Using Social Media for Sobriety Recovery? Preferences, Beliefs, Behaviors, and Surprises from Users of Online and Social Media Sobriety Support

Donald S. Grant and Karen E. Dill-Shackleford
Fielding Graduate University

# Author Note

Donald S. Grant, Fielding Graduate University, 2020 De La Vina St., Santa Barbara, CA,

93105; email: doctordeeg@gmail.com

Karen Dill-Shackleford, Fielding Graduate University, 2020 De La Vina St., Santa

Barbara, CA 93105; email: kshack@fielding.edu

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#### Abstract

As more and more social interactions move online, the public wonders what the consequences of less face-to-face time and more social media time will be. This study considers the social media question in a novel context: sobriety support. One hundred and ninety-six adults (141 female) who reported using both support modalities completed the Sobriety Support Preference Scale (SSPS) created for this study. Results indicated a significant preference of respondents for the F2F over the online sobriety support modality, although there were positive reactions to online support as well. Additionally, more participation in F2F sobriety support predicted greater sobriety success, while more participation in online sobriety support predicted less. Interestingly, participants reported both a) that they lied more about their sobriety success and b) that they were more likely to be drunk or high while participating in F2F sobriety support than while using online support. Finally, participants revealed a moderate decrease in using F2F sobriety support since engaging with online sobriety support, though they predicted a greater migration to online sobriety support in the future. This is the first known investigation of this important facet of social media use.

Keywords: sobriety support, recovery, alcohol abuse, substance abuse, social media

Word count: 7,681

Using Social Media for Sobriety Recovery? Preferences, Beliefs, Behaviors, and Surprises from Users of Online and Social Media Sobriety Support

One of the most hotly debated media issues today is whether our rapidly increasing use of social networking might be supplanting face-to-face interactions and, if so, what the social consequences of this might prove for us as a culture. A series of blogs hosted by *Psychology Today* recently debated this question by exploring the benefits and detriments of the social media rise in our daily lives ("The Internet Addict: Is problematic Internet use (PIU) a real disorder or a fad?," 2014). Blog entries covered topics from Internet use and relationships, to myths relating to social media, and even the effects of social media juggernaut Facebook. With regards to potential audience use effects of that particular social networking platform, one author (DePaulo, 2014) supplied experimental data indicating that posting on FB makes us happier, while another (Ni, 2014) noted that 33% of users report being unhappy while using it. As similar debates regarding its impact wage on, there currently seem to be more questions than answers regarding the role social media play in a healthy life (Fletcher, 2010).

The National Institutes of Health (2014) has proposed that "social media are increasingly affecting people's everyday behavior, including their attitudes relevant to health." Considering that 1 in 4 people in the world currently use social media, (with emerging economies demonstrating the greatest acceleration in its use), and that number predicted to rise from 1.47 billion in 2012 to 2.55 billion in 2017, (Ahmad, 2014; Fredricksen, 2013; Statistica, 2014), the NIH claim appears difficult to argue. In this context we asked some questions not yet addressed in the literature: What role does social media play in sobriety support? What are the respective strengths and weaknesses of

face-to-face (F2F) versus online sobriety support? What do adults in sobriety recovery who use these support systems believe about how the two modalities work in their lives now, and how they might work in the future?

# The Internet and Social Media Support

Since the early 1990s, the Internet has irreversibly altered the way in which we communicate, harvest knowledge, cultivate advocacy, and of course, socialize (Bargh & McKenna, 2004; Cassell, Jackson, & Cheuvront, 1998; Jones, 1997; Varga, 2004). In terms of social buttressing, its ability to act as an accessible conduit between legitimately impaired populations, (i.e. those struggling with a psychological, physical, or social debilitation so acute that it paralyzes their ability to seek help F2F), and external support systems previously unavailable to them, can prove profound (Boot & Meijman, 2010; Burke, 2000; Clarke et al., 2002; Langenhorst, 2012; National Telecommunications & Information Administration, NTIA, 2002; Wellman et al., 2006). Whether online support results in similar or better efficacy than that provided F2F however, is an open question (BBC, 2009; Cummings, Butler, & Kraut, 2002; Summers, Waigandt, & Whittaker, 2005).

Our study focused on better understanding the strengths and weaknesses of online versus F2F sobriety support. We included participants from all abstinence-based support groups whose members are considered by the Centers for Disease Control & Prevention (CDC) to suffer with the chronic illness of addiction (Centers for Disease Control & Prevention, CDC, 2012), with an emphasis on Alcoholics Anonymous (AA). Modality preference (F2F or online), as well as their differences in ease of self-disclosure, honesty, experience and/or sobriety efficacy were explored. Our participants were drawn from the

population of people in recovery who self-reported experience with both online and F2Fsobriety support. In addition to preference and efficacy questions, we also asked this group of participants their views on any possible migration from F2F to online sobriety support.

#### **Global Statistics: Alcoholism**

In many parts of the world, (including the United States), drinking alcoholic beverages is a common feature of social gatherings. For most, moderate alcohol use is not necessarily harmful (Grohol, 2006; National Institute on Alcohol Abuse, NIAAA, 2011, "Recovery Realm," 2012). In 2007 however, The Substance Abuse and Mental Health Services Administration (SAMHSA) estimated that 22.3 million persons (9% of the population aged 12 or older) were classified with substance (including alcohol) dependence or abuse (SAMHSA, 2008). A 2009 report released by The National Center on Addiction and Substance Abuse at Columbia University also estimated that "substance abuse and addiction cost federal, state and local governments at least \$467.7 billion in 2005" alone (CASA, 2009; Erdos, 2009). A longitudinal national health survey published in 2010 by the CDC reported that 23% of adults aged ≥18 years disclosed having had five or more alcoholic drinks in one day at least once in the preceding year (CDC, 2010a).

The 2010 CDC survey further concluded that during the period of 1993-2009, while more than half of the adult U.S. population drank alcohol in the past 30 days, approximately 5% drank heavily and 15% could be classified as "problem" or "binge" drinkers (CDC, 2010). The Alcohol-Related Disease Impact (ARDI) tool reported that "from 2001-2005, there were approximately 79,000 deaths annually attributable to excessive alcohol use" (CDC, 2010). The following year, a study conducted by the

National Institute on Alcohol and Alcoholism (NIAAA) reported that nearly 18 million American adults (NIAAA, 2011), and millions more teens (Kelly, Dow, Yeterian, & Kahler, 2010; Perkinson, 2011) currently "abuse alcohol or are alcohol dependent" (Hewitt, 2011). Likewise, survey data released in 2012 by *The Partnership for Drug-Free Kids* and the New York State Office of Alcoholism and Substance Abuse Services (OASAS) indicated that 10% (approximately 23.5 million) of all American adults aged 18 and older consider themselves to be in recovery from an alcohol or drug abuse problem (Rondó & Feliz, 2012).

Although the past decade has witnessed the publication of some research comparing F2F to online support, the literature is still quite limited. The preponderance of studies published comparing F2F versus online issues has been focally directed around differences in academic achievement and experience (S. Johnson, Aragon, Shaik, & Palma-Rivas, 2000; Langenhorst, 2012; G. Smith et al., 2010; Wang & Woo, 2007; Y. Yang, Cho, Mathew, & Worth, 2011), with mixed results (Beranek & French, 2011; Dillon, Dworkin, Gengler, & Olson, 2008; Hiltz, Johnson, & Turoff, 1986; Okdie, Guadagno, Bernieri, Geers, & Mclarney-Vesotski, 2011). While several studies have also been published investigating the differences between engagement with web-based and F2F weight loss support (F. Johnson & Wardle, 2011; J. Johnston, Massey, & DeVaneaux, 2012), none have explored F2F vs. online sobriety support utilization, practices, or behaviors. The kinship of compromised populations, importance of peer support, liability of "relapse" and commitment to behavioral changes are certainly shared similarities between AA and weight loss programs. Still, there are marked differences between the two (J. Johnston, 2011; Steakley, 2011). Recognizing that the research on the topic of online support is quite sparse, the National Institutes of Health in 2014 offered research grants for studies intended to "understand health-related social media interactions and their role in shaping attitudes about behaviors and health"—including alcoholism (NIH, 2014).

## **Social Support for Addiction**

In 1975, Brown, Bhrolchain, and Harris posited that the intimate relationships fomented through social support are uniquely protective (Brown, Bhrolchain, & Harris, 1975). In his 1976 presidential address to the American Psychosomatic Society, Dr. Sidney Cobb identified social support during a lifecycle of potential crises, (including alcoholism), as a subjective feeling generated by information leading the individual to believe that he (a) is cared for and loved, (b) is esteemed and valued, and (c) belongs to a network of communication and mutual obligation (Cobb, 1976). Twenty-eight years later, in 2004, the advent of Facebook globally launched what some call the true birth of Internet-based social networking (Lazer, 2009).

Usually peer-led and membership directed, self-help support groups are comprised of individuals who share a common problem, concern, or experience (Cheung, Mok, & Cheung, 2005; Wituk, Shepherd, Slavich, Warren, & Meissen, 2000). The group task is to "help people deal with a major life issue such as death, abuse, trauma, addiction or disability" (M. B. Johnson, 2009). Self-help groups have been identified as a cost-effective recovery strategy (Davison, Pennebaker, & Dickerson, 2000), and thus for many individuals with compromised financial or insurance resources, their only viable option ("eGetgoing," n.d.; Kelly & Yeterian, 2011). In 1997, researchers estimated that more

than 25 million Americans had been involved in self-help groups—including AA—at some point during their lives (Kessler, Mickelson, & Zhao, 1997; Wituk et al., 2000).

Generating support through social communities has long proven beneficial for a variety of compromised populations (Davison, Pennebaker & Dickerson, 2000; Wellman & Wortley, 1990). For the alcoholic, the most well known of these is Alcoholics Anonymous. Whether ultimately effectual or not, with an estimated two million members who regularly participate in more than 115,000 F2F groups worldwide (Arkowitz & Lilienfeld, 2011), Alcoholics Anonymous, (AA) arguably appears to offer the most globally popular, accessible and cost-effective resource available for the alcoholic wishing to solicit sobriety group support (Arkowitz & Lilienfeld, 2011; Kingree, Simpson, McCrady, Tonigan, & Lautenschlager, 2006). While HIPAA patient protection protocols and the anonymity recovery model potentially impede the ability to authenticate either the actual numbers of alcoholics seeking recovery or the long-term efficacy of treatment models (Erickson, 2007; Gorski & Miller, 1986; Marvin-Humann, 2008), many rehabilitation programs still strongly espouse participation in AA (Kingree & Thompson, 2011; Reigle & Dowd, 2004; Slaymaker & Sheehan, 2008). In the United States, professional organizations, and addiction experts alike (Kleber et al., 2007) openly lobby clinicians to encourage—and even help facilitate—AA patient involvement.

