999). In an investigation of a constellation of mentoring functions (e.g. coaching, motivation, & information support) Levesque, O'Neill, Nelson, and Dumas (2005) did not find any significant differences between female and male participants.

A study of girls and boys in mentoring relationships with Big Brothers/Big Sisters resulted in little difference in outcomes other than sex was a moderator of relationship satisfaction where girls were more likely to be dissatisfied with short term and to be satisfied with longer term relationships (Rhodes, Lowe, Litchfield, & Walsh-Samp, 2008). With respect to AA sponsorship, Klein and Slaymaker (2011) found that young women were as likely to get a sponsor as young males, but it was not as predictive of future abstinence as it was for males. Without substantiative findings on sex differences, continued exploratory research is warranted.

AA sponsorship and voluntary peer mentorship share similar theoretic foundations. An individual with a similar condition but greater experience shares their success to help the less experienced individual have a greater likelihood of attaining a better outcome. Empirical research suggests both mentees and mentors can benefit from these peer relationships. In addition, successful mentors may share common characteristics or play common roles. Insights from AA sponsorship may inform fields beyond substance use disorder recovery.

Conjoint Analysis

Conjoint analysis is grounded in conjoint measurement theory, first mathematically developed by Luce and Tukey (1964). This theory allows for the use of ordinal preferences to be decomposed into relevant attribute part worths or marginal utilities. The general idea for psychology is that most people make relative preference decisions based on a bundle of attributes conjointly (or simultaneously) evaluated. This holistic evaluation can then be used to calculate

relative importance weights for observed attributes (Krantz & Tversky, 1971). For example, individuals choose cars, but cars have an array of attributes that may influence individuals' preferences—e.g. safety, reliability, resale value, performance, mileage, etc. Conjoint analysis uses an ordinal ranking of car preferences (e.g. Toyota Corolla, Ford Mustang) to estimate the part worth utilities and tradeoffs between attributes (e.g. mileage vs. performance).

The general model for an additive conjoint model utilizes an observed ranking, rating, or choice dependent variable as a function of a combination of attributes. In a basic formulation, it is an ANOVA with an ordinal dependent variable and can be thought of verbally as: rank depends on the bundle of attributes as well as each attributes relative worth (Green & Rao, 1971). Mathematically, the model is $U(x) = \sum_1^k U_{ik}(x_{ik})$, where k = attributes and i = instance of or observed attribute.

This formulation allows for nominal, ordinal, or interval attributes (e.g. a car that is red, goes fast, attracts attention, and gets 27 mpg). In addition, the associated part worth utilities do not have to assume a monotonic form (e.g. a fast car may have a part worth utility greater than a slow car, but a super fast car may have a lower part worth utility than a slow car). Conjoint analysis is most often used to evaluate consumer preferences and attribute tradeoffs (e.g. does being rich make up for not having a sense of humor?).

Monte Carlo simulation studies of conjoint analysis have demonstrated the procedure to be superior to linear modeling (forcing the assumption of monotonicity), robust with respect to the dependent variable measure (ranking,

rating, and choice) although ranking is the theoretical better measure, and the assumption of orthogonal designs (e.g. attribute independence) (Carmone, Green, & Jain, 1978; Elrod, 1992). The present study used ranking data on hypothetical sponsor attribute bundles to evaluate part worth utilities of availability, experience, knowledge, confidentiality, and goal setting behavior.

The use of conjoint analysis in evaluating preferences in the health care field is relatively nascent but expected to grow (Bridges, Kinter, Kidane, Heinzen, & McCormick, 2008) and recently a task force representing the International Society for Pharmacoeconomics and Outcomes Research reported on a standard checklist for good practices when using and reporting conjoint analysis in research (Bridges, Hauber, Marshall, Lloyd, Prosser et al., 2011).

Recent studies in health have included an evaluation of consumer preferences for HIV test attributes (Phillips, Maddala & Johnson, 2002), research on individuals' preferences for cigarette and alcohol cessation (Flach & Diener, 2004), an investigation of the economic value of informal care (van den Berg, Maiwenn, van Exel, Koopmanschap, & Brouwer, 2008). Research on quality adjusted life years (QALY) has also utilized conjoint methods (Flynn, 2010). In social psychology, conjoint analysis has been used to detect the presence of covert discrimination (Caruso, Rahnev, & Banaji, 2009). These studies demonstrate the viability and usefulness of this method of analysis.

Oxford House

Oxford House (OH) is a network of self-governing, self-supporting recovery homes for individuals with SUD who are currently committed to

abstinence. The network is loosely governed by Oxford House World Services and has an organizational structure that consists of a World Council and local chapters. In addition, some states have statewide organizational resources. Overall, however, each house is autonomous, is run democratically with minimal guidelines, and is self-financed by the residents (Oxford House, 2012).

Oxford House residences are rental, single family homes inhabited, on average, by 6 to 10 same-sex residents. Residents are not limited in their length of stay. The major rules governing the house require a resident to remain clean and sober, pay a fair share of expenses, do a fair share of household chores, and not be disruptive (Jason et al., 2007).

The Oxford House program encourages residents to participate in AA or another SHG, but actively discourages residents from hosting SHG meetings or any activities that may be considered therapeutic. The Oxford House Traditions (see Table 3) outline the purpose and general organizing principles that govern the expectations for house operations.

Table 3

The Oxford House Traditions

1. Oxford House has as its primary goal the provision of housing and rehabilitative support for the alcoholic and drug addict who wants to stop drinking or using and stay stopped.

2. All Oxford Houses are run on a democratic basis. Our officers are but trusted servants serving continuous periods of no longer than six months in any one office.

3. No Member of an Oxford House is ever asked to leave without cause—a dismissal vote by the membership because of drinking, drug using, or disruptive behavior.

4. Oxford House is not affiliated with Alcoholics Anonymous or Narcotics Anonymous, organizationally or financially, but Oxford House members realize that only active participation in Alcoholics Anonymous and/or Narcotics Anonymous offers assurance of continued sobriety.

5. Each Oxford House should be autonomous except in matters affecting other houses or Oxford House, Inc. as a whole.

6. Each Oxford House should be financially self-supporting although financially secure houses may, with approval or encouragement of Oxford House, Inc., provide new or financially needy houses a loan for a term not to exceed one year.

7. Oxford House should remain forever non-professional, although individual members may be encouraged to utilize outside professionals whenever such utilization is likely to enhance recovery from alcoholism.

8. Propagation of the Oxford House, Inc. concept should always be conceived as public education rather than promotion. Principles should always be placed before personalities.

9. Members who leave an Oxford House in good standing are encouraged to become associate members and offer friendship, support, and example, to newer members.

Source: Oxford House, 2012

Many of the OH Traditions are similar in nature and content with AA Traditions. OH also advocates an abstinence model for SUD recovery and a singular focus on helping the individual maintain abstinence through affordable, safe, and sober housing. In addition, fellowship, self respect, and self reliance are promoted (OH, 2012). In February of 2011, the Oxford House Model was listed on SAMHSA's National Registry of Evidence-based Programs and Practices (NREPP) (SAMHSA, 2012).

The present study's participants are past and current residents of Oxford Houses who were attendees at the 2010 World Oxford House Convention which was held in Chicago, IL.

Rationale

The AA program is the largest SHG for individuals with SUD, which affects over 20 million individuals in the United States. The AA paradigm includes a disease model for the SUD condition and abstinence as a recovery goal. These and other characteristics (e.g. spirituality) may limit the attractiveness of AA as a universal program for individuals with SUD (Kelly et al., 2003). Evidence suggests that AA dropout rates are significant and that efforts to measure an individual's intentions and ease an individual's transition to AA can be predictive of AA involvement (Kelly et al., 2010; Timko & Debenedetti, 2007). Overall, while AA is the largest SHG program, it serves a minority of individuals with SUD.

The AA program, by its very nature, creates significant challenges for researchers trying to measure the overall program's effectiveness (Sharma & Branscum, 2010). While much of the literature on AA is suggestive of beneficial results from AA involvement, these investigations are usually of quasi-experimental, longitudinal designs at best (Kaskutas, 2009). With the AA model requiring an interaction with an active, participatory client, such designs as double blind, fully randomized assignment designs are not realistic (Bebbington, 1976). Therefore, continued empirical research with continuous refinements remains important.

One way to build stronger cases for AA efficacy is to better understand the mechanisms of AA, and then to test those both independently and generatively (Kelly et al., 2012). By studying these underlying mechanisms, within program

relative effectiveness can be measured which provides two important results. One is that assignment to mechanism differences may be randomized and more systematically measured, providing within program differences that are replicable and consistent. This may lead to stronger arguments for AA's overall effectiveness. Another positive result may be the decomposition of mechanisms that allow for alternative programs to be developed. These programs might use similar base mechanisms to AA but packaged differently from AA's disease and abstinence model. This argues for further research on AA mechanisms to both further the support of AA and to develop alternatives to AA.

Sponsorship is an integral component of the AA program yet most of the empirical research to date has simply measured whether or not an individual has a sponsor and/or is a sponsor. These simple dichotomous measures have been empirically powerful, but they do not inform on the qualities and characteristics that make for effective sponsorship (Rynes & Tonigan, 2011; Witbrodt et al., 2012). These qualities and characteristics have generally not been examined from a perspective of sponsor attributes and roles.

This study performed exploratory research on the qualities and characteristics of AA sponsors. Participants were past and currents residents of Oxford Houses who have sponsor and sponsee experiences. They provided their perspective on effective sponsors. The study utilized several different data analytic methods to extract and assess the qualities and characteristics of effective AA Sponsors. These analyses included a conjoint analysis exercise ranking hypothetical sponsor profiles with five attributes, each varying by three levels, to

measure the relative part worth utilities to overall sponsor rankings. This research provided both qualitative and quantitative information that could guide future research, be of applied use to clinicians and practitioners, and may be informing to those interested in other settings and contexts for peer mentorship.

Research Questions

The present study was an exploratory investigation that focused on the characteristics of an effective AA sponsor for an individual with SUD early in recovery (working their initial 12 step program). The following research questions were the basis for the experimental design and methods:

Research Question I: Without providing intentional aided awareness to the participant, based on their perspective and experience, what are some of the most important characteristics and functions of a successful sponsor for a sponsee early in recovery?

Research Question II: With the provision of intentional aided awareness and a bounded set of 20 available qualities and characteristics, which 10 are most important for an effective sponsor to possess?

Research Question III: Of the most important characteristics identified in Research Question II, how are these characteristics ranked in order of importance?

Research Question IV: Of these ranked characteristics, do the characteristics and rankings differ by sex (female/male) or current role (sponsor/sponsee) and if so, what are these differences?

Research Question V: What are the utility profiles of the 5 attributes—experience, knowledge, availability, confidentiality, and goal setting—and their relative part worths for effective sponsorship?

Research Question VI: Do these utility profiles differ by sex (female/male) or current role (sponsor/sponsee) and if so, what are these differences?

CHAPTER II

METHOD

This exploratory research utilized a convenience sample of anonymous adult individuals in recovery from SUD in a cross-sectional, self-report design. These individuals were participants in a research study led by Dr. Leonard Jason and authorized by the DePaul University IRB as project LJ062910PSY.

Participants

245 adult individuals (female = 117, 47.8%, and male = 128, 52.2%) participated in the study. The majority of the participants were White, not of Hispanic origin (*n*= 175, 71.4%) with African Americans representing 18.8% (*n*= 46) of the sample. The next largest category was American Indian or Alaskan Native at 2.4% (*n*=6). Overall, this sample was predominately European White with a representative sample of African Americans with a nearly 50/50 mix of females and males.

The average age of a participant was 41.0 years (*Md* = 41.0, *SD* = 10.6, minimum age = 20, maximum age = 70) with a median educational level of some college (35.7% of the sample). At least a high school equivalency was attained by 94.3% of the sample and 15.2 % had a bachelors or higher academic degree. Nearly fifty percent of the individuals were single, never married (49.2%) and 40.1% were separated or divorced. Participants married or in a relationship with a life partner accounted for 6.9% of sample. The remaining individuals were widowed.

Over 70% of the sample were employed (full time = 60.7%, part time = 11.5%). Those seeking employment but were unemployed totaled 10.2%. Students represented 10.7% and the balance (7.0%) were disabled or retired. Approximately 4 out of 5 participants currently lived in an Oxford House (80.8%) with the balance being mostly Oxford House alumni. The current average length of stay was 19.6 months (*Md* = 12.0, *SD* = 20.8).

