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Get Legitimate: Achievements Promote Recovery from Addiction via Non-Addict Identity

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Get Legitimate: Achievements Promote Recovery from Addiction via Non-Addict Identity

by

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Abstract

Despite decades of research, over 400 million people around the globe suffer from substance abuse and only 10% to 43% maintain abstinence after treatment. Social support, spirituality, self-regulation, and locus of control have all been examined for their efficacy and relationship with successful abstinence outcomes. Conceptually, educational/vocational achievement is believed to contribute to reforming an identity divorced from the previous lifestyle of active addiction. Educational and Vocational achievements as proxies for non-addict identity have only been investigated sporadically. The present study seeks to establish a quantitative link between successful long-term recovery and these types of goal-oriented achievements. A survey was administered to 195 participants in recovery and results showed that those who have achieved an advanced certification, license, or degree since getting clean report almost twice as much clean time as those who did not. Multiple regression revealed that educational/vocational achievement was a significant predictor and the overall model accounted for 49% of the variance in length of abstinence. These findings expose the importance of a neglected component of research in recovery from addiction. Implications include greater emphasis on vocational rehabilitation in recovery and future research should aim to examine and refine this concept further.

Keywords: identity, recovery, addiction, substance abuse, vocation, achievement, educational attainment

Get Legitimate: Achievements, Non-Addict Identity, and Recovery from Addiction

As many as 240 million people around the world suffer from alcohol abuse alone and when factoring in marijuana and all other drugs, this balloons to a number greater than the population of the entire United States, 429 million (Gowing et al., 2015). In 2001, Miller, Walters, and Bennett found that only 25% of people in recovery remained abstinent from alcohol one year after treatment. Another study found abstinence rates to be 43% on average, while noting that participation in more intensive treatment programs, led to better outcomes than participation in less intensive programs (Monahan & Finney, 1996). There is a wide range within previous research on what the relapse rates actually are, as evidenced by another study that found a 90% relapse rate amongst opiate dependent patients who underwent treatment (Smyth, Barry, Keenan, & Ducray 2010). Naturally, these differences likely depend partially on the study of different substances. For the purpose of this study, alcohol and all drugs will be inferred when referencing addiction to substance abuse and length of total abstinence from all of the above will be referred to as “clean time”.

There also remains the question of whether people are finding recovery from addiction without formal treatment. Research confirmed that treatment (including in-patient rehabilitation programs or participation in organizations such as Alcoholics Anonymous) participants were more successful in their recovery than non-help seeking participants (e.g., Moos & Moos, 2006). Amongst those who received help, however, almost 40% had relapsed by a 3-year follow-up. Within this group, another 42.9% had relapsed by a 16-year follow-up (Moos & Moos, 2006). Though there appears to be ample variance in relapse rates, one point of agreement is that they are unfortunately higher than many would hope. What does long-term recovery look like? Can we reverse-engineer a rebuilt life?

In 2004, a qualitative dissertation examined the stories of five African Americans in the United States who all attribute their successful recovery from addiction, in part, to achieving a new non-addict identity via formal education (Rutledge, 2004). While the impetus for the present study began with anecdotal accounts, Rutledge's narrative approach gives voice to an otherwise overlooked topic of research. Although many studies focus on the etiology of addiction, which serves informing prevention methods well, the recidivism rate for people who seek treatment from drugs and alcohol remains dramatically high even after decades of research (Miller, Walters, & Bennett, 2001; Monahan & Finney, 1996; Smyth, Barry, Keenan & Ducray, 2010).

With that in mind, The Basic Text of Narcotics Anonymous (1988, p.15-16) presents a relevant quote to the present study: "Old friends, places, and ideas are often a threat to our recovery. We need to change our playmates, playgrounds and playthings". Therapists in clinical practice with addiction populations frequently parrot these suggestions because there is so often a lifestyle married to the habitual behavior of addiction. A popular saying amongst recovering addicts says, "If you spend enough time in a barber shop, you're going to end up getting a haircut." This strain of advice purports that if, for example, you stop drinking but continue to spend ample time in bars because that's the environment in which you are familiar, you are bound to drink again. It appears to be reasonable logic. Although successful abstinence from drugs and alcohol does not always include participation in 12-step recovery programs (Biernacki, 1986; Moos & Moos, 2006), these suggestions certainly promote an evolution of environmental influences and behavioral changes that could lead to different life experiences. What is not emphasized, however, are enumerated practical alternatives for these "people, places and things". We tell addicts what not to do but we rarely tell them what to do instead. It is a

worthy starting point to assume that there may be commonalities amongst people who have experienced long-term recovery. The purpose of the present study is to establish a quantitative relationship between educational and/or vocational achievement (as a proposed component of non-addict identity) and long-term recovery.