# The "Psychology" of AA

The unifying assumption of AA is that the most effective and efficient path to recovery from alcoholism is via the bond of one alcoholic helping another ("Alcoholics Anonymous," 2001; Rudy & Everman, 2008). Guided by the "12 Step" approach, recovery in AA is thus mediated at least partially by personal development through

positive social support (Borkman, 2006). During F2F AA meetings, participants are invited to openly share their "experience, strength and hope" with others in attendance ("Alcoholics Anonymous," 2001). AA members learn that honest self-disclosure during meetings will be part of the recovery process ("Alcoholics Anonymous," 2001; Borkman, 2006). Vital also to the suggested AA "recipe for recovery" is socialization and supportive companionship between program members—a concept known as "fellowshipping." Empirical research on the AA group dynamic suggests that the instillation of hope, vicarious learning, modeling, and altruism promoted by both regular meeting attendance and fellowshipping can result in better long-term abstinence outcomes, as well as increased self-esteem, personal relationships, and motivation (Kelly & Yeterian, 2011; Stanton, 2011; Subbaraman, Kaskutas, & Zemore, 2011; Yalom, 1995).

AA participation has historically required that those seeking its support physically attend F2F meetings in designated geographic locations (M, 2011; Weegmann, 2004). In more remote parts of the world, members often gather in the most geographically convenient space available ("Alcoholics Anonymous Shanghai," 2011; "Alcoholicos Anonimos Grupo Aragon," 2012). Still, many alcoholics today continue to suffer in isolation. Fear of public or personal embarrassment through association with AA is believed to prevent untold numbers from participating in the program ("Alcoholics Anonymous," 2001; "Alcoholics Anonymous. Welcome to the e-AA Group," 2012; Colman, 2011; Reigle & Dowd, 2004). A lack of meetings in more remote areas and the inherent problem of relapse also prove strong nemeses to the fellowship itself (Arkowitz & Lilienfeld, 2011; Hewitt, 2011; Kaskutas, Subbaraman, Witbrodt, & Zemore, 2009;

Mueller, Petitjean, Boening, & Wiesbeck, 2007; H. Yun, 2006). Not uncommon among habitual drinkers is an elevated level of physical or emotional dysregulation coupled with denial, which further impedes their willingness to actively procure help (Copeland & Martin, 2004; Kelly, Dow et al., 2010; Kingree et al., 2006; Tonigan, Connors, & Miller, 1996; S. Yang, 2008). Misconceptions regarding AA as a cult or religious-based organization negatively impact membership growth as well (Bufe, 1998; Vaillant, 2005).

## Sobriety Support Comes Online: The Digitally Mediated Road to Recovery

While some may challenge the integrity of moving such a profoundly personal experience like sobriety support online, social media do have unique features that may be attractive to those seeking recovery in our popular media culture. With more than 2.9 billion estimated individual users worldwide as of March 2014, the Internet maintains the ability to connect previously disparate, distant and even isolated individuals, and also reach a mass audience (MMG, 2014). In addition (and potentially particularly incentivizing for sobriety support seekers) is "the relative anonymity afforded to users and the provision of group venues in which to meet others with similar interests and values" (Bargh & McKenna, 2004, p. 573). These connections are often supported by already established off-line relationships, but the structure of the digital system also allows for new relationships to be cultivated as well. Online communications between members can occur simultaneously, consecutively, or even asynchronously (Greenwell & Kraemer, 2006).

As the AA Fellowship expanded rapidly around the globe and modern technology evolved, many members began using the Internet to share the message of recovery through AA sponsored, anonymously curated, and crowd designed (both commercial and

non-commercial based) online sobriety support digital platforms ("Alcoholics Anonymous. Welcome to the e-AA Group." 2012; "In the Rooms," 2012; VanLear, Sheehan, Withers, & Walker, 2005). Today there exist literally thousands of cyberspace recovery sites, domains, AA chat rooms, and sobriety bulletin boards, available 24 hours a day in scores of languages, ("Addicted to More," 2007; "Alcoholics Anonymous. Anonymity and Social Networking Sites," 2011; "Miracles in Progress," 2007; "Alcoholics Anonymous. Online Intergroup of Alcoholics Anonymous," 2012). Online meetings are facilitated through various computer mediated communication (CMC) technologies, including email, chat (text), audio/video, discussion forums, websites, and telephone conference calls ("Alcoholics Anonymous Online," 2012). In addition to more "traditional" online AA-endorsed sites, the Internet also now offers myriad online alternative non-12 Step-based sobriety support options (Boot & Meijman, 2010; Jones, 1997; NTIA, 2002; Wellman et al., 2006). These resources target the support-seeking alcoholic who is either unwilling or unable to engage such support in person ("eGetgoing," n.d.; Horvath, 2012; Sossin-Bergman & Cardoos, 2011). The platforms range in scope from passive general recovery and information URLs ("Daily Reflections," 2011; Hunt, 2011; King, 2008; "Recovery Realm," 2012; "Sober Sources Network," 2012) to interactive sites offering opportunities to create and then build new networking alliances with other abstinence-ambitious individuals ("Alcoholics Anonymous. Welcome to the e-AA Group," 2012; "Sober Circle," 2008,"; "Soberdad.com," n.d.; "Sobermusicians.com," n.d.; "Sober Travelers," n.d.; "Sober Village," n.d.; VanLear et al., 2005).

As stated earlier, studies have evidenced that "the type of social support specifically given by AA members—such as the potential for 24-hour availability, role modeling and experientially-based advice for staying sober" (Kaskutas, Bond & Humphreys, 2002)—can positively influence one's ability to sustain long-term abstinence (Bogenschutz, Tonigan, & Miller, 2006; Kaskutas et al., 2002). Online sobriety social media networking platforms—especially their "real time" and 24/7/365 availability facets not always accessible through conventional F2F sobriety resources—now provide an infinite supply of this support, available at almost any place and time ("eGetgoing," n.d.; Hunt, 2011; "Life Recovery Program," n.d.; "MyAddiction.com," n.d.). A significant difference between online and F2F sobriety support is the lack of visual, verbal or expressive cues. Thus, these online forums offer a novel environment where core social psychological issues of social perception and presentation of self and others, social influence, interaction, attraction and relationships, identity, attitudes, and persuasion all potentially meet and are reflected back through a one-way CMC "looking glass" (Cooley, 1902; Zhao, 2005).

## The Online Ties That Bind

Many researchers have been positive about the potential of CMC to build social ties and community on the basis of "networked individualism" (Aubrey, Cattopadhyay, & Rill, 2008; Lewis & West, 2009). A 2007 University of Michigan study affirmed that as it is utilized predominantly to maintain relationships rather than make new friends, Facebook (FB) in particular offers a positive supplement to other modes of communication (Ellison, Steinfield, & Lampe, 2007). Researchers have also cited FB as a useful tool for strengthening weak relational ties while promoting collective action

(Aubrey et al., 2008; Valenzuela, Park & Kee, 2009). Psychologist Catalina Toma believes that "the fact that people know most of their Facebook friends in real life keeps them honest" (Callaway, 2009, para. 9; Toma, 2013). In online sobriety support sites where F2F relationships may be less likely to exist however, this mechanism for honesty is no longer in place. (Hutson, 2009; Tong et al., 2008). This is one of the issues we addressed in our own investigation.

## **Cyber Sobriety**

Studies have shown that "problem drinkers who do not use available forms of treatment will engage with an interactive Web site" (Lieberman & Huang, 2008). Furthermore, for those either seeking sobriety, or committed to maintaining it but legitimately unable to attend a F2F AA meeting, Internet access offers immediate online support. ("Alcoholics Anonymous. Anonymity and Social Networking Sites," 2011; Kissin et al., 2003). Giles (2003) in fact, proposes that "online communication is extremely important for individuals who are unable to meet other people in conventional settings for reasons of physical mobility or geographic isolation" (p. 270). By evolving the original AA ideology of shared "experience, strength and hope" ("Alcoholics Anonymous," 2001, p. xxii) from its basic F2F origins to an online content-based or even "video chat" interaction, modern technology now appears to have rendered even anti-AA sober-seekers a potentially viable source of support. A number of studies, including one done by McKenna and Bargh (1998), found that this opportunity for self-selected empowerment proved "particularly helpful for users who felt marginalized in face-to-face interaction."

#### **Self-Presentation and Presentation**

The potential effect of CMC on self-presentation however remains a strong point of contention (Walther, Van Der Heide, Hamel, & Shulman, 2009). In F2F corporeal copresence, others send a rich array of embodied nonverbal cues, which are more easily read than those available in a CMC situation (Zhao, 2005). Zhao (2005) further posits that "in the absence of symbolic nonverbal cues that are essential for discerning others' hidden feelings and attitudes, we invariably confront the difficulty of obtaining an accurate knowledge of other's appraisals of our self-presentations" (p. 387). In social presence theory, it is conjectured that the fewer non-verbal and paralinguistic cues supplied through online interaction creates a significantly lower feeling of social presence. In other words, through CMC, "an individual's self-perception is reduced and deindividuation is encouraged" (Whitty, 2008, p.1838).

Those in agreement suggest that as social presence declines, communication becomes more uninhibited and even more potentially personal (Hiltz et al., 1986; Sproull & Kiesler, 1986). Evidence-based studies have demonstrated that the "online disinhibition effect" can cause "people to say and do things in cyberspace that they wouldn't ordinarily say and do in the face-to-face world" (Suler, 2004, p. 321). This dichotomous phenomenon has been suggested as the reason why those seemingly unable to confide or share intimacies in a F2F situation suddenly find themselves almost easily able to do so when "safely" cloaked behind a computer-mediated "veil" (Suler, 2004). McKenna, Green, and Gleason (2002) theorized that the "relative anonymity of Internet interactions" potentially provides a safer place to disclose core aspects about one's self (p. 10). Baym (2010) agrees that "testing out honest self-disclosure and expressing one's 'real' self online can be empowering and liberating" (p. 15). Supporting the suppositions

of both Suler and McKenna et al., Whitty's (2008) work suggests that lack of traditional cues in CMC can be overcome and lead to "more personal intimate relationships" that can prove empowering for many people.