The average length of substance usage was 236.8 months or 19.7 years (*Md* = 228.0 months, *SD* = 117.2 months). The average length of abstinence was 45.2 months (*Md* = 26.0, *SD* = 52.9). 94.3% (*n* = 231) of the participants identified as having ever been a sponsor, sponsee, or both. Of the 231, 109 had been or were sponsors.

Procedures

Adult individuals in recovery for SUD were recruited at the 2010 World Oxford House Convention from September 2, 2010 to September 4, 2010. Recruitment was done by physical presence at the convention and research participation was supervised by associates of the Center for Community Research, DePaul University. Potential participants were given an information sheet outlining the scope, topics, and estimated timing of completing the survey. This document also informed the potential participant that no negative consequences would result from not completing the survey or from not answering any items. Individuals who started the survey process were offered the incentive of entry in a raffle that consisted of six $100 gift cards to be chosen at random on 9/4/2010.

The anonymous research survey consisted of a paper based instrument consisting of four major sections including a demographic section and a subsection with items on sponsorship. The sponsorship research task also included sorting nine cards representing nine hypothetical sponsors in order of perceived sponsor effectiveness. Of the average 40 minutes of estimated completion time for the entire survey, approximately 15 to 20 minutes were allocated to demographics and sponsorship. Each participant was given their own unique set of cards, which were numbered and indexed to their paper survey. In addition, the cards were stapled together in the order of the participant's sort when returned to a research administrator.

Measures

The survey was designed to collect information in a series of sequential sections with the first section being demographics (see Appendix A). The major items in this section included sex, race/ethnicity, age, education, marital status, employment status, Oxford House residency, length of substance use, and length of abstinence.

The sponsorship sections were designed for this study and had not been used in previous studies or been empirically validated by research. The sponsorship survey (see Appendix B) was developed to initially gather data about the respondent's participation in a sponsorship relationship, and then without aiding the awareness of the individual about specific sponsorship characteristics (which were on the next page) asked:

Based on your perspective and experience, please write down some of the most important characteristics and functions of a successful sponsor for a sponsee early in recovery (working an initial 12-step process).

After this open-ended section on sponsorship characteristics the next section of the survey consisted of a 4 by 5 array (20 total) of characteristics and qualities that might be important for a sponsor to be effective. These characteristics were reviewed informally with Oxford House researchers and Oxford House alumni prior to their use. The following is the array (Figure 1).

Figure 1

Sponsor Characteristics

From the following list of 20 qualities & functions of a sponsor, please circle the ten (10) that you think are the most important

Guidance (1)	Involvement w/12 Step (2)	Experience w/sobriety (3)	Good Role Model (4)	Integrity (5)
Availability/ Accessibility (6)	Encouragement (7)	Good at Setting Goals (8)	Experience as a Sponsor (9)	Trustworthy (10)
Respects Confidentiality (11)	Flexible (12)	Positive Attitude (13)	Advice (14)	Attentiveness (15)
Mandatory Scheduled Contacts (16)	Sharing Experiences (17)	Honest Feedback (18)	Knowledge of AA (19)	Problem Solving (20)

After choosing the 10 most important characteristics from their perspective, participants were asked to rank their top five of these ten in the order of their importance. This ranking exercise was designed to capture a relative ranking of the top characteristics or qualities participants felt were important to being an effective sponsor.

Finally, the participant was given a set of 9 index cards which consisted of hypothetical same sex sponsors (e.g. females were given female hypotheticals, males were given male hypotheticals) which differed on the bases of experience, knowledge, availability, confidentiality, and goal-setting behavior. Each participant received 9 cards that differed on attributes as determined by a design of experiments (DOE) (see Appendix Y) that resulted in 3 sets of 9 cards (27 hypothetical sponsors) that provided an orthogonal experiment to derive part worth coefficients from 3^5 or 243 possible experimental conditions across the 5 attributes. Three examples of hypothetical sponsors:

Sponsor 1

Sponsor 1 is new to being an AA sponsor and her knowledge of AA, 12-step, and substance abuse recovery is mainly just personal. She is always available 24/7 but she has been known to slip occasionally with confidentiality. She takes a hands-off approach and lets the sponsees set their own goals.

Sponsor 3

Sponsor 3 is new to being an AA sponsor but she is widely recognized for being very knowledgeable about AA, 12-step, and substance abuse recovery. She is always available 24/7 and she always maintains confidentiality. She takes a structured approach and sets goals for her sponsees.

Sponsor 9

Sponsor 9 is a seasoned veteran at being an AA sponsor and she is widely recognized for being very knowledgeable about AA, 12-step, and substance abuse recovery. It often takes a second call to reach her, but she always maintains confidentiality. She takes a hands-off approach and lets the sponsees set their own goals.

This card sorting exercise was the final sponsorship related task in the overall research project. In summary, the survey included demographic

information, an open ended, unaided question regarding effective sponsorship characteristics, a choice and ranking exercise, and finally, a card sorting, conjoint experiment.

CHAPTER III

RESULTS

The results are exploratory and consist of three major analytic tasks mainly defined by the research questions and subsequent survey instrument design. This design led the participant through 3 major reporting exercises: 1) an opened ended, unaided awareness question, 2) choice and ranking of attributes tasks; and 3) the ranking of 9 hypothetical sponsors through a card sorting exercise. The specific analyses varied by research question.

Results for the Qualitative, Open-ended Research Question I

Research Question I: Without providing intentional aided awareness to the participant, based on their perspective and experience, what are some of the most important characteristics and functions of a successful sponsor for a sponsee early in recovery?

The survey item for this research question was:

"Based on your perspective and experience, please write down some of the most important characteristics and functions of a successful sponsor for a sponsee early in recovery (working an initial 12-step process)"

Participants (*N* = 233, Female = 111, Male = 122) provided a total of 1029 responses (*M* = 4.42, *SD* = 1.20, *Md* = 5, Range = 1→8). Examples include:

calling everyday to establish relations
knowledge of steps
she always being at meetings
able to reach her at any given time
has no problems listening to me
trustworthy & honest
calling me on my crap in a loving way
having time for me
be open-minded
be honest

These 1029 items were then analyzed independently by two research assistants. Both research assistants (female PhD student in clinical psychology and full-time male researcher on an Oxford House grant) were members of the research staff at the Center for Community Research, DePaul University. After independent reviews, a coding system of 19 themes was developed (see Table 4).

Table 4

Qualitative Sponsorship Attribute Coding Themes

Theme	Keywords
AVAILABILITY	Accessible, has time, not too busy
KNOWLEDGE	Of Big Book, traditions, AA, life, philosophy, recovery
STRUCTURE	Goals, content (e.g. steps) accountability, feedback
SHARING	Disclosure, personal information, recovery activities
GUIDANCE	Advice, suggestions, leadership
ENGAGEMENT	Goes to meetings, has a sponsor, works steps
SERVICE	Having to do with doing service (both sponsee & sponsor)
TRUSTWORTHY	Confidential , honest, doesn't gossip
LISTENING	Listens, wants my opinion, view
CONTACT	Proactive consistency of contact, calls daily, etc
SIMILARITY	Same experience, higher power, drug of choice, ……as me
COMPASSIONATE	Understanding, caring, empathetic, kindness, sincere
RESPECTFUL	Doesn't judge
EXPERIENCE	Time in recovery, clean time, experience as a sponsor, etc
PATIENCE	
ROLE MODEL	Has what I want, does the right things
SUPPORTIVE	Positive, encouraging, "not a catastrophizer"
COLLABORATIVE	Work together
OTHER	Sense of humor, nothing personal, brief reflections to past

After agreement on a coding scheme, the two research assistants independently coded the 1029 items. After this independent coding, agreement scoring was done to measure inter-rater reliability. The raw agreement score based on tabular intersections was 752 of the 1029 items or 73.1%. Usually,

inter-rater agreement scores are adjusted for the probability that the agreement is simply due to chance. The Kappa statistic (κ) for this analysis represents "substantial agreement" per Landis and Koch (1977) (see Table 5). Since this first iteration of coding achieved a satisfactory level of agreement, no changes were made to the theme structure nor was any recalibration of initial coding judgments made.

Table 5

Inter-Rater Reliability Agreement

		Value	Asymp. Std. Error	Approx. T	Approx. Sig.
Measure of Agreement	Kappa	.711	.015	86.534	.000
N of Valid Cases		1029			

Interpretation of Kappa (κ) per Landis & Koch (1977):

Kappa	**Interpretation**
< 0	Poor agreement
0.0 – 0.20	Slight agreement
0.21 – 0.40	Fair agreement
0.41 – 0.60	Moderate agreement
0.61 – 0.80	Substantial agreement
0.81 – 1.00	Almost perfect agreement

Average theme frequencies ranged from slightly less than 15 to over 100 with Trustworthy and Engagement tied for having the highest coded frequencies and Service having the fewest counts (see Figure 2).

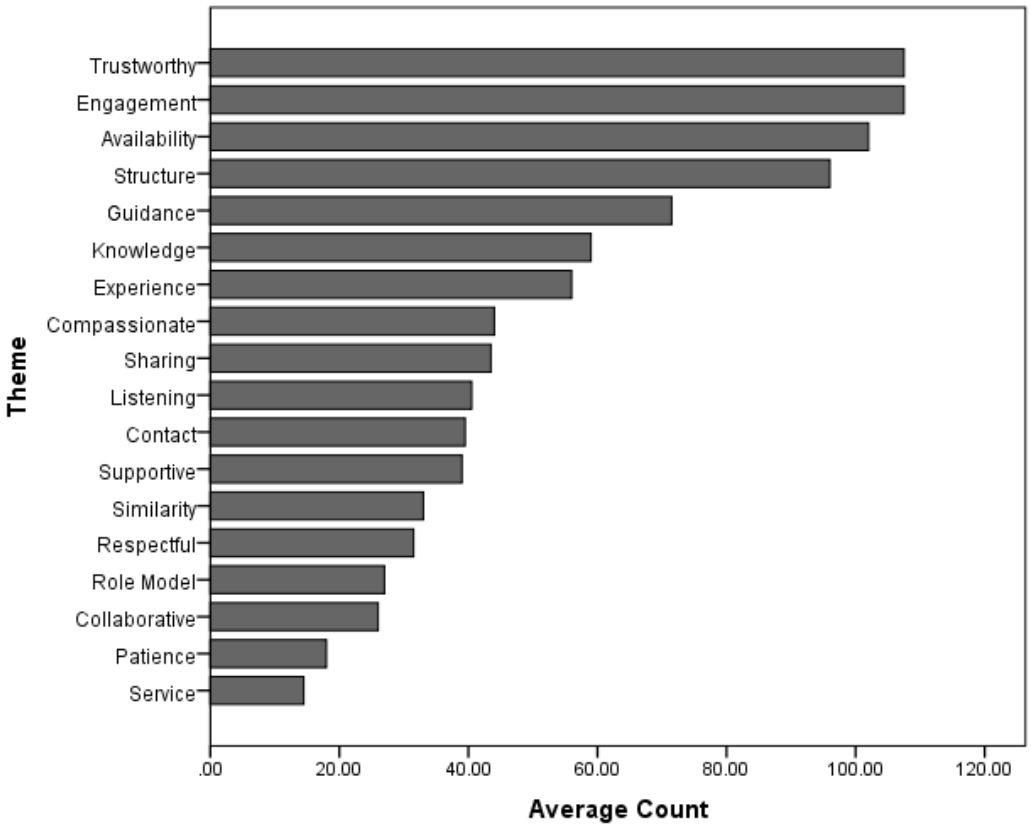


Figure 2. Average count of attribute themes

An analysis of agreement across the dimensions revealed that similarity, sharing, and guidance had some differences in interpretation, perhaps, indicating less clearly defined sponsor attributes (see Figure 3). Other dimensions, such as availability and structure, demonstrated high agreement. Overall, consistent with the kappa analysis, the rank ordering of dimensions exhibits relative inter-observer stability.

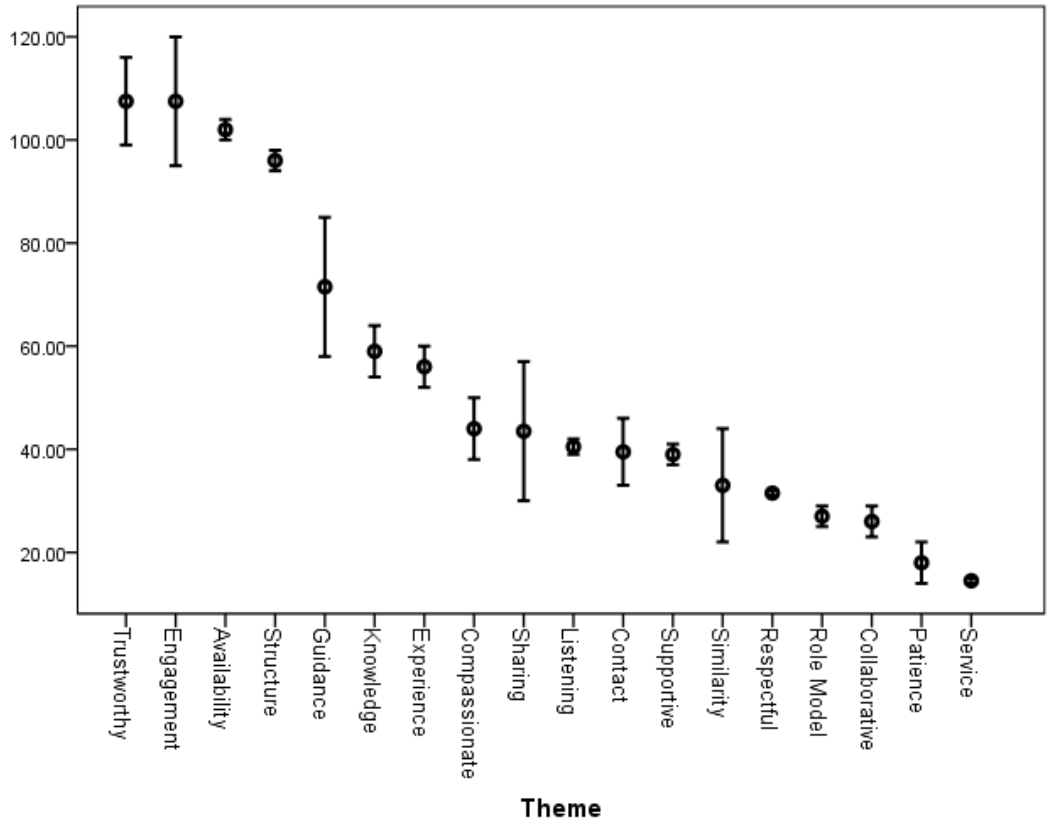


Figure 3. Deviation of Coded Responses by Theme

The extent of differentiable attributes suggest sponsorship to be an extensive and complex role. Several unique comments highlighted this range including 1) *I have never had a successful sponsorship relationship* (P#277), 2) *introduction to clean and sober activities--hiking, camping* (P#111), 3) *fun stuff* (P#262), and 4) *success rate of other sponsees* (P#404). These comments present potentially important characteristics to any individual sponsor/sponsee relationship and Participant #404 clearly identifies a potentially critical measure of a sponsor's effectiveness.

Results for the Choice Exercise, Research Question II

Research Question II: With the provision of intentional aided awareness and a bounded set of characteristics, of 20 available qualities and characteristics which were the 10 that were considered most important for a sponsor to be effective (Figure 4)? This question was analyzed on the basis of absolute and relative frequency counts and the correlation matrix of characteristics to investigate possible substitution and augmentation effects.

AA Sponsorship Survey

From the following list of 20 qualities & functions of a sponsor, please circle the ten (10) that you think are the most important

Guidance (1)	Involvement w/12 Step (2)	Experience w/sobriety (3)	Good Role Model (4)	Integrity (5)
Availability/ Accessibility (6)	Encouragement (7)	Good at Setting Goals (8)	Experience as a Sponsor (9)	Trustworthy (10)
Respects Confidentiality (11)	Flexible (12)	Positive Attitude (13)	Advice (14)	Attentiveness (15)
Mandatory Scheduled Contacts (16)	Sharing Experiences (17)	Honest Feedback (18)	Knowledge of AA (19)	Problem Solving (20)

From the group of 10 items that you selected above, please choose your Top 5 (five) and rank them in order of importance from 1 to 5 where 1 would be what you think is most important. If you prefer, you can use the numbers associated with the items rather than writing them out.

Figure 4. Set of 20 sponsor attributes for choice and ranking exercise

Respondents chose ten of the characteristics they thought were most important for a sponsor. Table 6 shows the frequency and proportion for these attributes.

Table 6
Frequency of choice for important characteristics of sponsors

Attribute	Count	Proportion
Involvement w/12 Step	188	0.777
Trustworthy	180	0.744
Honest Feedback	178	0.736
Respects Confidentiality	163	0.674
Positive Attitude	162	0.669
Integrity	158	0.653
Availability/Accessibility	154	0.636
Experience w/Sobriety	152	0.628
Guidance	145	0.599
Sharing Experiences	136	0.562
Encouragement	131	0.541
Knowledge of AA	130	0.537
Good Role Model	113	0.467
Problem Solving	70	0.289
Experience as a Sponsor	60	0.248
Advice	60	0.248
Attentiveness	58	0.240
Flexible	48	0.198
Good at Setting Goals	46	0.190
Mandatory Scheduled Contact	33	0.136

Involvement with 12-step, Trustworthy, and Honest Feedback scored the greatest number of mentions. As an indicator of significance and in comparison to being chosen at random, Guidance with a proportion of .599 is statistically different than random choice ($z = 3.106$, $p = .002$). Participants overall did not highly value Attentiveness or Mandatory Scheduled Contact, and Experience as a Sponsor was not perceived as being critical.

To test for possible substitution effects across attributes, a correlation matrix of attributes was calculated. Overall, the strongest substitution correlation was -.239 which occurred between Encouragement and Knowledge of AA (see Table 7).

Table 7

Attributes and Their Related Significant Substitution Attributes ($r \leq -.126$)

Attribute	Substitution Attributes
Involvement w/12 Step	Encouragement (-.135), Advice (-.129)
Trustworthy	Good Role Model (-.172), Sharing Experiences (-.156), Advice (-.145)
Honest Feedback	Good Role Model (-.171)
Respects Confidentiality	Advice (-.172), Good Role Model (-.161), Problem Solving (-.139)
Positive Attitude	Knowledge of AA (-.212)
Integrity	Guidance (-.189), Mandatory Scheduled Contact (-.166), Advice (-.144), Problem Solving (-.128)
Availability/Accessibility	None
Experience w/Sobriety	Attentiveness (-.229), Flexible (-.175)
Guidance	Integrity (-.189), Experience as a Sponsor (-.175)
Sharing Experiences	Trustworthy (-.156)
Encouragement	Knowledge of AA (-.239), Involvment w/12 Step (-.135)
Knowledge of AA	Encouragement (-.239), Good at Setting Goals (-.226), Positive Attitude (-.212), Attentiveness (-.178)
Good Role Model	Trustworthy (-.172), Honest Feedback (-.171), Respects Confidentiality (-.161)
Problem Solving	Respects Confidentiality (-.139), Integrity (-.128)
Experience as a Sponsor	Guidance (-.175), Good at Setting Goals (-.156)
Advice	Respects Confidentiality (-.172), Trustworthy (-.145), Integrity (-.144), Involvement w/12 Step (-.129)
Attentiveness	Experience w/Sobriety (-.229), Knowledge of AA (-.178)
Flexible	Experience w/Sobriety (-.175)
Good at Setting Goals	Knowledge of AA (-.226), Experience as a Sponsor (-.156)
Mandatory Scheduled Contact	Integrity (-.166), Good Role Model (-.131)

Most attributes had relationships, although their effect size was generally closer to small (0.10) than medium (0.30) by Cohen's conventions (Cohen, 1992). Both Good Role Model and Knowledge of AA appear to have non-random clustering of related attributes but generally, the number of significant (without correction for Type I inflation $r \geq .126$, and Bonferroni corrected critical $r \geq$

.179) relationships was small and these attributes were conceived as independent characteristics in the perceptions of the respondents.

In assessing positive relationships, that is where the choice of one attribute predicts the choice of another attribute, the evidence for independence is even stronger. Few attributes were positively related to another attribute (see Table 8) suggesting that participants did not match up characteristics for some augmentation effect beyond the simple additive choice.

Table 8

Attributes and Their Related Significant Positive Attributes (Pearson r ≥ .126)

Attribute	Positive Attribute Relationships
Involvement w/12 Step	None
Trustworthy	Respects Confidentiality (.157), Positive Attitude (.131)
Honest Feedback	None
Respects Confidentiality	Trustworthy (.157)
Positive Attitude	Encouragement (.199), Trustworthy (.131)
Integrity	None
Availability/Accessibility	None
Experience w/Sobriety	None
Guidance	None
Sharing Experiences	None
Encouragement	Positive Attitude (.199)
Knowledge of AA	None
Good Role Model	None
Problem Solving	None
Experience as a Sponsor	None
Advice	None
Attentiveness	None
Flexible	None
Good at Setting Goals	None
Mandatory Scheduled Contact	None

The results of this correlation analysis revealed some small substitution effects among the 20 attributes in the choice set and almost no positive,

augmentation effects. These findings indicate relative independence for the attributes and that the ranking based on frequency fairly represents the relative importance of sponsor characteristics.

Results for the Ranking Exercise, Research Question III

Research Question III: Of the 10 most important characteristics, as chosen by a participant, what were the rankings of the most important characteristics? This exercise was designed to examine the relative importance of the attributes that the participant had previously chosen as the 10 most important characteristics.

The results of this ranking exercise are summarized in Table xx.

Table 9:

An attribute's presence as a count in an individuals' Top 1, Top 3, & Top 5 characteristics

	Top 1	Top 3	Top 5
Involvement w/12 step	47	103	134
Respects Confidentiality	19	63	101
Trustworthy	26	70	98
Honest Feedback	12	56	95
Integrity	17	56	92
Availability/Accessibility	14	48	90
Guidance	25	54	85
Experience w/Sobriety	31	64	84
Positive Attitude	11	39	69
Knowledge of AA	13	50	67
Sharing Experiences	5	29	56
Encouragement	3	21	48
Good Role Model	8	21	47
Problem Solving	0	8	31
Experience as a Sponsor	3	12	23
Mandatory Scheduled Contact	3	10	21

Good at Setting Goals	1	2	18
Attentiveness	3	9	17
Advice	0	7	16
Flexible	0	1	9

For example of all the respondents, 47 had Involvement w/12 Steps as their most important attribute. This attribute made it into the top three attributes for 103 individuals and 134 participants had it in their top five. These results are highly consistent with the results of the simple choice exercise (see Figure 5). The Spearman rank correlation coefficient between the simple count of choice and the Top 5 rankings is 0.949 (bootstrapped confidence interval, $CI_{.95}$ = [0.825, 0.986]. It is interesting to note that of the top five to seven attributes, only the first, Involvement w/12 Step, is directly related to AA. Both Knowledge of AA and Experience as a Sponsor have relatively low rankings.

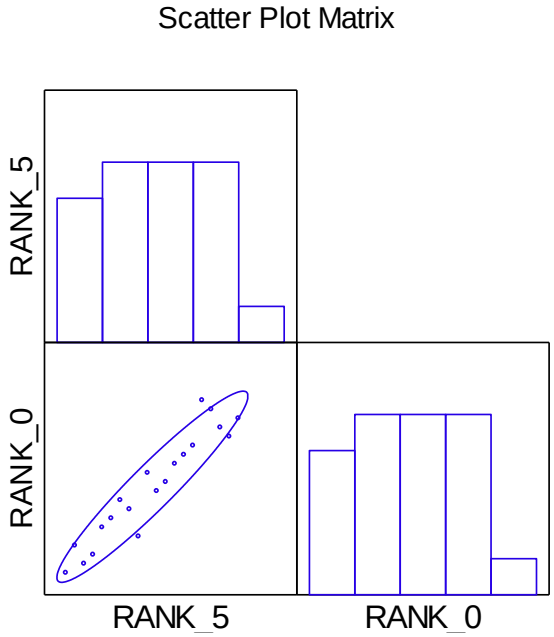


Figure 5. The scatterplot of the naïve frequency ranked attributes with the rankings as measured by being a Top Five attribute.