## **Concerns about Online Recovery**

With more and more people engaging in online sobriety support, the recovering community and professionals alike wonder what impact these modern platforms could have on the both the future of F2F AA and its membership (Jackiewicz 2011; Kiesler, Zubrow, Moses & Geller, 1985; McCarthy, 2008). Confidentiality protection—a nonnegotiable safeguard upon which the very foundation of AA was originally constructed ("Alcoholics Anonymous," 2001)—is also a concern. Critics of online recovery have argued that Internet resources only encourage already self-isolated substance abusers to delay treatment or impede their progression toward authentic recovery (Bargh & McKenna, 2004; BBC, 2009; Hall, 2003; Seligman, 2009; Silverman, 2007). They further claim that online social networking is generating a pandemic of unhealthy isolation in general (BBC, 2009). AA traditionalists further point out that commitment to the program demands invested action by participants—including "suiting up and showing up" for F2F meetings—"no matter what" ("Daily Reflections. Suit Up and Show Up," 2011; "Early Recovery," n.d.).

Some researchers question the efficacy of Internet Recovery Services (IRS) and how successful they truly are in either facilitating or helping maintain short-and long-term sobriety (Aboujaoude, 2010; Hall, 2003). On this point, IRS advocates do not disagree, but suggest that by carefully combining lessons learned from previous research with emerging recovery technology and measurement methods, it may be possible to

further maximize both IRS efficacy and usability (Murphy et al., 2010). Detractors challenge that CMC relationships in general result in more weak than strong ties (Donath & boyd, 2004; Walther et al., 2009; Wright, 2005). Cummings, Butler, and Kraut (2002) contend that CMC is less valuable for building and maintaining close social relationships than F2F contact. One of the reasons our study was developed was to address these questions.

### **Hypotheses**

The current investigation was designed to address a number of key issues related to face-to-face versus online sobriety support. Some issues relate to preferences, some to beliefs, and still others to behaviors. What follows are the hypothesis and research questions.

H<sub>1</sub>: Participants who have engaged in both online and F2F sobriety support will show a preference for the F2F modality.

RQ<sub>1</sub>: Will participants who have engaged in both F2F and online sobriety support find it easier to be more honest in the F2F environment than in their online participation?

RQ<sub>2</sub>: Will people in recovery who have used both online and F2F sobriety support be more likely to be using substances while participating in one modality or the other?

RQ<sub>3</sub>: Will participants who have engaged in both online and F2F sobriety support report having decreased their attendance at F2F sobriety support since engaging with sobriety support online?

RQ<sub>4</sub>: To what degree will sobriety success be related to the use of online and F2F sobriety support?

## Method

# **Participants**

Recruitment. The intended population for this research was adults in recovery from substance abuse who used both F2F and online sobriety support modalities. Rather than solicit via F2F recovery groups, we recruited online to ensure that all participants had experience with CMC sobriety recovery support. The first author has a long and visible history working in the field of recovery. We used that position and visibility to garner potential participants on Facebook. FB will suggest friends to users based upon shared connections and interests (Duff, 2011; Lewis & West, 2009). Thus, in preparation for this research, the first author spent 5 years accepting unsolicited friend requests on FB from individuals whose profiles indicate that they are in sobriety recovery. In addition, the first author joined sobriety support pages online in order to build his social media connections with sobriety support participants.

Participants were recruited via posts on FB sobriety support pages and individual private FB messages from the first author. Care was taken to present the legitimacy of the study (university-affiliated research) as well as the anonymity of the data, which is crucial in sobriety support.

**Demographics**. Eight hundred and fifty seven individual invitations were sent out via FB. From this initial pool, 223 (162 female, 61 male) adults responded. After the removal of incomplete surveys (N=27), the final sample consisted of 196 adults in sobriety recovery who self-reported using both F2F and online sobriety support modalities (141 female, 55 male). Age data were collected by category, with the following breakdown: 18-29 (4%), 30-39 (17%), 40-49 (32%), 50-59 (37%), 60+ (10%). In terms of self-identified race, participants were 86% Caucasian, 4% Hispanic, 2%

African-American, 1% Asian, <1% Asian/Pacific Islander, and <1% Latino, with 6% identifying as "other." Most participants were from the US (86%); 14% were from outside the US (11 from Canada, 7 from England and 4 from India, with China, Australia, Sweden, Ireland, and Indonesia also represented).

As a group, most of the participants had been in recovery for a number of years, with 92% reporting they had been in recovery for at least one. Most participants also self-reported that they regularly attend F2F sobriety support functions. Table 1 gives more detailed statistics for both time in recovery and F2F sobriety support attendance. In terms of their relationship with the first author, 65% of the sample did not know the first author personally, 22% were colleagues, 12% were personal friends, and 3% said they were not friends but had met the first author at a recovery-based event.

#### **Materials**

Sobriety Support Preference Scale. The Sobriety Support Preference Scale (SSPS) was created for use in this study. The SSPS is a 40-item instrument, designed to measure beliefs and behaviors related to online and face-to-face delivery of sobriety support. The SSPS scale is included in Appendix A.

The SSPS consists of two 20-item subscales—one to measure preference for face-to-face sobriety support, the other to measure preference for online sobriety support. The only difference between the two sets of 20 items is that the first asks questions about F2F sobriety support and the second is worded to ask about online sobriety support. For example, the statement "When I am in crisis, I am likely to seek support through Face-to-face sobriety resources," was posed in the first subset. Then in the second subset, the statement is reworded to read, "When I am in crisis, I am likely to seek support through

online recovery resources." Response are provided on a 10-point Likert-type scale, with 0 labeled *strongly disagree* and 9 labeled *strongly agree*. Themes covered in the scale included the ability to be honest, the ability to feel close to the community, and the value of the experience.

**Opinion Data.** Following the SSPS, we asked 10 additional questions related to participants' blending of the two support modalities, migration to the online modality, reasons for using online versus F2F sobriety support, and beliefs about the future of online recovery. These items are also included in Appendix A. Finally, participants were presented with an optional open-ended item that invited them to offer additional comments.

## **Design and Procedures**

This study used a within-subjects quasi-experimental design, comparing the beliefs, behaviors, and recovery status of participants in their online and F2F experiences with sobriety recovery. Participants completed the online survey described above, and supplied demographic information. The survey was administered via Survey Monkey.

#### **Results**

The analyses that follow are organized by hypothesis. We first formed two composite variables representing Modality Preference (F2F versus online) after the four reverse worded survey questions were reverse scored. See Appendix A for those items.

## H<sub>1</sub> - Modality Preference

A repeated measures ANOVA with the variable of Modality Preference (F2F vs. online) revealed a significant preference for F2F (M=7.7, SD=1.54) over online (M=4.86,

SD=2.09) modality, F(1, 192)=153.04, p<.0001,  $\eta^2$ =.44. In other words, our participants significantly preferred the F2F to online modality.

### RQ<sub>1</sub> - Honesty

Composite variables of three survey items measuring the ability of participants to be honest in a given modality (i.e., "When I participate in F2F sobriety support, I am able to be completely honest") were created for comparison. Results of a repeated measures ANOVA indicated that participants felt it was significantly easier to be honest in F2F sobriety support (M=7.43, SD=1.87) than during online sobriety support (M=6.11, SD=2.2), F(1, 192)=35.39, p<.0001,  $\eta$ <sup>2</sup>=.16. Thus, respondents found it easier to be honest in the F2F than in the online sobriety support modality.

We also ran a repeated measures ANOVA to determine if participants reported lying more about their amount of time sober in the online or F2F modality. Results indicated that participants were more likely to lie about their amount of time sober in the F2F (M=2.81, SD=3.24) than the online modality (M=1.78, SD=2.19), F(1, 185)=18.67, p<.0001,  $\eta$ <sup>2</sup>=.92.

## RQ2 - Drunk/High During Participation

A repeated measures ANOVA was run to determine whether participants were more likely to report being drunk or high in one support modality or the other. Results indicated that participants were significantly more likely to be drunk or high during F2F participation (M=2.57, SD=3.05) than while engaging with online sobriety support (M=1.84, SD=2.34), F(1, 185)=9.35, p<.05,  $\eta$ <sup>2</sup>=.048.

#### RQ<sub>3</sub> - Potential Migration From F2F to Online Sobriety Support

Using the relevant item from the opinion data, we ran descriptive statistics to determine the degree to which participants report having decreased their attendance at F2F sobriety support since engaging in sobriety support online. Mean reduction in F2F sobriety support was 3.05 (SD=2.75) on a scale of 0 to 10, indicating that participants reported having decreased their F2F sobriety support attendance moderately since engaging in online sobriety support.

# **RQ4** - Sobriety Success

To determine the sobriety success achieved through the use of F2F versus online support, composite mean variables of survey questions regarding self-reported sobriety success were created for both F2F and online use. Correlational tests were run, with results indicating a significant positive correlation between degree of F2F participation and sobriety success (r=.237, N=193, p<.001) and a significant negative correlation between degree of online support participation and sobriety success (r=-.182, N=190, p=<.05). Thus, results of these tests suggested that greater use of F2F sobriety support predicts greater sobriety success, while greater use of online sobriety support predicts less sobriety success.

In addition, we correlated length of time sober with both F2F and online participation. Results indicated a significant positive correlation between F2F sobriety support use and length of time sober (r=.217,  $\underline{N}$ =195, p<.05), and a negative correlation between online sobriety support use and length of time sober (r=-.308,  $\underline{N}$ =192, p<.0001). Thus, greater participation in F2F sobriety support predicts a longer period of time sober, while greater participation in online sobriety support predicts less time sober. There was

also a significant positive correlation between age and sobriety time, with older participants reporting longer time in sobriety (r=.427, N=195, p<.0001).