While these rankings appear to be relatively stable, the diversity of responses across individuals is indicated by the result that only Involvement w/12 Step had over 50% (134/242 or 55.4%) of the participants rank it as a Top Five characteristic. Therefore, it's important to note that the other 19 characteristics did not have the majority of the respondents endorsing them as a Top 5 attribute. Thus, these rankings reflect both a strong consistency of important, but not exclusively dominate themes and the breadth by which individuals perceive the critical qualities of a sponsor.

Results for the Ranking Exercise, Research Question IV

Research Question IV: Of these ranked characteristics, do they differ by sex (female/male) or current role (sponsor/sponsee)? To test for differences by sex or role, χ^2 (chi-square tests) were performed where the null hypotheses were the distribution of counts for Top Five rankings were independent of sex or sponsor/sponsee role.

For the distributions of rankings by sex, the results were not significant ($\chi^2 = 20.493$, $df = 19$, $p = .365$), therefore no evidence of differences by sex was found. The descriptive results by attribute (Table 10) show the consistency of results with the only result of local significance (and not Bonferroni corrected) was an attribute of little importance to most participants, Attentiveness.

Table 10

Frequency counts of a Top Five ranking by attribute by sex

	Sex		
Attribute	Female	Male	Total
Involvement w/12 step	69_a	63_a	132

Respects Confidentiality	51_a	49_a	100
Trustworthy	52_a	43_a	95
Honest Feedback	51_a	43_a	94
Availability/Accessibility	43_a	47_a	90
Integrity	46_a	43_a	89
Experience w/Sobriety	36_a	47_a	83
Guidance	39_a	44_a	83
Positive Attitude	26_a	40_a	66
Knowledge of AA	27_a	38_a	65
Sharing Experiences	20_a	35_a	55
Encouragement	21_a	26_a	47
Good Role Model	19_a	28_a	47
Problem Solving	14_a	16_a	30
Experience as a Sponsor	12_a	11_a	23
Mandatory Sched Contact	9_a	12_a	21
Good at Setting Goals	8_a	10_a	18
Attentiveness	4_a	13_b	17
Advice	5_a	11_a	16
Flexible	6_a	3_a	9
Total	558	622	1180

Note: No Bonferroni correction, sig difference = a,b.

The results were not significant ($\chi^2 = 22.929$, $df = 19$, $p = .240$), in testing for differences between the distributions of rankings for sponsees and sponsors. Table 11 compares the ranking frequency counts by sponsee/sponsor role.

Table 11

Frequency counts of a Top Five ranking by attribute by dyad role

	Dyad		
	Sponsee	Sponsor	Total
Involvement w/12 step	62_a	62_a	124
Respects Confidentiality	48_a	46_a	94
Trustworthy	46_a	42_a	88

Honest Feedback	50_a	35_a	85
Availability/Accessibililty	44_a	37_a	81
Integrity	42_a	37_a	79
Experience w/Sobriety	38_a	40_a	78
Guidance	43_a	34_a	77
Knowledge of AA	22_a	42_b	64
Positive Attitude	24_a	36_a	60
Sharing Experiences	24_a	27_a	51
Good Role Model	22_a	21_a	43
Encouragement	24_a	18_a	42
Problem Solving	12_a	12_a	24
Experience as a Sponsor	12_a	8_a	20
Mandatory Sched Contact	10_a	10_a	20
Good at Setting Goals	12_a	5_a	17
Attentiveness	8_a	7_a	15
Advice	7_a	7_a	14
Flexible	8_a	1_b	9
Total	558	527	1085

Note: No Bonferroni correction, sig difference = a,b.

In examining pairwise comparisons not corrected for multiple comparison error, Knowledge of AA appears to be more highly valued among sponsors than sponsees. While statistically this is not fully supported, as exploratory evidence it might have some meaning. Overall, however, it would appear that sponsors and sponsees have similar insights on valued characteristics of sponsors and a grouping distinction based on role has little informative value.

Both the analysis by sex (female/male) and role (sponsee/sponsor) provide substantive evidence that the important characteristics and qualities of a sponsor are largely independent of sex or role.

Results for the Conjoint Exercise, Research Question V

Research Question V: What are the utility profiles of the 5 attributes—experience, knowledge, availability, confidentiality, and goal setting—and their relative part-worths for effective sponsorship?

The calculations of the utility profiles were done by using conjoint analysis methods as implemented by SYSTAT, a statistical package (SYSTAT Software, 2007). This analysis resulted in the calculation of 15 (5 attributes with 3 levels each) part worth coefficients as derived measures of the average perceived utility of attributes and levels. The ranking data for this analysis resulted from an orthogonal design of experiment for five attributes and three levels per attribute. The design had 27 hypothetical sponsors organized into 3 groups of 9 that were ranked from 1 to 9 in order of overall attractiveness as a potential sponsor. Each participant ranked one group of nine sponsors.

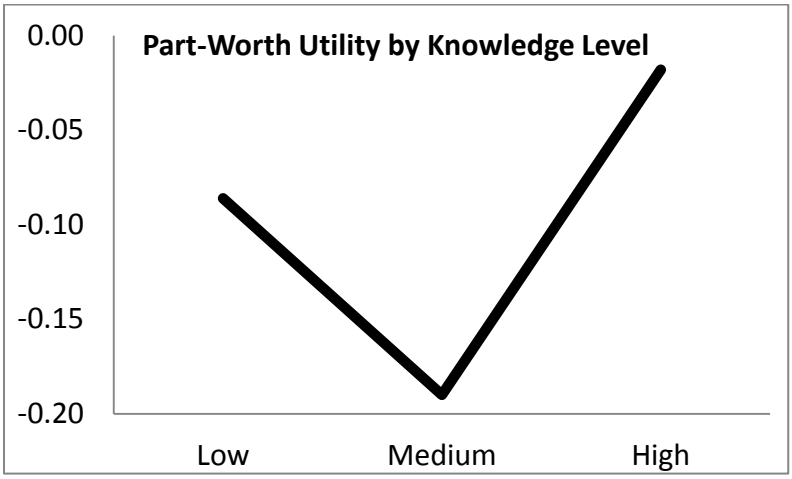
This analysis utilized maximization of Kendall's tau (τ) in a loss function of $1-(1+\tau)/2$ where $-1 \leq \tau \leq 1$. For this analysis, the loss function converged at .2947997 and $\tau = 0.410$ where $\tau = 1.00$ would be a perfect match of rankings. The estimated part worth utilities are presented in Table 12. In this analysis the sum of all part worth utilities are always equal to zero.

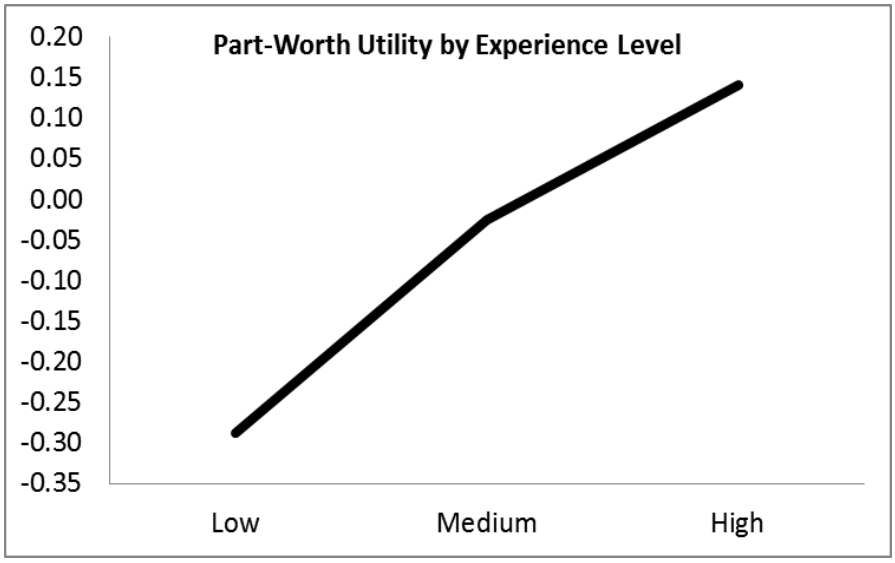
Table 12

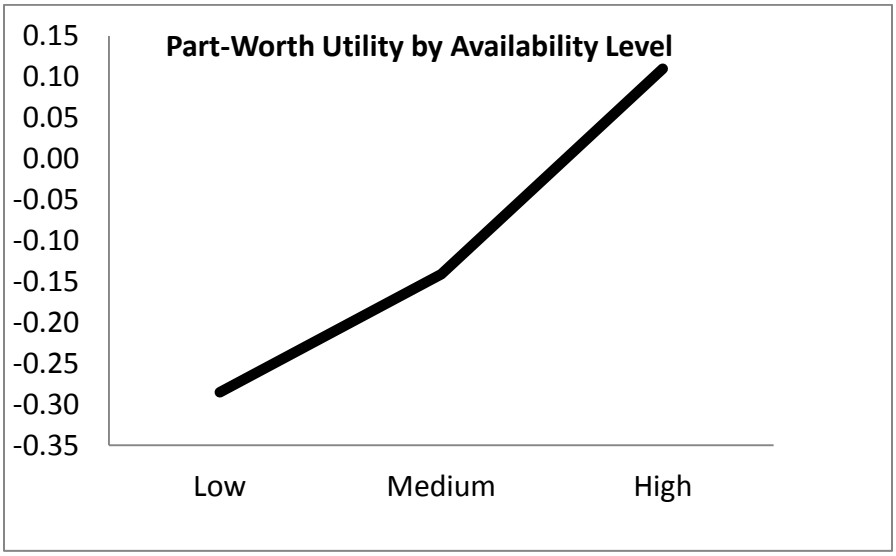
Part-worth utility coefficients for attributes by levels (L, M, H)

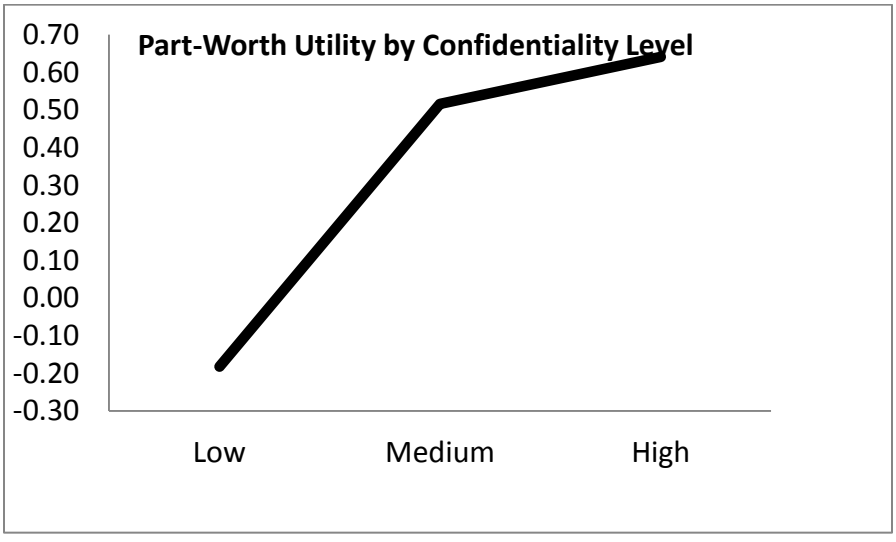
	Experience	Knowledge	Availability	Confidentiality	Goal Setting
Low	-0.288	-0.086	-0.285	-0.182	-0.165
Medium	-0.026	-0.190	-0.141	0.516	-0.050
High	0.140	-0.018	0.110	0.641	0.023

These coefficients represent the part-worth utility of an attribute given the level of the attribute as derived from a conjoint (taken as a whole) assessment of a bundle of 5 attributes at varied levels. For this analysis, Confidentiality has the highest possible level of utility (0.641), but the biggest gain in utility is simply going from low to a moderate level of confidentiality (part-worth utility of .698). The gain biggest gain from going from a medium to high level is for Availability (.251). If an individual were endowed with one low attribute, two medium level attributes, and two high level attributes, the utility maximizing combination of characteristics would be low knowledge, moderate confidentiality and goal setting, and high levels of availability and experience (Total utility = 0.630). Figure 6 has the slopes for these derived part-worth utilities in graphic form.