#### **Discussion**

The current investigation is the only known study to date that examines the experiences and preferences of a group of recovering alcoholics and addicts who use both online and face-to-face sobriety support. We found that these participants prefer F2F to online sobriety support, but that they value online sobriety support as well. Results also predict a future migration towards online, and away from F2F, sobriety support.

Interestingly we found that greater participation in F2F sobriety support predicted greater reported recovery, but greater participation in online support predicted less reported recovery. And while those in recovery found it easier to be honest while F2F, they were also more likely to lie about their time sober, and be drunk or high while seeking support F2F, compared with online.

### **Modality Preference**

Keeping in mind that online sobriety support is still relatively new, it was not surprising that in the determination of modality preference for either F2F or online, a significant preference for the F2F modality was revealed. New technologies, no matter how attractive, are often met with reservation. Thus, it would be expected that a preference—perhaps sentimental—for the "old way" might exist. In the open-ended comments, the consensus was in favor of F2F. Those who expressed support for the online modality mentioned its value "in a pinch," how a blend of both F2F and CMC have worked for them, and the ability (through online connectivity) to reach resources

and like-minded others that would not otherwise be accessible to them. A full list of the open-ended responses (non-edited) has been provided in Appendix B.

It should be noted that both the age of our sample and the relative novelty of online sobriety support today also likely contributed to participants' attitudes towards online sobriety support. Although our study respondents included adults 18 and above, our representative sample nonetheless skewed older. It also did not include those 17 or younger—inarguably an important demographic in terms of CMC comfort, trust, facility, and even dependence. As these digital natives assume the majority of our population, it can be reasonably predicted that the arguments currently being levied against online sobriety support engagement (whether real, perceived, or merely personal) will be significantly diminished. Our prediction then is that future replications of this particular test will reveal an increased modality preference for online sobriety support.

This is another reason these data are important: because they take a historical snapshot of online sobriety support. If, as our participants predicted, sobriety support does continue to migrate online, then our data will be an important benchmark.

The internal controversy within the ranks of F2F Alcoholics Anonymous and other 12 Step programs regarding online sobriety support might also contribute to many members' reservations when considering engaging with CMC sober resources. The first author has, in fact, many times witnessed vehement disagreements between sobriety-minded individuals regarding the dangers of reliance on online sober support.

#### Honesty

The commitment to honesty is a bedrock principle of all 12 Step programs—including, but not limited to, Alcoholics Anonymous. Although it is generally accepted

that prior to seeking sobriety, duplicity was often a common practice (or even the "default setting" behavior) for members ("Alcoholics Anonymous," 2001; Goldstein & Flett, 2009; Kingree & Thompson, 2011; Sossin-Bergman & Cardoos, 2011), it is also believed that a sober lifestyle demands "rigorous honesty" ("Alcoholics Anonymous. The Big Book of Alcoholics Anonymous. Facebook," n.d.). Thus, the ability to be completely honest within the ranks of the Fellowship—especially with regards to past debauched behavior—is generally endorsed as fundamental to sobriety attainment and maintenance. With that in mind, one of the strongest arguments by detractors of online sobriety support is the concern that it is easier to be more disingenuous in the online than the F2F modality. Critics of CMC recovery engagement further highlight: the inherent ability by users to control, edit, or manipulate online postings; the capability to engage usage at will or covertly disenfranchise completely; freedom from accountability; temptation to give false testimony; and a lack of online recovery group participation protocol guidelines. All these concerns suggest dangerous threats to honesty in CMC sobriety support participation.

Whether it is because of the potential hazards identified by online sobriety support skeptics, or merely because it is just more difficult to be dishonest face-to-face and eye-to-eye, our findings indicated that participants indeed felt it was significantly easier to be more honest in F2F than CMC sobriety support. This result also appears reasonable based on research that suggests a vulnerability for dishonesty when interacting online (Beckett, 2009; Buffardi & Campbell, 2008; S. Chen, 2009; Fiore, 2008; Jones, 1997; Whitty, 2008; Zywica & Danowski, 2008), this result also appears reasonable.

Lying about sobriety time. Because our results showed that participants found it easier to be honest when F2F than online, the results suggesting that participants lie more about their time sober in F2F engagement might initially appear contradictory. Those having personal experience with both modalities however, understand that to the alcoholic or addict, the concepts of dishonesty and lying (although seemingly synonymous) can sometimes be interpreted very differently ("Alcoholics Anonymous," 2001; "Alcoholics Anonymous. The Big Book of Alcoholics Anonymous. Facebook," 2012; Enos, 2012; "In the Rooms," 2012; Reigle & Dowd, 2004). It was with this comprehension that questions relating to "honesty" and self-disclosure, and others specifically regarding "lying" about sobriety time, were purposefully included in the survey for this study.

To explain this concept further, it is important to understand that in the language of 12 Step programs (including AA), honesty implies acting without guile in <u>all</u> affairs—including personal, social, business, relationships and, of course, the support program itself. Within F2F meetings, honesty usually relates to self-disclosure while sharing one's "experience, strength and hope" ("Alcoholics Anonymous," 2001, p.xxii) regarding past, present, and future events. The term lying, however, usually correlates with fallacious claims of actual time abstinent. A "newcomer," for example, might lie about how much time he currently has clean and sober. Those with significant years (or even decades) of abstinence have also relapsed and then, (again due to embarrassment, shame, fear, or myriad other reasons) lied to the Fellowship about their present state of sobriety— or lack thereof.

## **Substance Use During Participation**

That participants significantly reported a greater likelihood to be drunk or high during F2F than online participation might, at initial review, seem surprising—especially to critics of online sobriety support. Upon closer inspection of the survey questions relating to this particular investigation however, the results make more sense. The questions asked whether or not participants "have been drunk or high while participating" in either modality. The only requirement for participation in sobriety-based 12 Step programs is a "desire" to stop drinking or using. Thus, it is not uncommon for both newcomers and those who have relapsed to attend meetings while still under the influence. However, it is important to note that the *M*'s for both modalities (F2F=2.57, CMC=1.84) were still considerably skewed toward "0 = *Strongly Disagree*" for this survey question. Therefore, the number of respondents who self-reported being drunk or high while participating in either is still relatively low in terms of the N (186) itself. That noted, the results of this question certainly merit further investigation by future researchers.

#### Potential Migration From F2F to Online Sobriety Support

Critics of the online modality fear a rapid migration away from F2F meeting attendance toward CMC sobriety support. Our study results however, suggest that participants do not report decreasing their F2F attendance in favor of a significant migration toward online sobriety support. One threat to the external validity of this particular result though, (which should again be noted), is that this study included no participants under the age of 18; the *M* age of respondents was 40-49. Again it seems reasonable to predict that as the first digitally native Millennials become adults, sobriety support will see greater shifts online in the future. Researchers interested in exploring this

possibility could easily replicate this study to determine if (and if so, how significantly) that were to occur. Future longitudinal or cross-sectional research utilizing our survey could also be created to test this prediction.

# **Sobriety Success**

Because AA does not conduct internal self-studies, sobriety efficacy statistics are difficult to obtain (Bebbington, 1976). The few external studies that have attempted to measure the effectiveness of the program have often appeared contradictory (Arkowitz & Lilienfeld, 2011; Kaskutas, 2009; Kaskutas, Bond, & Avalos, 2009; Tonigan et al., 1996; Vaillant, 2005). AA does however conduct its own random surveys every 3 years. The most recent results (published in 2007) claim that out of 8,000 North American members surveyed, 33% reported remaining sober for over 10 years. 12% reported 5 to 10 years sobriety, 24% were sober 1 to 5 years, and 31% had less than a year of abstinence (Gray, 2012). Of course it could be argued that these data are inherently flawed. Those who have relapsed, for example, not only might be difficult to locate, but would also most likely (from feelings of shame, embarrassment, or even disinterest) not report their lack of success. Their disinclusion in the study could significantly skew survey results.

Nonetheless, the significantly positive correlation between sobriety success and F2F participation appears to indicate that those who engage with that modality feel that their sobriety stronger because of it. The open-ended responses of our participants strongly favored F2F, noting (among other reasons) their feelings that greater integrity, honesty, and "tactile" experiences can be found within that modality. The significant negative correlation discovered between sobriety success and CMC participation appears to indicate that although sobriety can be supported through that modality, participants

simply prefer the F2F modality. Open-ended responses regarding negative feelings towards CMC participation point to the duplicity, lack of commitment, and alleged lack of "spiritual" connection participants have discovered in that modality. Although these correlations between CMC sobriety support and lack of sobriety success could certainly be attributed to any of the reasons proposed by either advocates of F2F engagement or critics of the online modality—or even a combination of both—it could also be for a quite simple reason: negotiating a tremendous lifestyle behavior change such as sobriety is not easy ("Alcoholics Anonymous," 2001). The biological addiction, psychological attachment, and sociological wreckage which face many sobering alcoholics can prove formidable adversaries to abstinence (Knack, 2009). Because the amount of published research on online sobriety support is still limited, there cannot yet be a determination regarding its potential longitudinal success. Thus, the results of RQ4 offer important fodder upon which future scientists might build.

Results of two additional correlational tests performed in further exploration of which modality, if either, contributed to sobriety success were interesting, but also somewhat expected. The first, which investigated the correlation between length of sobriety time to the F2F or online modality, indicated that participation in F2F sobriety support predicted a greater length of time in sobriety, whereas the online modality predicted less. When recognizing that online sobriety support has only been generally accessible for less than two decades, but F2F sobriety support was introduced in 1935, these findings, of course, also could significantly change with time. Similarly, the positive correlation discovered between chronological age and length of sobriety time

appears reasonable to accept when considering that the older the individual, the longer he has had to secure, maintain, and build sober time.

The hypothesis and 4 research questions tested each offer interesting and important data regarding (a) the current state of sobriety support utilization, (b) how it is utilized, and (c) utilization experience. Although the data do not indicate that a significant F2F to CMC migration has yet occurred, it nonetheless clearly suggests that a shift in that direction is happening. When comparing the short amount of time online sobriety support has even been accessible to the number of those participants currently engaging with it, the likelihood that its popularity will only grow seems probable.

### **Strengths and Limitations**

Sample Our recruitment method had both strengths and limitations. Our participants initiated friendships via FB with the first author of their own will. Their motivation for seeking this social media connection could be explained by their own interest in connecting with others who use sobriety support online, with the first author's career and personal relationships with sobriety, their personal relationship with the first author, and/or the possibility that the first author's FB friendship was suggested to them by FB itself (Duff, 2011; Lewis & West, 2009). To address this issue, we ran our analyses with relationship to the first author as a variable and found the significant results remained unchanged.

Because this is a study designed to test F2F versus computer-mediated participation in sobriety support resources, one potential confound is the authenticity of the data—in other words, the veracity of subject self-presentation. This issue involves both the FB persona of the subject and his or her survey responses. Because sobriety is self-

reported and therefore scientifically immeasurable, there appears to be no manner in which to compensate for purposed duplicity. Also because of the inherent shame and embarrassment regarding sobriety lapse, it is possible that survey responses may be exaggerated or fabricated due to intrapsychic conflict, online privacy and confidentiality, or other personal reasons. However, because the study hypothesis and research questions were constructed to test participants' experiences with online versus F2F sobriety recovery participation, any duplicitous survey responses should not significantly affect statistical results. In addition, it seems reasonable to assume that any potential participant engaging in inauthentic FB self-presentation would be unlikely to complete and submit the survey.

Another potential confound is the nascence of online recovery resources. Because online recovery participation is still in its infancy, it would make sense that those with longer-term sobriety would be more accustomed to their traditional F2F support systems. Chronological age could also play a factor in lower participation in online recovery support, given that the digital immigrant might lack technological comfort with, or be intimidated by, computer-mediated platforms. The decision to seek potential survey respondents through online resources like FB and sober social media sites was made in order to remove this particular confound as much as possible. In addition, theorizing that only those with enough social media experience to comfortably navigate its technology and successfully submit the survey would prove the population with the most potential external validity, only that demographic was targeted to participate.

#### **Conclusions**

We are experiencing a period of cultural transition driven by technology. Currently walking our planet are the very last generations ever to have built their social networks primarily through F2F relationships, without the benefit of online connectivity options. As the world eventually fully abdicates to the digitally native, it is impossible to predict how strongly CMC will continue to impact sociological change. What does seem reasonable to forecast, however, is an exponential evolution of technology and online engagement possibilities yet to be imagined.

Some pundits portend that the increased ease and convenience of CMC comes at the cost of social intimacy, authentic interpersonal relationships, personal security, and increased isolation (Aubrey et al., 2008; Caron, 2007; FBI, 2014; Lyon, 2009; Snol, 2009; Toma, 2013, Whitty, 2008). Other experts argue that online accessibility only promotes positive connections and bonds (Keen, 2009; Marshall, 2009; Millat, 2009; Valenzuela et al., 2009). For the sobriety-minded, it would seem that the ability to seek support at any time, anywhere is not just a good thing, but could even prove life-saving. Still, the importance of close fellowshipping with others, feeling a "part of," and illustrating a complete commitment to the program is universally accepted as vital to sobriety success. Can these be constructed and maintained with the same or greater efficacy online as through F2F contact? There are those who fear that a growing reliance upon online sobriety support portends the extinction of F2F AA. Although that seems an unrealistic prediction today, only time will tell. Still, when considering the results of our initial investigation into this new phenomenon, coupled with the fact that technology makes the previously unimaginable possible, it does not seem implausible to propose an ever-increasing blend of online and F2F modalities in the not-too-distant future, with

virtual F2F sobriety support meetings held in augmented reality one day even becoming the norm.

#### References

- Aboujaoude, E. (2010). Problematic internet use: An overview. *World Psychiatry*, 9(2), 85-90.
- Addicted to More. (2007). Alcoholics Anonymous online meetings. Anonymous meeting rooms in cyberspace. Retrieved October 6, 2011 from <a href="http://www.addictedtomore.com/alcohol/alcoholics-anonymous-online-meetings-2008.php">http://www.addictedtomore.com/alcohol/alcoholics-anonymous-online-meetings-2008.php</a>
- Ahmad, I. Social media engagement and usage stats and facts *Social media today*.

  Retrieved from http://www.socialmediatoday.com/content/global-internet-mobile-and-social-media-engagement-and-usage-stats-and-facts-infographic
- Alcoholicos Anonimos Grupo Aragon. (2012, February 24). [Facebook post]. Retrieved from https://www.facebook.com/profile.php?id=100002113796577
- Alcoholics Anonymous (AA). (2009, Winter). Anonymity and social networking sites. *Box 459*, *55*(*5*), 8-9.
- Alcoholics Anonymous (AA) (n.d.). The big book of Alcoholics Anonymous [Facebook post]. Retrieved from <a href="http://www.facebook.com/AABigBook">http://www.facebook.com/AABigBook</a>
- Alcoholics Anonymous (AA). (n.d.). Online Intergroup of Alcoholics Anonymous.

  Retrieved September 12, 2012 from <a href="http://www.aa-intergroup.org">http://www.aa-intergroup.org</a>
- Alcoholics Anonymous (AA) (n.d.). Welcome to the e-AA Group. Retrieved October 6, 2012 from <a href="http://www.e-aa.org/index.php">http://www.e-aa.org/index.php</a>
- Alcoholics Anonymous Online (AA Online). (2012). AA online: Realtime open AA meetings. Retrieved October 29, 2012 from http://www.aaonline.net/

- Alcoholics Anonymous Shanghai (AA Shanghai). (2011). China online AA meetings via Skype. Retrieved October 6, 2012 from <a href="http://www.aashanghai.com/skype-meetings.html">http://www.aashanghai.com/skype-meetings.html</a>
- Anonymous. Alcoholics Anonymous (A.A.) (2001). *Alcoholics Anonymous* (4th ed.).

  New York: Alcoholics Anonymous World Services.
- Arkowitz, H., & Lilienfeld, S. (2011). Does Alcoholics Anonymous work? *Scientific American Mind*, 22(1), 64-65.
- Aubrey, J., Cattopadhyay, S., & Rill, L. (2008). Are Facebook friends like face-to-face friends: Investigating relations between the use of social networking websites and social capital. Paper presented at the Annual Meeting of the International Communication Association, May 21, 2008, Montreal.
- Bargh, J., & McKenna, K. (2004). The Internet and social life. *Annual Review of Psychology*, 55, 573-590. doi: 10.1146/annurev.psych.55.090902.141922
- Baym, N. (2010). Personal connections in the digital age. Malden, MA: Polity Press.
- Bebbington, P. E. (1976). The efficacy of Alcoholics Anonymous: The elusiveness of hard data. *The British Journal of Psychiatry*, 128, 572-580. doi: 10.1192/bjp.128.572
- Beckett, A. (2009, March 1). The dark side of the Internet. *The Guardian*. Retrieved from http://www.theguardian.com/technology/2009/nov/26/dark-side-internet-freenet
- Beranek, P., & French, M. (2011). Team trust in online education: Assessing and comparing team-member trust in online teams versus face-to-face teams. *The Journal of Distance Education*, 25(3).

- Bogenschutz, M., Tonigan, J., & Miller, W. (2006). Examining the effects of alcoholism typology and AA attendance on self-efficacy as a mechanism of change. *Journal of Studies on Alcohol*, 67, 562-567.
- Boot, C., & Meijman, F. (2010). The public and the Internet: Multifaceted drives for seeking health information. *Health Informatics Journal*, 16(2), 145-156. doi: 10.1177/1460458210364786
- Borkman, T. (2006). Sharing experience, conveying hope: Egalitarian relations as the essential method of Alcoholics Anonymous. *Nonprofit Management & Leadership*, 17(2). doi: 10.1002/nml.140
- British Broadcasting Corporation (BBC). (2009). Online networking 'harms health'. *BBC News*. Retrieved from http://news.bbc.co.uk/2/hi/uk\_news/7898510.stm
- Brown, G., Bhrolchain, M., & Harris, T. (1975). Social class and psychiatric disturbance among women in an urban population. *Sociology*, *9*, 225-254.
- Bufe, C. (1998). *Alcoholics Anonymous: Cult or cure?* (2nd ed.). Tucson, AZ: Sharp Press.
- Buffardi, L., & Campbell, W. (2008). Narcissism and social networking web sites.

  \*Personality and Social Psychology Bulletin, 34, 1303-1314. doi:

  10.1177/0146167208320061
- Burke, L. (2000). Online therapy isn't shrinking. *Wired*. Retrieved from http://www.wired.com/culture/lifestyle/news/2000/05/36584
- Callaway, E. (2009). A Facebook profile can reveal the real you. *New Scientist*. Retrieved from http://www.newscientist.com/article/dn17189-a-facebook-profile-can-reveal-the-real-you.html

- Caron, N. (2007). Chinese gamer dies of exhaustion after three-day binge. *Digital Journal*. Retrieved from http://www.digitaljournal.com/article/229820
- Cassell, M., Jackson, C., & Cheuvront, B. (1998). Health communication on the internet:

  An effective channel for health behavior change? *Journal of Health*Communication, 3(1), 71-79. doi: 10.1080/108107398127517
- Center on Addiction and Substance Abuse (CASA). (2009). New CASA report finds federal, state and local governments spend almost half a trillion dollars a year on substance abuse and addiction. New York, NY: Columbia University.
- Centers for Disease Control & Prevention (CDC). (2010). *Alcohol & public health*.

  Retrieved from http://www.cdc.gov/alcohol/
- Centers for Disease Control & Prevention (CDC). (2010a). Adults having five or more alcoholic beverages in 1 day. CDC *Features*. Retrieved from http://www.cdc.gov/features/ds5drinks1day/
- Centers for Disease Control & Prevention (CDC). (2012). *Alcohol & public health*.

  Retrieved from http://www.cdc.gov/alcohol/
- Chen, S. (2009). Facebook, Twitter users beware: Crooks are a mouse click away.

  \*CNN.com.\* Retrieved from www.cnn.com/2009/CRIME/10/19/social.networking.crimes
- Cheung, Y., Mok, B., & Cheung, T. (2005). Personal empowerment and life satisfaction among self-help group members in Hong Kong. *Small Group Research*, *36*(3), 354-377. doi: 10.1177/1046496404272510
- Clarke, G., Reid, E., Eubanks, D., O'Connor, E., DeBar, L., Kelleher, C... Nunley, S. (2002). Overcoming depression on the Internet (ODIN): A randomized controlled

- trial of an Internet depression skills intervention program. *Journal of Medical Internet Research*, 4(3).
- Cobb, S. (1976). Presidential address 1976; Social support as a moderator of life stress.