Part-Worth Utility by Experience Level
0.20
0.15
0.10
0.05
0.00
-0.05
-0.10
-0.15
-0.20
-0.25
-0.30
-0.35
Low
Medium
High


Part-Worth Utility by Availability Level
0.15
0.10
0.05
0.00
-0.05
-0.10
-0.15
-0.20
-0.25
-0.30
-0.35
Low
Medium
High


Part-Worth Utility by Confidentiality Level
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
-0.10
-0.20
-0.30
Low
Medium
High

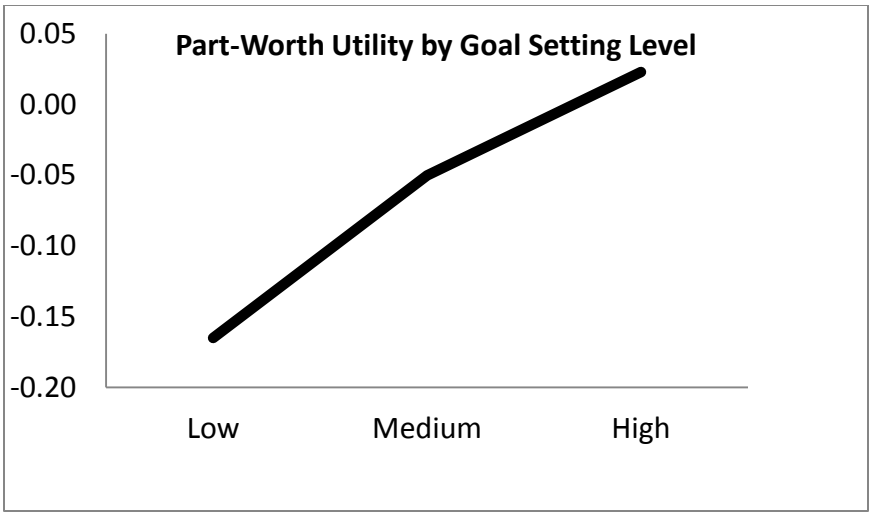


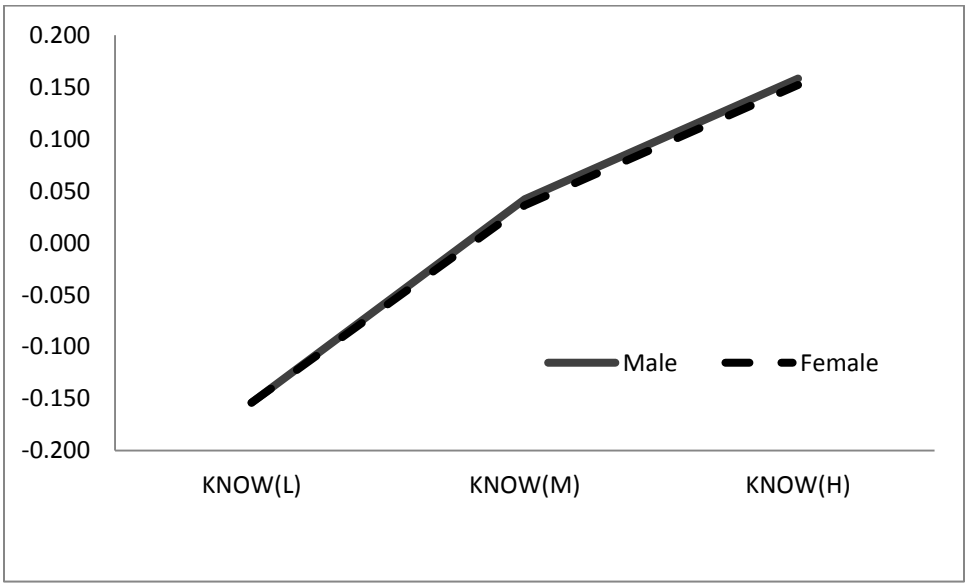
Figure 6. Part-worth utility coefficients by attribute and attribute level.

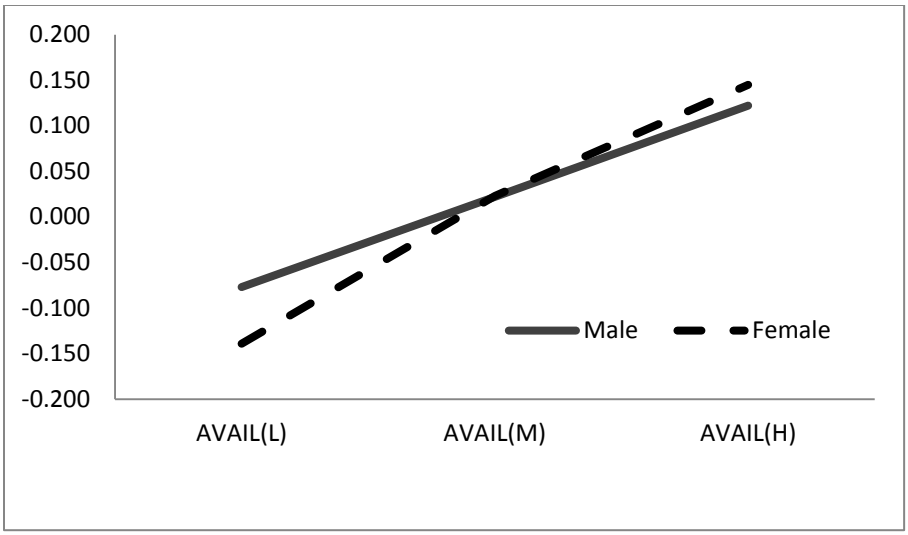
Some noteworthy themes emerge in this conjoint experiment of holistically evaluating a bundle of sponsor attributes and their levels. First, maintaining some respectable level of confidentiality seems to be critical for a sponsor to be effective. Being available and actively engaging in goal setting also appear to be positively valued attributes. Experience is progressively and ultimately positively valued, but interestingly knowledge has a non-monotonic slope. Since this analysis is ultimately, non-parametric, and therefore, descriptive in nature, perhaps a possible conclusion for knowledge is that changes in knowledge did not seem to materially affect overall utility. Therefore, knowledge exhibited the least leverage on overall utility formation.

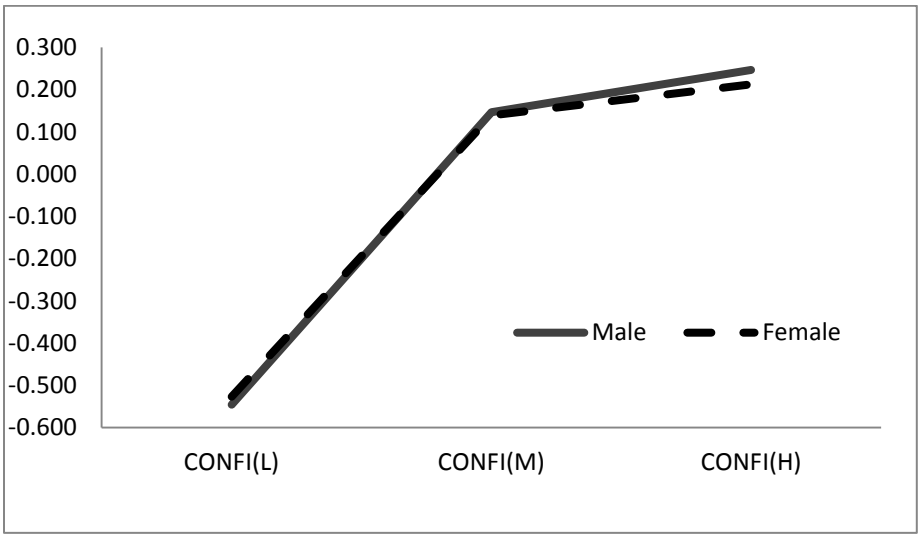
Results for the Conjoint Exercise, Research Question VI

Research Question VI: Do these utility profiles differ by sex (female/male) or current role (sponsor/sponsee)? Two additional conjoint analyses were performed to descriptively observe whether profile part-worth utility plots change perceptibly by sex or sponsor/sponsee as group conditions.

The results for sex are graphically displayed in Figure 7. Overall, no major discrepancies are apparent in the visual representation of female/male comparisons.







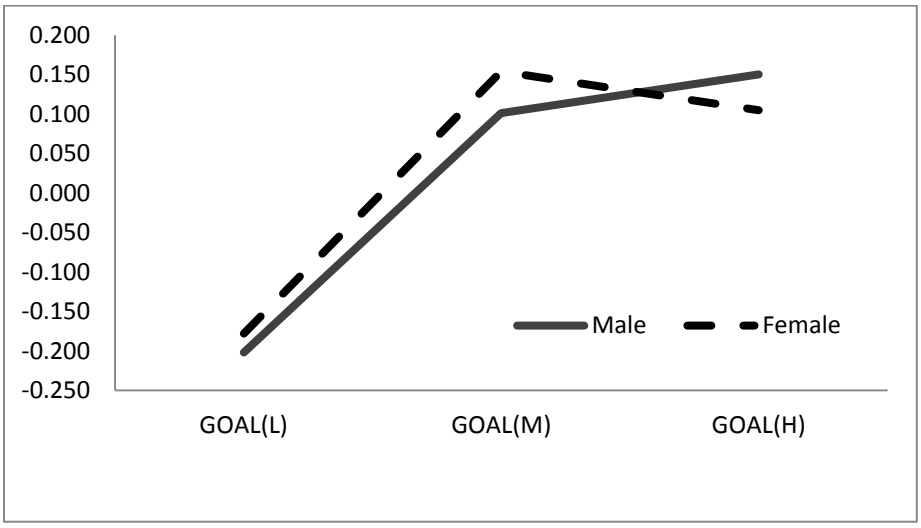
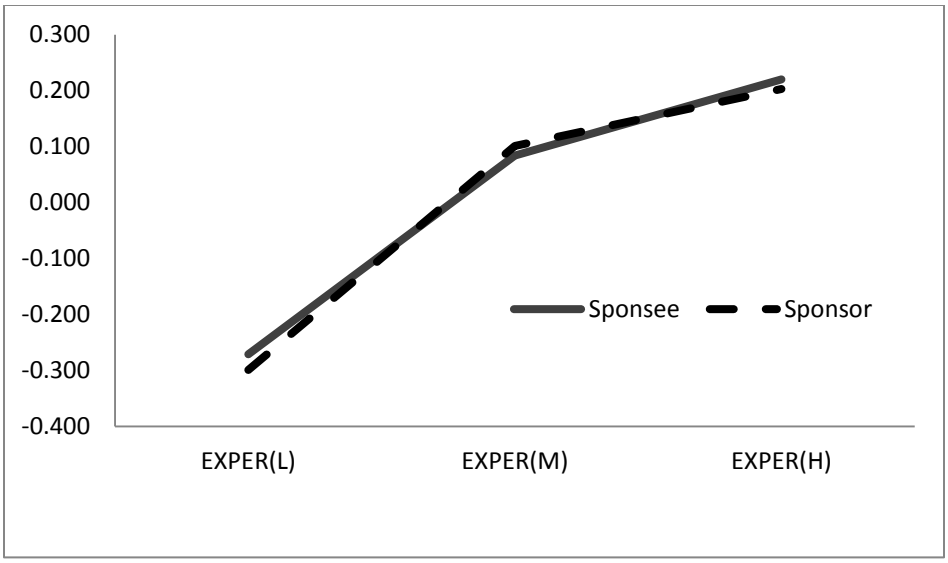
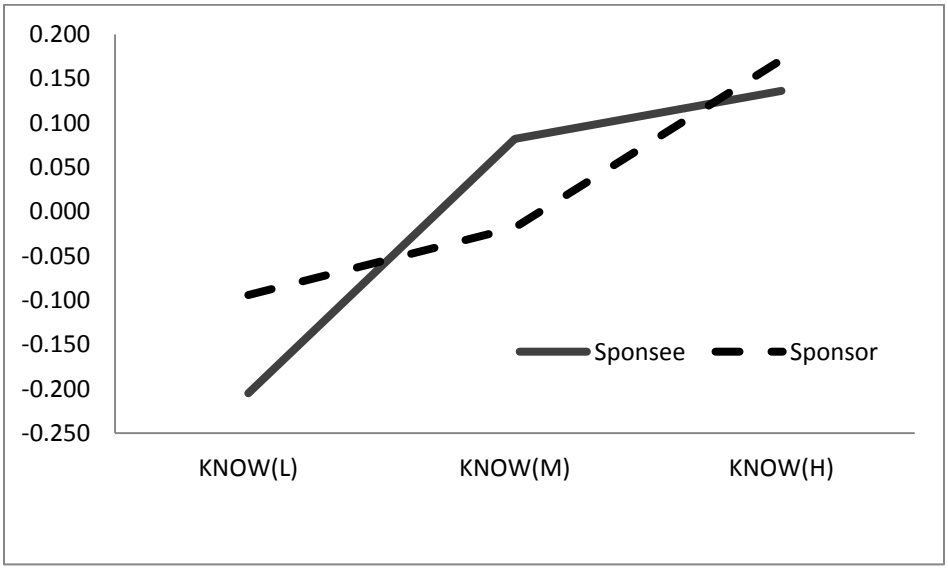


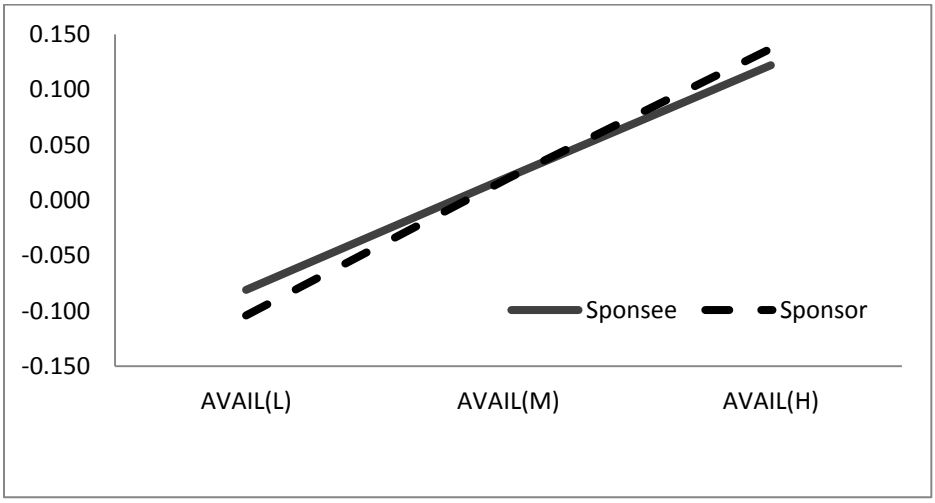
Figure 7. Part-worth utilities by attribute by level by sex.

The grouping methodology required independent analysis by group, thereby reducing the effective sample sizes by about half. The part-worth coefficients changed in some instances from the full analysis, although for most attributes, the change is only relative in nature. For knowledge, however, changing to groups has led to a positive monotonic slope. The major finding of this analysis, which was to compare female and male conjoint evaluations, is that female and male conjoint appraisals are indistinguishable and knowledge of a person's sex would not led to a prediction difference of part-worth utility of sponsor characteristics. This result is also consistent with the findings in the choice and ranking experiment.

The group analysis of sponsee/sponsor role also resulted in generally close part-worth utility coefficients. Overall, the graphs (Figure 8) exhibit close matches in level and shape. From an exploratory perspective, two differences might be interesting to document. First, the largest difference between sponsees' and sponsors' evaluations concerns having the sponsee being left to set their own goals. Sponsees view this much more negatively than sponsors do. Secondly, while both sponsees and sponsors see knowledge as progressive and monotonic, sponsees see a greater value in moving from low knowledge to moderate knowledge, while sponsors value the change from moderate knowledge to a high level of knowledge the greatest. These two small discrepancies do not, however, change the fundamental finding that sponsees and sponsors tend to appraise part-worth utilities in a generally similar manner.


0.300
0.200
0.100
0.000
-0.100
-0.200
-0.300
-0.400
Sponsee
Sponsor
EXPER(L)
EXPER(M)
EXPER(H)


0.200
0.150
0.100
0.050
0.000
-0.050
-0.100
-0.150
-0.200
-0.250
Sponsee
Sponsor
KNOW(L)
KNOW(M)
KNOW(H)


0.150
0.100
0.050
0.000
-0.050
-0.100
-0.150
Sponsee
Sponsor
AVAIL(L)
AVAIL(M)
AVAIL(H)

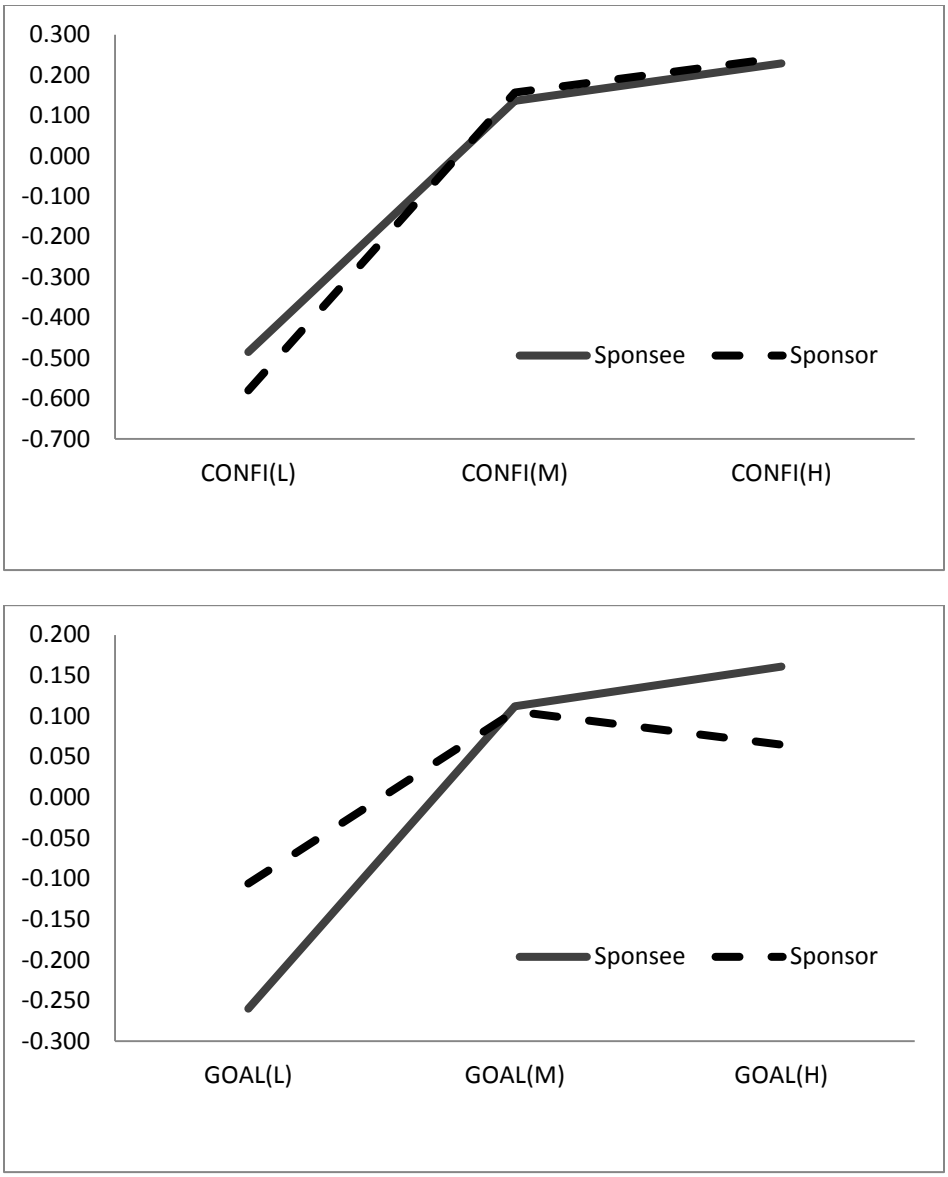


Figure 8. Part-worth utilities by attribute by level by role

Research question VI has been answered by an examination of grouping effects on the calculation of part-worth utilities. Table 13 has the derived part-worth utility coefficients used for the Figures. These coefficients were calculated using bootstrapping methodology (1000 sample replications) to obtain stable estimates of coefficients. Differences between females and males, sponsees and sponsors were small even as exploratory descriptive differences.

Table 13

Part-worth utility coefficients by attribute, by level, and by sex and role

	Male	**Female**	**Sponsee**	**Sponsor**
	Part-worth Utility Coefficients			
EXPER(L)	-0.295	-0.276	-0.271	-0.299
EXPER(M)	0.083	0.111	0.084	0.101
EXPER(H)	0.202	0.196	0.220	0.203
KNOW(L)	-0.154	-0.154	-0.205	-0.094
KNOW(M)	0.042	0.036	0.082	-0.018
KNOW(H)	0.158	0.152	0.136	0.171
AVAIL(L)	-0.077	-0.139	-0.081	-0.104
AVAIL(M)	0.022	0.023	0.021	0.020
AVAIL(H)	0.122	0.145	0.122	0.137
CONFI(L)	-0.546	-0.527	-0.485	-0.580
CONFI(M)	0.147	0.139	0.136	0.157
CONFI(H)	0.247	0.213	0.229	0.243
GOAL(L)	-0.202	-0.178	-0.260	-0.106
GOAL(M)	0.101	0.154	0.112	0.106
GOAL(H)	0.150	0.105	0.161	0.065

Summary of Results

This exploratory analysis of the important qualities and characteristics of the AA sponsor sponsoring someone new to recovery has identified various major themes or attributes that appear critical for sponsor effectiveness. The evaluation of unaided awareness themes emphasized a sponsor's current engagement in AA. This finding was replicated in the choice and ranking exercise as the most chosen and top ranked attribute. Trustworthiness and confidentiality were also important

characteristics that were of primary importance across all four experimental methods—unaided awareness, choice, ranking, and conjoint analysis. The conjoint analysis suggested a significant difference in utility for those sponsors who maintain confidentiality versus those who do not.

Structure and guidance were highly mentioned characteristics that also appeared to be important in both the conjoint and choice analysis. In the choice and ranking experiment, honest feedback and guidance were relatively highly mentioned and ranked. In the conjoint analysis, a sponsor unilaterally setting goals was more highly valued than either a cooperative or sponsee led approach. These findings would suggest a sponsor can assist a sponsee by providing structure.

Availability was an important attribute through all analyses. Although most characteristics were relatively independent, availability appeared to be a very distinct and independent concept in both the unaided awareness and choice exercise. In the conjoint analysis, availability was an attribute that at a high level helped maximize a constrained overall utility. The other was level of experience which is not state controllable by a sponsor.

Overall, investigations into sex and dyad role differences did not result in findings that females and males or sponsees and sponsors view the important qualities and characteristics of a sponsor differently. These findings, at the aggregate, suggest individual differences within groups are much more important than between group differences. In addition, the broadness of the choices and rankings suggest that while certain attributes may, on average, be significantly

more important than other attributes, individual differences might be the a critical discussion point in the formation of a successful sponsee/sponsor relationship.

CHAPTER IV

DISCUSSION

While sponsorship is considered an important process within the AA paradigm (AA, 2010), little research has been published that describes the qualities and characteristics of an effective AA sponsor. This exploratory investigation of the attributes of an effective sponsor was designed to collect data through three major analytical tasks: an unaided, open probe of important characteristics; a choice and ranking exercise of 20 pre-defined attributes, and a conjoint evaluation of hypothetical sponsors varying on five attributes by three levels. The participants for this research were individuals in recovery from substance use disorder who had experience being a sponsee, sponsor, or both.

Findings and Implications

Overall, this research provided insight on the broad and diverse constellation of characteristics that might typify the effective AA sponsor. This breadth is illustrated by only one individual mentioning the empirical " success rate" of the sponsor and only *Involvement with 12-step* being in the Top 5 ranking for over 50% of the participants. So while several meaningful themes emerged in this analysis, one general finding appears to be effective AA sponsorship represents a diverse set of properties that satisfy a diverse set of sponsee' needs.

This diversity, on average, was not explained by sex or dyad role (sponsee/sponsor). Female and male differences were not significant in either the choice and ranking exercise or the conjoint analysis. Overall, it appeared that females and males have similar perspectives on what constitutes characteristics of

an effective sponsor. Since, this parallelism was maintained in the conjoint exercise, where the part-worth utility curves were closely overlapping, females and males also seemed to view relative worth similarly. Thus, in summary, while there were material between-participant differences in what constitutes an effective AA sponsor, there was little evidence of between-group differences as defined by sex.