  \*Psychosomatic Medicine, 38(5).
- Colman, D. (2011, May 8). Challenging the second "a" in A.A. *The New York Times*, p. ST1. Retrieved from http://www.nytimes.com/2011/05/08/fashion/08anon.html?pagewanted=all
- Cooley, C. (1902). *Human nature and the social order*. New York, NY: Charles Scribner's Sons.
- Copeland, J., & Martin, G. (2004). Web-based interventions for substance use disorders:

  A qualitative review. *Journal of Substance Abuse*, 26(2), 109-116.
- Cummings, J., Butler, B., & Kraut, R. (2002). The quality of online social relationships.

  Communications of the ACM, 45(7), 103-108.
- Daily Reflections. (2011). Suit up and show up. Retrieved October 29, 2012 from http://www.daily-reflections.com/2011/12/28/suit-up-and-show-up-2-3/
- Davison, K., Pennebaker, J., & Dickerson, S. (2000). Who talks? The social psychology of illness support groups. *American Psychologist*, 55(2), 205-217.
- DePaulo, B. (2014). Now We Know Whether Facebook Is Making Us Lonely.

  \*Psychology Today\*. Retrieved from http://www.psychologytoday.com/collections/201407/internet-addiction/now-we-know-whether-facebook-is-making-us-lonely

- Dillon, K., Dworkin, J., Gengler, C., & Olson, K. (2008). Online or face to face? A comparison of two methods of training professionals. *Journal of Family and Consumer Sciences*, 100(3), 28-33.
- Donath, J., & boyd, d. (2004). Public displays of connection. *BT Technology Journal*, 22(4), 71-82.
- Duff, S. (2011). How Facebook suggests friends. Articlesnatch. Retrieved from http://www.articlesnatch.com/Article/How-Facebook-Suggests-Friends/3368921#.UHN51VG7njs
- Early Recovery. (n.d.). Retrieved October 29, 2012 from <a href="http://www.early-recovery.com">http://www.early-recovery.com</a>
  eGetgoing. (n.d.). Online group therapy: Anonymous, convenient & affordable.

  Retrieved December 12, 2008 from

  <a href="http://www.egetgoing.com/addiction\_treatment/online">http://www.egetgoing.com/addiction\_treatment/online</a>
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends":

  Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4).
- Enos, G. (2012). A new way to network for the recovery community. *Addiction*\*Professional. Retrieved from http://www.addictionpro.com/article/new-way-network-recovery-community
- Erdos, S. (2009). Substance abuse costs states, U.S. Retrieved June 11, 2009, from http://www.business-journal.com
- Erickson, C. (2007). The science of addiction from neurobiology to treatment. New York, NY: W.W. Norton.

- Federal Bureau of Investigation (FBI). (2014). Internet fraud. Retrieved from http://www.fbi.gov/scams-safety/fraud/internet\_fraud
- Fiore, A. (2008). *Self-presentation and deception in online dating*. Paper presented at the Secrets & Lies Workshop, Florence, Italy.
- Fletcher, D. (2010). Friends without borders. Time, 175, 32-38.
- Fredricksen, C. (2013). Social networking reaches nearly one in four around the world.

  Worldwide social network users: 2013 forecast and comparative estimates.

  Retrieved from http://www.emarketer.com/Article/Social-Networking-Reaches-Nearly-One-Four-Around-World/1009976
- Giles, D. (2003). Media psychology. London, UK: Lawrence Erlbaum Associates.
- Goldstein, A., & Flett, G. (2009). Personality, alcohol use, and drinking motives. *Behavior Modification*, 33(2), 182-198.
- Gorski, T., & Miller, M. (1986). *Staying sober*. Independence, MO: Herald House/Independence Press.
- Gray, K. (2012, January 29). Does AA really work? A round-up of recent studies. *The Fix.* Retrieved from http://www.thefix.com/content/the-real-statistics-of-aa7301
- Greenwell, S., & Kraemer, B. (2006). Internet reviews: Social networking software: Facebook and MySpace. *Kentucky Library Association*, 70(4), 12-16.
- Grohol, J. (2006). Alcohol/substance dependence. *Psych Central*. Retrieved from http://psychcentral.com/disorders/sx16.htm
- Hall, M. (2003). Internet recovery for substance abuse and alcoholism: An exploratory study of service users. *Journal of Substance Abuse Treatment*, 24(2), 161-167.

- Hewitt, S. (2011, May 30). Alcoholics Anonymous marks 65 years of sobriety,

  \*McClatchy Tribune Business News\*. Retrieved from

  http://search.proquest.com.ezproxy.fielding.edu/docview/869009666?accountid=1

  0868
- Hiltz, S., Johnson, M., & Turoff, M. (1986). Experiments in group decision making:

  Communication process and outcome in face-to-face versus computerized conferences. *Human Communication Research*, *13*, 225-252.
- Horvath, T. (2012). SMART recovery® self help for addiction & alcohol abuse.

  Retrieved 29 October 2012, from Smart Recovery, http://www.smartrecovery.org/
- Hunt, T. (2011). Online alcohol therapy. Retrieved October 7 2011, from

  Brighteyecounseling.co.uk, http://www.brighteyecounselling.co.uk/
- Hutson, M. (2009, January 28). Facebook friends: Too many, too few? *Psychology Today*.
- In the Rooms. (2012). In the rooms: A social network and 12 step resource for the recovery community worldwide. Retrieved December 12, 2008 from <a href="http://www.intherooms.com">http://www.intherooms.com</a>
- Jackiewicz, D. (2011). Hyperpersonal recovery from alcoholism negotiating social support and self-disclosure between computer-mediated and face to face AA meetings (Master's thesis). Illinois State University, Normal, IL.
- Johnson, F., & Wardle, J. (2011). The association between weight loss and engagement with a web-based food and exercise diary in a commercial weight loss programme: a retrospective analysis. *International Journal of Behavioral Nutrition and Physical Activity*, 8(83).

- Johnson, M. B. (2009). Support groups. In G. Fisher & N. Roget (Eds.), *Encyclopedia of substance abuse*. Thousand Oaks, CA: Sage Publications.
- Johnson, S., Aragon, S., Shaik, N., & Palma-Rivas, N. (2000). Comparative analysis of learner satisfaction and learning outcomes in online and face-to-face learning environments. *Journal of Interactive Learning Research*, 11(1), 29-49.
- Johnston, J. (2011, June 3). ACSM: Weight loss success in a 3-D virtual world.

  \*EurekAlert!\* Retrieved from http://www.eurekalert.org/pub\_releases/2011-06/iu-awl060111.php
- Johnston, J. D., Massey, A.P. & DeVaneaux, C. (2012). Innovation in weight loss programs: A 3-dimensional virtual-world approach. *Journal of Medical Internet Research*, 14(5).
- Jones, S. G. (1997). The Internet and its social landscape. In S. G. Jones (Ed.), *Virtual culture: Identity and communication in cybersociety* (pp. 7-35). London, UK: Sage.
- Kaskutas, L., Bond, J., & Avalos, L. (2009). 7-year trajectories of Alcoholics

  Anonymous attendance and associations with treatment. *Addictive Behaviors*,

  34(12), 1029-1035. doi: 10.1016/j.addbeh.2009.060.015
- Kaskutas, L., Bond, J., & Humphreys, K. (2002). Social networks as mediators of the effect of Alcoholics Anonymous. *Addiction.*, 97, 891-900.
- Kaskutas, L., Subbaraman, M., Witbrodt, J., & Zemore, S. (2009). Effectiveness of making Alcoholics Anonymous easier: A group format 12 Step facilitation approach. *Journal of Substance Abuse Treatment*, 37, 228-239.

- Keen, A. (2009, October 14). Is social networking bad for our children? *The Daily Telegraph*. Retrieved from http://www.telegraph.co.uk/technology/social-media/6324960/Is-social-networking-bad-for-our-children.html
- Kelly, J., Dow, S., Yeterian, J., & Kahler, C. (2010). Can 12-step group participation strengthen and extend the benefits of adolescent addiction treatment? A prospective analysis. *Drug and Alcohol Dependence*, 110, 117-125.
- Kelly, J., & Yeterian, J. (2011). The role of mutual-help groups in extending the framework of treatment. *Alcohol Research & Health*, 4, 350-355.
- Kessler, R., Mickelson, K., & Zhao, S. (1997). Patterns and correlates of self-help group membership in the United States. *Social Policy*, 27, 27-46.
- Kiesler, S., Zubrow, D., Moses, M., & Geller, V. (1985). Affect in computer-mediated communication: An experiment in synchronous terminal-to-terminal discussion. *Human-Computer Interaction*, 1, 77-104.
- King, C. (2008). The sober sources network: Where online recovery resources is second to none. Retrieved from www.prlog.org/10091471-the-sober-network-where-on-line-recovery-resources-is-second-to-none
- Kingree, J. B., Simpson, A., McCrady, B., Tonigan, J., & Lautenschlager, G. (2006). The development and initial evaluation of the survey of readiness for AlcoholicsAnonymous participation. *Psychology of Addictive Behaviors*, 20(4), 453-462.
- Kingree, J. B., & Thompson, M. (2011). Participation in Alcoholics Anonymous and post-treatment abstinence from alcohol and other drugs. *Addictive Behaviors*, 36, 882-885.

- Kissin, W., McLeod, C., & McKay, J. (2003). The longitudinal relationship between self-help group attendance and course of recovery. *Evaluation and Program Planning*, 26, 311-323. doi: 10.1177/1046496404272510
- Kleber, H., Weiss, R., Anton, R., George, T., Greenfield, S., Kosten, T... Steering

  Committee on Practice Guidelines (2007). Treatment of patients with substance
  use disorders (2nd ed.). *American Journal of Psychiatry*, 164, 5-123.
- Knack, W. (2009). Psychotherapy and Alcoholics Anonymous: An integrated approach. *Journal of Psychotherapy Integration*, 19(1), 86-109.
- Langenhorst, D. (2012). Effectiveness of online instruction: Differences in measured student outcomes online versus face-to-face instruction at the high school level.