Similar results were obtained in the group analyses for sponsees and sponsors. Dyad role was not a significant predictor in either the choice or conjoint exercises. Small descriptive differences were found in the conjoint analysis but they were insignificant and in the case of goal setting, it was simply confirming that sponsees setting their own goals was least preferred. This lack of group differences by sex or role has important implications. The large individual differences found between participants were independently distributed with respect to sex and dyad role and that the studies findings are universal with respect to those characteristics.

This breadth of important characteristics and qualities which would seem to be evidence of relevant individual differences implies that sponsee/sponsor matching should not be a passive process of assuming sponsor or relationship adequacy. Instead, this breadth argues for an active process of inquiry prior to the formalization of a sponsorship relationship and continuing evaluation of its usefulness. In essence, these data would suggest one size does not fit all.

The qualitative analysis did reveal several important themes. First, a sponsor's current engagement in AA appeared to be the most important AA-

related attribute and basically, tied with Trustworthy as the highest frequency theme. Both Experience and Knowledge ranked much lower than Engagement and it would appear that someone currently active and focused on the AA program would be perceived as likely to be more effective than someone with greater past experience or knowledge of AA. This characteristic of Engagement carried through as the Involvement with 12-step in the choice and ranking exercise as the only attribute with a majority of mentions in the Top 5 ranking. As a practice implication, current engagement in AA may signify both commitment to the AA program and a current commitment to being a sponsor. It probably also indicates that an active practitioner provides more usefulness to a sponsee (e.g. current AA social network access, role modeling of sober behaviors) than just experience and knowledge.

The second theme, or perhaps a collection of themes, has to do with qualities of character. In the qualitative analysis, Trustworthy tied for the highest number of mentions. In the conjoint exercise, the greatest change in utility was in moving from low levels of confidentiality to moderate levels. In the choice task, Trustworthy was second and Respects Confidentiality and Integrity were four and six respectively. These themes were relatively independent but all three seem indicative of the possible misuse of the relationship and the greater vulnerability of the sponsee. If one were to ask "why should the sponsor need to be trustworthy, etc?" possible answers seem to be protective of the sponsee. This has implications for issues such as shame, stigma, and other indications of psychological vulnerability.

For the sponsee, how a potential sponsor portrays themselves and how they are viewed by others with respect to these themes of character would seem to be an important consideration in making a relationship decision. Also, these characteristics generalize much more broadly to interpersonal relationships overall and may possibly be an influence on a sponsee's overall development, for example, through social learning. The evaluation of character seems to have multiple implications, both positive and negative, for the potential sponsee.

Availability scored highly on all three analytical exercises and ranked third highest of the qualitative responses. Clearly an unavailable sponsor would likely be ineffective, but availability probably has nuances with respect to the expectations of both sponsor and sponsee. While some qualitative responses leaned towards a concept similar to 24/7 (24 hours a day, 7 days a week), some were more focused on predictability or regularity. From the perspective of practice, it would seem that a general discussion of expected availability and contact would be useful between prospective sponsors and sponsees due to the variation in these expectations and availability's relative importance.

Structure seemed to be an important theme in every analysis, although taking slightly different labels. In the qualitative study, Structure included elements of goal-setting, content, accountability, and feedback. In the choice and ranking exercise, Honest Feedback was the third highest chosen attribute and fourth top ranked attribute. In the conjoint analysis, letting the sponsee set their own goals was negatively valued and even more negatively valued by sponsees. These results strongly suggest that sponsees are looking to the sponsor to provide

requisite structure for the sponsee to progress in recovery. The nature of this structure might vary significantly between individuals, but the evidence suggests that sponsees see the role of the sponsor as more than just an information source or advice giver on the AA program. From a practical standpoint, an a priori discussion on this topic would seem to be beneficial and importantly, the sponsor should be expectant of having to provide leadership in helping a sponsee chart a promising recovery path.

Another grouping of themes has to do with an effective sponsor's attitudes. Although only Positive Attitude in the choice task rated highly as an attitude (fifth in choice), constructs such as compassionate, respectful, encouraging, patient were mentioned enough to justify that the attitudes of a sponsor may be very critical to the sponsee/sponsor relationship. While not consistently high scoring as developed in this set of analyses, a sponsor's attitudes could be influential to relationship strength and permanency. It could also influence such volitional mechanisms as a sponsee's motivation.

With respect to knowledge and experience, on average, experience was perceived as slightly more characteristic of a successful sponsor. Neither were near to current Involvement w/12-step or the qualitative equivalent of Engagement. This might have important implications for both new and experienced or knowledgeable sponsors. It would seem that lack of experience can be overcome by current involvement and that knowledge has lower marginal usefulness than current practice. Therefore, being currently in active practice has greater perceived value for the sponsee, on average.

This may be possibly understood when evaluating this finding through the lens of Moos (2008) description of the beneficial mechanisms of a SHG. These mechanisms included social control, social learning, behavioral choice, and stress and coping skills. An active, engaged sponsor would be in a stronger position to model and align behaviors and skills in the AA recovery model. In essence, the sponsor would be demonstrating proficiencies though practice rather than lecturing. An engaged sponsor could exert social control by being an exemplar of AA engagement rather than being a proponent of it. Through sharing of current experiences, real time learning of stress and coping skills could take place. These potential benefits would seem to place greater weight on current involvement as compared to simply having acquired knowledge or experience.

For the sponsee, an assessment of this engagement may be an important process prior to initiating a sponsor relationship. For a new sponsor, understanding the value of concurrently executing the AA program may reduce the anxiety of having lesser experience and motivate greater adherence to their own recovery program. One implication of this may be that in the search for a sponsor, referrals to those visible and active may take precedent over those who currently have sponsees but are less active.

Overall, the choice and ranking exercise demonstrated that simple frequency was highly related to ranking. This finding would indicate that analytically, a voting mechanism is roughly equivalent to a ranking mechanism for this level of analysis. Thus, an attribute that has a frequency ranking of third would also after post-choice ranking, maintain the third position. This finding

also helps support the informative value of the qualitative study, in that, frequency of mentions of a characteristic are suggestive of ranking weight.

From a theoretical perspective these results support that AA sponsorship has characteristics that distinguish between effective and ineffective sponsorship. This would suggest AA sponsorship can be effective, but not always, so that current literature that ties sponsorship to results with a dichotomous variable may be understating the effects of an effective sponsor and overstating the effects of an ineffective sponsor. Given disparity in effectiveness, another theoretical implication has to do with overall AA affiliation effects. Basically, the issue is spillover or contagion effects, positive or negative, to overall program compliance due to sponsor relationship effects. To the degree AA program elements are not independent, improved AA sponsor relationships might have a multiplicative effect on AA effects overall.

While the iatrogenic focus on sponsorship has received some attention in the literature (AA, 2010, Brown, 1995), this has largely been described in terms of dependency. The collection of Trustworthy, Confidentiality, and Integrity as important characteristics would suggest some theoretical basis for developing a connection between vulnerability, risk, and the sponsor's role in facilitating strength. Clearly, there is an ethical argument for not taking advantage of a sponsee relationship but there might also be a strength of character effect that allows for greater vulnerability and greater possibility for transformative change in the sponsee. These possibilities for both negative and positive effects probably argue for a more precise measure of sponsorship that mere presence.

Sponsorship characteristics would seem to support many of the possible mechanisms described by Moos (2008). For example, Structure would provide elements of social control, access to social learning, and some clarity of behavioral choices. As discussed previously, Engagement or Involvement w/12-step might influence all four categories including stress and coping. Motivating functions such as having a positive attitude, being encouraging, etc., could possibly affect all the categories as well. Sponsorship as perceived by this sample generally aligns well with the conceptual SHG mechanisms of Moos.

Of the top five mentions in both the qualitative and choice results, only one was specific to AA. Most of the characteristics would generalize to other peer or non-peer mentorship relationships. The qualities of character (e.g. Trustworthy) and attitudes (e.g. Positive Attitude) may be informing for many relationships that involve initiating and maintaining a transformative process. For these more broad-based possible implications, current Engagement could possibly be substituted with current role modeling at high proficiency. This would allow possible interpretations across fields and contexts.

In summary, the findings suggest a broad array of characteristics and qualities that may contribute to a sponsor's effectiveness. This breadth probably indicates significant individual differences in perceptions of important attributes. Group differences based on sex or dyad role (sponsor/sponsee) were not significant. Several important themes emerged that were supported across analyses including Engagement, Trustworthy, Structure, and Availability. These

themes and the individual differences suggest a discussion of potential issues between a prospective sponsor and sponsee prior to formalizing a relationship.

Limitations

This exploratory research was conducted as a cross-sectional, self-report design with a convenience sample. Although this sample has experience and interest generally in AA and AA sponsorship, they've also been associated with Oxford Houses which are communal, democratically-operated, recovery residences. No theories of sponsorship mechanisms or effectiveness were proposed or tested. This research was designed to elicit important qualities and characteristics of effective sponsors, to derive relative value through choice and ranking, and to evaluate characteristic level differences in utility when conjointly assessed.

Contributions to the Literature

Existing literature has largely examined AA sponsorship as an indicator of AA affiliation. Sponsorship has been used as a dichotomous predictor that has been significant in several studies relating to the sponsee's usage behavior (e.g. Bond et al., 2003, Gnomes & Hart, 2009), the sponsor's usage behavior (e.g. Crape et al., 2002), and the likelihood of a sponsee's leaving AA (Kelly & Moos, 2003). Overall, there has been very little research regarding effective sponsorship or the qualities of an effective sponsor. This research should initiate a research discussion on not merely the presence of sponsorship, but the valence and value of sponsorship. Overall, this research should provide the basis for developing possible new measures on sponsorship. In addition, the utilization of conjoint

analysis in this field might motivate other researchers to apply similar methods for more macro evaluations of mixture effects.

Future Research

The diverse set of characteristics that participants reported provides a solid foundation for continuing to investigate sponsorship, sponsorship functions, sponsorship effectiveness, and sponsorship relationships to both the sponsee's and sponsor's recovery trajectories and outcomes. Some possible future research threads include:

Measurement

Measurement might begin to parse the binary presence or absence of a sponsor with measures having to do with the uses and benefits derived from having or being a sponsor, satisfaction with sponsorship, and barriers to forming a sponsorship relationship. For example, an instrument that measures the functionality of a sponsor (e.g. provides honest feedback, is a good role model, is a friend, provides encouragement, etc.) would provide information that possibly could be used to test hypotheses regarding effectiveness, critical elements supporting recovery behaviors, and relationships with other theoretically important constructs such as self-efficacy, social networks, and support.

Another avenue for sponsor measurement might be level of satisfaction with the relationship. Relationships may have individual differences in perceived satisfaction that influence a sponsee's engagement with the AA program generally. In addition, sponsees who have had relationships end in a positive or negative manner may develop different attitudes towards sponsorship and AA.

Having a basis for measuring the effects of sponsorship satisfaction would probably help better understand sponsorship's role in AA involvement, affiliation, and future intentions.

Barriers and expectations would also be a measurement research focus that might be of practical and theoretical use in understanding sponsorship's contribution to the AA paradigm. Measuring why or why not individuals initiate a sponsor search, what their expectations are, the search process and search outcomes might provide insight on why the likelihood of a sponsor relationship varies and what may be influencing relationship satisfaction. This research focus might initially start as a qualitative study since it covers initiation of the relationship but with expectations included, it should relate to sponsor characteristics and qualities, including such issues as friendship.

Models

A good measurement instrument on sponsorship should allow for a much more nuanced exploration of sponsorship's unique contribution to both the AA model and to an individual's recovery. A broad array of testable implications results from having measurement instruments with greater precision and scales encompassing both positive and negative valence. Some of the possible relationships to model include sponsorship effects on: 1) self-efficacy and abstinent specific self-efficacy, 2) self-regulation, 3) goal setting, motivation, and intention, 4) stress and coping skills, 4) AA dosage and compliance, 5) social support, 6) social network composition and dynamics, 7) stigma, 8) employment and other non-usage characteristics of recovery, and 9) substance usage. For

example, if a successful sponsor acts as social learning model by actively engaging in AA protocol, the sponsee through observation and interaction might see positive effects with respect to self-efficacy, self-regulation, motivation, and stigma. The examination of joint social network relationships to reveal social network differences by sponsor effectiveness could be another example.