  Doctoral dissertation). Northeastern University, Boston, MA.
- Lazer, D. (2009). *The social psychology of Facebook*. Cambridge, MA: Harvard

  University. Retrieved from

  http://www.iq.harvard.edu/blog/netgov/2009/03/the\_social\_psychology\_of\_faceb.

  html
- Lewis, J., & West, A. (2009). "Friending": London-based undergraduates' experience of Facebook. *New Media & Society*, 11(7), 1-21. doi: 10.1177/1461444809342058j
- Lieberman, D., & Huang, S. (2008). A technological approach to reaching a hidden population of problem drinkers. *Psychiatric Services*, *59*(3), 297-303.
- Life Recovery Program. (n.d.). Online addiction treatment. Retrieved October 29, 2012 from <a href="http://www.liferecoveryprogram.com/">http://www.liferecoveryprogram.com/</a>
- Lyon, J. (2009, October 13). State's cyberbullying law too limited, advocate says.

  \*Arkansas News\*. Retrieved from

- http://arkansasnews.com/2009/10/13/state%E2%80%99s-cyberbullying-law-too-limited-advocate-says/
- M, M. (2011). Flowchart of events of interest to members of the fellowship of Alcoholics

  Anonymous. *Silkworth.net*. Retrieved from

  http://silkworth.net/aahistory/flowchart\_mm.html
- Marshall, M. (2009, March 7). Facebook is good for you; Do social networking sites, or the internet generally, cause loneliness and poor health? If anything, it's the reverse, says Michael Marshall. *New Scientist*. Retrieved from www.newscientist.com/article/mg20126986.200-why-facebook-is-good-for-you.html
- Marvin-Humann, K. (2008). The relationship between motivation, Maslow's hierarchy of needs, time, and craving levels in the mandated substance abuse treatment population. (Doctoral dissertation). Alliant University, Fresno, CA.
- McCarthy, C. (2008). Max Levchin envisions an Alcoholics Anonymous app on Facebook. *CNET News*. Retrieved from http://news.cnet.com/8301-13577\_3-9928036-36.html
- McKenna, K., & Bargh, J. (1998). Coming out in the age of the internet: Identity

  "demarginalization" through virtual group participation. *Journal of Personality*and Social Psychology, 75, 681-694.
- McKenna, K., Green, A., & Gleason, M. (2002). Relationship forming on the Internet: What's the big attraction? *Journal of Social Issues*, 58, 9-31.

- Millat, C. (2009). Facebook makes employees work harder: Study. *NBC San Diego*.

  Retrieved from http://www.nbcsandiego.com/news/archive/Facebook-Makes-Employees-Work-Harder-Study.html
- Miracles in Progress (2007). I can't go to AA because I'm a single parent without babysitters. Miracles in Progress 12 Step Recovery Forums. Retrieved from <a href="http://www.12stepforums.net">http://www.12stepforums.net</a>
- MMG. (2014). Internet world stats. (2014). Retrieved from http://www.internetworldstats.com/stats.htm
- Mueller, S. E., Petitjean, S., Boening, J., & Wiesbeck, G. A. (2007). The impact of self-help group attendance on relapse rates after alcohol detoxification in a controlled study. *Alcohol & Alcoholism*, *41*(4), 108-112. doi: 10.1093/alcalc.ag/1122
- MyAddiction.com. (n.d.) Online addiction & recovery resources. Retrieved October 29, 2012 from http://www.myaddiction.com/
- National Institute on Alcohol Abuse (NIAAA). (2011). FAQs for the general public.

  Bethesda, MD: National Institutes of Health. Retrieved from

  http://www.niaaa.nih.gov/FAQs/General-English/Pages/default.aspx
- National Institutes of Health (NIH). (2014). Using social media to understand and address substance use and addiction (R01). Retrieved January 7, 2014, from National Institutes of Health, http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-14-008.html
- National Telecommunications & Information Administration (NTIA). (2002). A nation online: How Americans are expanding their use of the Internet. Washington, DC:

- U.S. Department of Commerce. Retrieved from http://www.ntia.doc.gov/legacy/ntiahome/dn/nationonline\_020502.htm.
- Ni, P. (2014). Can Less Time on Facebook Increase Your Happiness? Yes! *Psychology Today*. Retrieved from http://www.psychologytoday.com/collections/201407/the-internet-addict/can-less-time-facebook-increase-your-happiness-yes
- Okdie, B., Guadagno, R., Bernieri, F., Geers, A., & Mclarney-Vesotski, A. (2011).

  Getting to know you: Face-to-Face versus online interactions. *Computers in Human Behavior*, 27, 153-159. doi: 10.1016/j.chb.2010.07.017
- Perkinson, R. (2011). Alcoholism/Drug/Abuse/Teen/Gambling/Addiction Treatment

  Information. An International Expert Answers Your Questions On Addiction For

  Free! Retrieved from http://www.robertperkinson.com/
- Recovery Realm. (n.d.). Recovery Realm online addiction recovery community.

  Retrieved October 24, 2012 from http://www.recoveryrealm.com
- Reigle, N., & Dowd, E. (2004). Predicting Alcoholics Anonymous affiliation. *Health Education Journal*, 63(1), 81-88.
- Rondó, J., & Feliz, J. (2012). Survey: Ten percent of American adults report being in recovery from substance abuse or addiction. New York, NY: OASAS. Retrieved from http://www.oasas.ny.gov/pio/press/20120306Recovery.cfm
- Rudy, D., & Everman, H. (2008). Twelve-step programs. In V. Parrillo (Ed.), *Encyclopedia of social problems*. Thousand Oaks CA: Sage Publications.

- Seligman, K. (2009). Social isolation a significant health issue. *San Francisco Chronicle*.

  Retrieved from http://articles.sfgate.com/2009-03
  02/entertainment/17212628 1 loneliness-social-isolation-john-cacioppo
- Silverman, S. (2007). Creating community online: The effects of online social networking communities on college students' experiences. How can student affairs professionals best respond to this emergent phenomenon. (Doctoral dissertation). University of Southern California, Los Angeles.
- Slaymaker, V., & Sheehan, T. (2008). The impact of AA on professional treatment.

  \*Recent Developments in Alcoholism, 18, 59-70.
- Smith, G., Sorensen, C., Gump, A., Heindel, A., Caris, M., & Martinez, C. (2010).
  Overcoming student resistance to group work: Online versus face-to-face. *Internet and Higher Education*, 14, 121-128. doi: 10.1016/j.iheduc.2010.09.005
- Snol, L. (2009). 2010's top security threats: Facebook, Twitter, and iPhone apps.
  Retrieved from
  http://www.pcworld.com/printable/article/id,185661/printable.html
- Sober Circle. (2008). Welcome to the new Sober Circle. Retrieved February 1, 2012 from http://www.sobercircle.com
- Soberdad.com. (n.d.). Retrieved October 29, 2012 from http://soberdad.com/
- Sobermusicians.com. (n.d.). Retrieved October 29, 2012 from <a href="http://www.sobermusicians.com">http://www.sobermusicians.com</a>
- Sober Sources Network. (2008). Where online recovery resources is second to none.

  Retrieved September 18, 2012 from http://www.sobersources.com/

- Sober Travelers. (n.d.). Sober vacations, getaways & retreats. Retrieved September 15, 2012 from http://www.sobertravelers.org
- Sober Village. (n.d.). Retrieved October 29, 2012 from <a href="http://www.thesobervillage.com/">http://www.thesobervillage.com/</a>
- Sossin-Bergman, K., & Cardoos, D. (2011). Committing to sobriety through 12-Step programs. Retrieved 3 March 2012, from Treatment4Addiction.com, http://www.treatment4addiction.com/blog/recovery/committing-to-sobriety-through-12-step-programs/
- Sproull, L., & Kiesler, S. (1986). Reducing social context cues: Electronic mail in organizational communication. *Management Science*, 32, 1492-1512.
- Stanton, K. (2011, September 12). Social contacts, self-confidence crucial to successful recovery through Alcoholics Anonymous. *Targeted News Service*. Retrieved from http://search.proquest.com.ezproxy.fielding.edu/docview/888680808?accountid=1 0868
- Statistica. (2014). Number of social network users worldwide from 2010 to 2017 (in billions) *Statistica*. Retrieved from http://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/
- Steakley, L. (2011). Research shows remote weight loss interventions equally effective as face-to-face coaching programs. *Stanford Medicine*. Retrieved from http://scopeblog.stanford.edu/2011/11/15/research-shows-remote-weight-loss-interventions-equally-effective-as-face-to-face-coaching-programs/
- Subbaraman, M. (2011, August 20). Alcoholism: Research from alcohol research group in alcoholism provides new insights. *Psychology & Psychiatry Journal*, 241.

- Substance Abuse & Mental Health Services Administration (SAMHSA). (2008). Results from the 2007 national survey on drug use and health: National findings.

  Rockville, MD: U.S. Department of Health and Human Services.
- Suler, J. (2004). The online disinhibition effect. *CyberPsychology & Behavior*, 7(3), 321-326.
- Summers, J., Waigandt, A., & Whittaker, T. (2005). A comparison of student achievement and satisfaction in an online versus a traditional face-to-face statistics class. *Innovative Higher Education*, 29(3). doi: 10.1007/s10755-005-1938-x
- The Internet Addict: Is problematic Internet use (PIU) a real disorder or a fad? (2014).

  \*Psychology Today\*. Retrieved July 25, 2014, from 
  http://www.psychologytoday.com/collections/201407/the-internet-addict
- Toma, C. (2013). Feeling better but doing worse: Effects of Facebook self-presentation on implicit self-esteem and cognitive task performance. *Media Psychology*, *16*, 199-220. doi: 10.1080/15213269.2012.762189
- Tong, S., Van Der Heide, B., Langwell, L., & Walther, J. (2008). Too much of a good thing? The relationship between number of friends and interpersonal impressions on Facebook. *Journal of Computer-Mediated Communication*, 13(3), 531-549.
- Tonigan, J., Connors, G., & Miller, W. (1996). Alcoholics Anonymous involvement (AAI) scale: Reliability and norms. *Psychology of Addictive Behaviors*, 10(2), 75-80.

- Vaillant, G. (2005). Alcoholics Anonymous: Cult or cure? *The Australian and New Zealand Journal of Psychiatry*, 39(6), 431-436.
- Valenzuela, S., Park, N., & Kee, K. (2009). Is there social capital in a social network site?: Facebook use and college students' life satisfaction, trust, and participation.

  \*Journal of Computer-Mediated Communication, 14(4), 875-901. doi: 10.1111/j.1083-6101.2009.01474.x
- VanLear, C., Sheehan, M., Withers, L., & Walker, R. (2005). AA online: The enactment of supportive computer mediated communication. *Western Journal of Communications*, 69(1), 5-26. doi: 10.1080/10570310500033941
- Varga, S. (2004). *The social psychology of the Internet*. (Doctoral dissertation). Fielding Graduate University, Santa Barbara, CA.
- Walther, J., Van Der Heide, B., Hamel, L., & Shulman, H. (2009). Self-generated versus other-generated statements and impressions in computer-mediated communication: A test of warranting theory using Facebook. *Communication Research*, 36(2), 229-253. doi: 10.1177/0093650208330251
- Wang, Q., & Woo, H. (2007). Comparing asynchronous online discussions and face-to-face discussions in a classroom setting. *British Journal of Educational*Technology, 38(2), 272-286. doi: 10.111/j.1467-8535.2006.00621.x
- Weegmann, M. (2004). Alcoholics Anonymous: A group-analytic view of fellowship organizations. *The Group-Analytic Society (London)*, *37*(2), 243-258. doi: 10.1177/0533316404041276
- Wellman, B., Quan-Haase, A., Boase, J., Chen, W., Hampton, K., Diaz, I., & Miyata, K. (2006). The social affordances of the Internet for networked individualism.

- *Journal of Computer-Mediated Communication*, 8(3). doi: 10.111/j.1083.6101.2003.tb00216.x
- Wellman, B., & Wortley, S. (1990). Different strokes from different folks: Community ties and social support. *The American Journal of Sociology*, 96(3), 558-588.
- Whitty, M. (2008). Liberating or debilitating? An examination of romantic relationships, sexual relationships and friendships on the net. *Computers in Human Behavior*, 24, 1837-1850.
- Wituk, S., Shepherd, M., Slavich, S., Warren, M., & Meissen, G. (2000). A topography of self-help groups: An empirical analysis. *Social Work*, 45(2), 157.
- Wright, K. (2005). Researching Internet-based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages, and Web survey services. *Journal of Computer-Mediated Communication*, 10(3), Article 11.
- Yalom, I. (1995). *The theory and practice of group psychotherapy* (4th ed.). New York, NY: Basic Books.
- Yang, S. (2008). Glamorization of drugs in rap music linked to greater risk of alcohol and drug use among adolescents. *Medical News Today*. Retrieved from http://www.medicalnewstoday.com/releases/102553.php
- Yang, Y., Cho, Y., Mathew, S., & Worth, S. (2011). College student effort expenditure in online versus face-to-face courses: The role of gender, team learning orientation, and sense of classroom community. *Journal of Advanced Academics*, 22(4), 619-638.

- Zhao, S. (2005). The digital self: Through the looking glass of telecopresent others. Symbolic Interaction, 28(3), 387.
- Zywica, J., & Danowski, J. (2008). The faces of Facebookers: Investigating social enhancement and social compensation hypotheses; predicting Facebook and offline popularity from socialibility and self-esteem, and mapping the meanings of popularity with semantic networks. *Journal of Computer-Mediated Communication*, *14*(1), 1-34. doi: 10.1111/j.1083-6101.2008.01429.x

Table 1. Habits of the current sample regarding sobriety recovery and Face-to-Face recovery meeting attendance.

Time in Recovery	%	Current Attendance at F2F Sobriety Support	%
Not Currently in Recovery	2.1	Never	9
1 day to 6 months	9.7	Rarely	11.7
6 months to 1 year	6.2	Sometimes	14.8
1 to 5 years	17.9	Frequently	51.6
5 to 10 years	21.0	Daily	11.6
10 to 25 years	26.2	More than Daily	1
25 years+	15.9		

Table 2.

#### APPENDIX A

#### **Survey Questionnaire**

First, I'd like to ask you a few questions about yourself and your recovery. The answers to these questions are important because the responses to them will help me to see if there are any "trends" in particular demographics.

## I PROMISE THAT ALL RESPONSES WILL BE KEPT STRICTLY

ANO	ANONYMOUS AND CONFIDENTIAL!!!					
1.	What is your garder?					
	What is your gender? Male					
0	Female					
0	remate					
2.	Which category below includes your age?					
0	17 or younger					
0	18-29					
0	30-39					
0	40-49					
0	50-59					
0	60 or older					
3.	What is your Ethnicity?					
0	Caucasian					
0	Hispanic					
0	Latino					
0	African-American					
0	Asian-Pacific Islander					
0	Native American					
0	Asian					
0	Other (please specify)					
4.	Where do you currently live?					
0	U.S Northeast					
0	U.S Midwest					
0	U.S South					
0	U.S West					
0	U.S Southwest					
0	Outside the U.S. (please specify)					
5.	If you consider yourself in sobriety recovery, how much time sober do you currently have?					
0	I do not consider myself currently in sobriety					

- I have been in sobriety recovery in the past, but do not currently consider myself in sobriety.
- o 1 day to six months
- o 6 months to 1 year
- o 1 year to 5 years
- o 5 years to 10 years
- o 10 years to 25 years
- o More than 25 years
- 6. What is your experience, (if any), with residential rehab?
- o I have never been to residential rehab
- o I have been to residential rehab once
- I have been to residential rehab more than once
- o I have never been to residential rehab, but have been to outpatient rehab
- I have been to both residential and outpatient rehab
- 7. How often do you currently attend Face-to-face sobriety support meetings? Please select the answer that comes closest to matching your experience
- Never
- o Rarely
- Sometimes
- Frequently
- o Daily
- o More than once a day
- 8. How often do you currently participate in online sobriety support via recovery forums, chat rooms, online meetings or social networking like "Facebook?" Please select the answer that comes closest to matching your experience.
- Never
- o Rarely
- Sometimes
- Frequently
- o Daily
- o More than once a day

9.	How succ	essful do	you cons	sider your	CURREN	NT sobrie	ty?		
0 NOT A ALL	1 AT	2	3	4	5	6	7	8 EXTREM	9 ⁄IELY
	HE FOL				S, PLEAS	E USE T	HE SCA	ALE BELO	W
0	1	2	3	4	5	6	7	8	9
STRON	NGLY							STRON	<b>IGLY</b>
DISAG	REE							A(	GREE

### Please answer the following questions about your experience(s) with FACE-TO-FACE SOBRIETY SUPPORT:

- 1. When I am in crisis, I am likely to seek support through Face-to-face sobriety resources.
- 2. When I participate in Face-to-face sobriety support, I am able to be completely honest.
- 3. True self-disclosure is difficult for me when participating in Face-to-face sobriety support because I don't trust that the confidentiality of what I "share" will be kept completely confidential.
- 4. I believe that in general, people are able to be more their "authentic selves" while participating in Face-to-face sobriety support.
- 5. My anonymity is protected in Face-to-face sobriety support.
- 6. I find Face-to-face recovery much easier to "do" than online recovery.
- 7. Seeking support through Face-to-face recovery resources is for people who aren't really serious about their sobriety.
- 8. Participating in Face-to-face sobriety support is just more convenient for me than participating in online recovery.
- 9. My Face-to-face recovery community really cares about me.
- 10. I feel closer to my Face-to-face friends in recovery than I do to my online ones.
- 11. I believe that Face-to-face sobriety recovery support can be just as effective as online sobriety recovery support.

- 12. I believe that participating in Face-to-face sobriety support is a vital component to my recovery success.
- 13. I prefer my Face-to-face recovery relationships to my online ones.
- 14. I have been drunk or high while participating in Face-to-face recovery.
- 15. I have lied about my sobriety while participating in Face-to-face recovery.
- 16. Face-to-face recovery support helps keep me sober and accountable.
- 17. I tend to find people who are just like me in Face-to-face sobriety support.
- 18. I believe that my use of Face-to-face sobriety support has significantly contributed to my sobriety success.
- 19. My current Face-to-face sobriety support network is making a real difference in my recovery.
- 20. I believe that if it weren't for my participation in Face-to-face sobriety support, I would relapse.

# NOW, USING THE SAME SCALE, PLEASE ANSWER THE FOLLOWING QUESTIONS ABOUT YOUR EXPERIENCE(S) WITH ONLINE SOBRIETY SUPPORT:

Items 21-40 repeated the content of items 1-20 using "online" in place of "face-to-face" sobriety support.

#### **ALMOST DONE!**

NOW I'D JUST LIKE YOUR FEEDBACK ON A FEW QUESTIONS REGARDING YOUR OVERALL FACE-TO-FACE VERSUS ONLINE RECOVERY EXPERIENCE.

### PLEASE USE THE SAME SCALE AS IN YOUR PREVIOUS RESPONSES IN THE FOLLOWING QUESTIONS:

- 1. I have made connections at Face-to-face recovery meetings that I later ended up engaging with online.
- 2. I have made recovery connections online that I later ended up meeting at some point Face-to-face.

- 3. Since engaging with online recovery resources and sober social networking connections, I have found myself attending less Face-to-face recovery meetings than I used to.
- 4. I believe that eventually in the future, there will be more online recovery meetings than Face-to-face recovery meetings.
- 5. At some point in the future, I believe that Face-to-face recovery meetings may no longer even exist because recovery support "Fellowshipping" will all be done online.
- 6. When traveling and unable to attend a Face-to-face recovery meeting, I have successfully engaged with online sobriety support instead.
- 7. AND FINALLY.... FOR THE PURPOSES OF SURVEY PARTICIPANT INTEGRITY, PLEASE CHOOSE THE ANSWER THAT BEST DESCRIBES HOW WE KNOWEACH OTHER:
  - We are personal friends
  - We are colleagues in the field of recovery
  - We do not know each other personally, but are "Friends" through Face-toface recovery events
  - We do not know each other personally, but are "Friends" through social media platforms (i.e. "Facebook")
  - Other (please specify)
- 8. Please feel free to add below any additional comments you'd like to share (good or bad)
  - a. about your Face-to-face or online recovery support experiences and the impact you
  - b. believe either (or both) have had on your sobriety:

Thank you again for being of service by participating in my survey!