The optimal research designs would be longitudinal investigations with individuals relatively new to recovery (to maximize variance) where these effects could be modeled temporally with both direct and mediated indirect effects. However, cross-sectional designs should be able to detect these associations and their significance for many of these variables. Research of sponsorship could provide many practical, clinical, and theoretical insights to improve the likelihood of a successful recovery process. Overall, the field is currently relatively underdeveloped and sponsorship may provide not only an informative and meaningful research focus within the substance misuse field, it would probably produce generalizable information on mentorship for other fields as well.

CHAPTER V

SUMMARY

This research explored the qualities and characteristics of an effective AA sponsor by having approximately 240 participants with experience in recovery and AA sponsorship relationships perform three research tasks. Theses tasks included an unaided, open-probe question asking the participants' opinions on what characteristics made for an effective sponsor. The second task was a choice experiment where participants chose 10 characteristics from a possible array of 20 which were then ranked in order of importance. The third task consisted of ranking hypothetical sponsors which had five attributes—experience, knowledge, availability, confidentiality, and goal-setting—varying by three levels which closely corresponded to low, moderate, and high.

The major findings included significant diversity of characteristics attributable to effective sponsors but also several major themes. The most mentioned or highly ranked themes included Engagement or Involvement w/12 Step, Trustworthy, Availability, Structure including Honest Feedback, Confidentiality, and Positive Attitude. For the conjoint analysis, the greatest value contribution came from going from low to moderate Confidentiality. Another strong gain was achieved by having at least some joint or sponsor led structure in Goal-setting. With respect to possible group differences between females and males, or sponsors and sponsees, no significant differences were found.

These findings support AA sponsorship as a relatively complex function that has multiple possible positive and negative influences on a sponsee's recovery. Practice implications suggest an evaluation of expectations and qualities prior to formalizing a sponsorship relationship. Future research implications included measurement and modeling improvements to better understand the role and significance of sponsorship on the recovery process.

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Appendix A

Demographic Survey

DePaul University Oxford House 2010 World Convention Study

1. Gender (check one)

Male ☐ Female ☐

2. Date of Birth

Month ☐ Date ☐ Year ☐

3. Ethnic Group (check all that apply)

- ☐ Black or African-American
- ☐ White, not of Hispanic origin
- ☐ American Indian or Alaskan Native
- ☐ Asian, Asian-American
- ☐ Pacific Islander
- ☐ Hispanic, Cuban
- ☐ Hispanic, Puerto-Rican
- ☐ Hispanic, Mexican
- ☐ Hispanic, Other Latin American
- ☐ Some other ethnic group (please specify _____)

4. Marital Status (check only one)

- ☐ Single, never married
- ☐ Legally married
- ☐ Life partner but not legally married
- ☐ Separated but still married
- ☐ Divorced
- ☐ Widowed

5. Employment Status (check only one)

- ☐ Full-time
- ☐ Part-time
- ☐ Unemployed
- ☐ Receiving disability
- ☐ Homemaker
- ☐ Retired
- ☐ Student

6. How many years of education have you completed? (check only one)

- ☐ 1-8th grade
- ☐ 9-11th grade
- ☐ GED
- ☐ High school graduate
- ☐ Trade school

☐ Some college
☐ Associates degree
☐ Undergraduate degree
☐ Graduate degree

7. How long were you actively using drugs and/or alcohol?

Years ☐ Months ☐

8. How long have you been abstinent from drugs and/or alcohol?

Years ☐ Months ☐

9. How often do you attend self-help meetings?

_____ (Please provide a number and time frame; for example 2 times a week)

10. In your life, how many times have you attempted to stop using drugs and/or alcohol?

☐

11. In the last 90 days, how many times have you relapsed?

☐

12. How long total have you lived in an Oxford House? (If you have lived in more than one Oxford House, add up the total amount of time)

Years ☐ Months ☐

13. Do you currently live in an Oxford House?

Yes ☐ No ☐

14. If so, what is the name of your Oxford House?

☐

15. How long have you lived in your current Oxford House?

Years ☐ Months ☐

16. How much longer do you plan on living in your current Oxford House?

Years ☐ Months ☐

Appendix B

Sponsorship Survey

AA Sponsorship Survey

Thank you for agreeing to participate in this important study of AA/NA sponsorship. This research explores the important qualities, characteristics, and functions of an AA sponsor. Please answer the questions as honestly and as completely as you can given the information provided. The survey should take approximately 20 minutes to complete. Thank you.

1. Have you ever been a sponsor? Yes ☐ No ☐ If **NO**, skip to Question **6**.
2. How many years have you been a sponsor? _____ years
3. Total number of individuals sponsored? 1-4 ☐ 5-9 ☐ 10-19 ☐ 20+ ☐
4. Are you currently a sponsor? Yes ☐ No ☐
5. Current number of sponsees? _____

Skip questions **6** through **10** if you've been a sponsor

6. Have you ever been a sponsee? Yes ☐ No ☐
7. How long were you a sponsee? _____ years
8. Total number of sponsors you've had? _____
9. Are you currently a sponsee? Yes ☐ No ☐
10. How long have you had your current sponsor? _____ years

Based on your perspective and experience, please write down some of the most important characteristics and functions of a successful sponsor for a sponsee early in recovery (working an initial 12-step process)

1. _____
2. _____
3. _____
4. _____
5. _____

AA Sponsorship Survey

From the following list of 20 qualities & functions of a sponsor, please circle the ten (10) that you think are the most important

Guidance (1)	Involvement w/12 Step (2)	Experience w/sobriety (3)	Good Role Model (4)	Integrity (5)
Availability/ Accessibility (6)	Encouragement (7)	Good at Setting Goals (8)	Experience as a Sponsor (9)	Trustworthy (10)
Respects Confidentiality (11)	Flexible (12)	Positive Attitude (13)	Advice (14)	Attentiveness (15)
Mandatory Scheduled Contacts (16)	Sharing Experiences (17)	Honest Feedback (18)	Knowledge of AA (19)	Problem Solving (20)

From the group of 10 items that you selected above, please choose your Top 5 (five) and rank them in order of importance from 1 to 5 where 1 would be what you think is most important. If you prefer, you can use the numbers associated with the items rather than writing them out.

1. _____

2. _____

3. _____

4. _____

5. _____

In the Card Sorting Exercise, you are being asked to rank 9 hypothetical sponsor profiles. These profiles describe a sponsor on the basis of 5 factors: Experience, Knowledge, Availability, Confidentiality, and Goal Setting. Each of these qualities is measured at 3 levels which correspond roughly to low, moderate and high, but have specific meanings for each factor. Please sort the cards in order of your opinion of who would make the best sponsor as the first card, second best as the second card, etc. until the least preferred sponsor profile is last. After you have sorted the cards, please clip them together with the supplied clip and return them with your completed questionnaire. If you have any questions or comments please contact the DePaul Research Team. Thank you for your participation.

AA Sponsorship Survey

Hypothetical Sponsor Profiles—To Be Provided on 3x5 or 4x6 Index Cards	
Sponsor 1 Sponsor 1 is new to being an AA sponsor and her knowledge of AA, 12-step, and substance abuse recovery is mainly just personal. She is always available 24/7 but she has been known to slip occasionally with confidentiality. She takes a hands-off approach and lets the sponsees set their own goals.	Sponsor 2 Sponsor 2 is new to being an AA sponsor but she has basic knowledge of AA, 12-step, and substance abuse recovery. She is always available 24/7 and she always maintains confidentiality. For setting goals for a sponsee, she jointly works with her sponsee.
Sponsor 3 Sponsor 3 is new to being an AA sponsor but she is widely recognized for being very knowledgeable about AA, 12-step, and substance abuse recovery. She is always available 24/7 and she always maintains confidentiality. She takes a structured approach and sets goals for her sponsees.	Sponsor 4 Sponsor 4 has several years being an AA sponsor and her knowledge of AA, 12-step, and substance abuse recovery is mainly just personal. She usually responds when contacted and she is always good about confidentiality. She takes a structured approach and sets goals for her sponsees.
Sponsor 5 Sponsor 5 has several years being an AA sponsor and she has basic knowledge of AA, 12-step, and substance abuse recovery. She usually responds when contacted and she is usually good about confidentiality. She takes a hands-off approach and lets the sponsees set their own goals.	Sponsor 6 Sponsor 6 has several years being an AA sponsor and she is widely recognized for being very knowledgeable about AA, 12-step, and substance abuse recovery. She usually responds when contacted and she has been known to slip occasionally with confidentiality. For setting goals for a sponsee, she jointly works with her sponsee.
Sponsor 7 Sponsor 7 is a seasoned veteran at being an AA sponsor and her knowledge of AA, 12-step, and substance abuse recovery is mainly just personal. It often takes a second call to reach her. She is usually good about confidentiality. For setting goals for a sponsee, she jointly works with her sponsee.	Sponsor 8 Sponsor 8 is a seasoned veteran at being an AA sponsor and she has basic knowledge of AA, 12-step, and substance abuse recovery. It often takes a second call to reach her and she has been known to slip occasionally with confidentiality. She takes a structured approach and sets goals for her sponsees.
Sponsor 9 Sponsor 9 is a seasoned veteran at being an AA sponsor and she is widely recognized for being very knowledgeable about AA, 12-step, and substance abuse recovery. It often takes a second call to reach her, but she always maintains confidentiality. She takes a hands-off approach and lets the sponsees set their own goals.	

Appendix C

Design of Experiment

Design of Experiment (SYSTAT):

Complete Defining Relation

Identity =

A * B * D =
A^2 * B^2 * D^2 =
A * B^2 * E =
A^2 * D * E =
B * D^2 * E =
A^2 * B * E^2 =
B^2 * D * E^2 =

Fractional Factorial Design: 5 Factors, 3 Blocks, 9 Runs/Block

		Factor				
Blk	Run	A	B	C	D	E
1	1	0	0	0	0	0
1	2	0	1	0	2	1
1	3	0	2	0	1	2
1	4	1	0	2	2	2
1	5	1	1	2	1	0
1	6	1	2	2	0	1
1	7	2	0	1	1	1
1	8	2	1	1	0	2
1	9	2	2	1	2	0
2	1	0	0	1	0	0
2	2	0	1	1	2	1
2	3	0	2	1	1	2
2	4	1	0	0	2	2
2	5	1	1	0	1	0
2	6	1	2	0	0	1
2	7	2	0	2	1	1
2	8	2	1	2	0	2
2	9	2	2	2	2	0
3	1	0	0	2	0	0
3	2	0	1	2	2	1
3	3	0	2	2	1	2
3	4	1	0	1	2	2
3	5	1	1	1	1	0
3	6	1	2	1	0	1
3	7	2	0	0	1	1
3	8	2	1	0	0	2
3	9	2	2	0	2	0

Appendix D

Informed Consent Information Sheet

INFORMATION SHEET FOR PARTICIPATION IN RESEARCH STUDY

2010 Oxford House World Convention Study

You are being asked to participate in a research study being conducted by the Center for Community Research at DePaul University. This research is being supervised by Dr. Leonard Jason and Dr. David Mueller, who are with the Center for Community Research. We are asking you because we would like to know more about 12-step group sponsors, how those in recovery think about their addictions, and how well Oxford House residents fit with their Oxford House.

This study will take about 40 minutes of your time. If you agree to be in this study, you will be asked to fill out a survey and rank hypothetical AA sponsors through a card sorting exercise. This survey will include questions about your fit with your Oxford House, your satisfaction with your Oxford House, how often you experience various emotions, what you think about your addiction, and what you think are the most important qualities and characteristics of an AA sponsor. You will also be asked to complete a questionnaire that collects some personal information about you such as age, race/ethnicity, marital status, employment status, level of education, and other life history information. You can choose not to participate. There will be no negative consequences if you decide not to participate or change your mind later. To thank you for being in the study and if you are interested, your name and contact information will be collected for a drawing for a $100 gift card. A total of 6 gift cards will be given away. Your name and contact information for the drawing will be collected separately from your answers to the survey, so your survey responses will remain anonymous.

If you have questions about this study, please contact David Mueller at the Center for Community Research, DePaul University at (773) 325-2060, dmuelle3@depaul.edu. If you have questions about your rights as a research subject, you may contact Susan Loess-Perez, DePaul University's Director of Research Protections at 312-362-7593 or by email at sloesspe@depaul.edu.

You may keep this information for your records.