Clean Time

Regarding what will be used as the dependent variable in the present study, there are generally two common outcome measures regarding recovery from addiction. An abstinence model (a.k.a. quitting “cold turkey”) simply promotes the extinction of any and all drug or alcohol consumption (Miller & Page, 1991). There is also a harm reduction model that supports the idea of reducing consumption to avoid abuse and negative consequences (Marlatt, 1996). However, even harm reduction advocates recognize that abstinence would be preferable. Some even promote “Gradualism” which splits the difference between these two approaches and suggests that clinicians guide more resistant patients along the continuum from harm reduction to the end goal of abstinence (Kellogg, 2003). In either case, because abstinence is still perceived as a superior aim, length of days abstinent (or “days clean”) is commonly used as an outcome measure in the study of addiction and was justified as the appropriate measure for this study (Laudet, 2007).

Furthermore, although harm reduction models may be more applicable to people resistant to abstinence, the sample of participants for the current study were recruited from 12-step-recovery-oriented online forums and both Alcoholics Anonymous and Narcotics Anonymous specifically promote an abstinence model. The former proposes, “The only relief we have to suggest is entire abstinence” (Alcoholics Anonymous, 2001, p. xxx) and the later more strongly,

“This is a program of complete abstinence from all drugs” (Narcotics Anonymous, 2008, p. 9). The next section turns from the dependent variable to the latent construct of non-addict identity.

Non-Addict Identity

One study found that 12-step affiliation, life meaning, social supports, and spirituality accounted for 22% of the variance in life satisfaction amongst recovering persons (Laudet, Morgen, & White, 2006). What if these disparate variables were conceptualized instead as components of a larger latent variable?

Identity transformation has been identified as a key interest in recovery, even amongst younger adults (Rodriguez & Smith, 2014). Furthermore, addiction in adolescence has been shown to be related to lack of self-clarity (Nixon, 2005) distinct from identity exploration (Israelashvili, Kim, & Bukobza, 2012). Though perhaps perceived as a positive characteristic, feelings of being in-between stages (adolescence and early adulthood) are associated with problematic substance use (Smith, Bahar, Cleeland, & Davis, 2014). The higher likelihood of substance abuse prevalence in emerging adulthood has been partially attributed to the instability, and the disillusionment of identity and belonging inherent in this developmental period (Arnett, 2005). However, identity commitment has been found to buffer against addiction and developing this commitment, a deterrent to risky behaviors (Dumas, Ellis, & Wolfe, 2012).

Waldorf and Biernacki (1981) were among the first to coin the construct of non-addict identity and its necessity in successful recovery from addiction. Up until that time, the most widely accepted perception of the process of recovery was simply that most addicts would “mature out” of these behaviors by their mid-thirties (Winick, 1962) and there seems to be some evidence to support this (Waldorf, 1983; Biernacki, 1986; Prins, 1995). This suggests that recovery (as opposed to relapse) is simply a function of age. However, it would be unethical to

neglect a population in need, assuming that they will grow out of a behavior at a later time. Even if we assumed that previous findings were true (though they did not apply to all participants), the danger and cost to society and themselves still merits further consideration from the scientific community. Additionally, high relapse rates serve as evidence against a simple maturing out.

Though its main focus was on Hepatitis C treatment, an Australian study came across a paradoxical concern amongst addicts seeking professional treatment from in-patient opiate substitution therapy clinics. They noted that there is a stigma associated with a patient accepting that they are “a drug user” and facing this negative label may also be something that the patient has been avoiding or experiencing denial about (Rance & Treloar, 2014). A provocative question arises; how effective can a treatment be if the treatment itself requires a negative, dehumanizing brand to be associated with it? After introducing a more integrated, holistic approach including peer-support services, specialty nurses, and physician assessments (as opposed to dispensing drug-replacement medication only) at several sites, the same researchers conducted in-depth interviews with patients and staff who later shared about how integrating more services at one location enhanced the perception of the therapeutic interaction. One patient described more clearly what others implied, “It was nice to know that somebody actually looked out for Tracy, not just ‘Methadone Tracy’.” (Rance & Treloar, 2014, p. 456). In these instances, the inducement of a re-negotiated self appears to be not only facilitated but even initiated externally by a professional support structure. However, the value of a non-addict identity can begin to be seen as a result of this study.

Though not directly related to abstinence, a self-identity shift from problem drinker to non-problem drinker has been shown to predict harm reduction (Montes, Dearing, Claus, & Witkiewitz, 2017). More directly relevant data regarding the make-up of non-addict identity

were shown by McIntosh and McKeganey (2000) who interviewed 70 self-qualified recovering addicts and hypothesized that narratives were an integral tool in constructing non-addict identity. This qualitative study concluded that narratives serve in the formation of non-addict identity by providing a reinterpretation of their former using life-style, a reinterpretation of sense of self, and providing a substantial explanation for their recovery (often described as “rock bottom experiences”, McIntosh & McKeganey, 2000, p. 1507). Another qualitative account delineates a positive identity model as one where enhanced self-esteem as a result of validation of a positive, non-using identity is linked to motivation for recovery (Johansen, Brendryen, Darnell, & Wennesland, 2013). The same study also identified skill building and practical support as instrumental in positive outcomes, which is especially salient for the mechanisms for building non-addict identity proposed in the present study. Though informative, there seems to be a dearth of quantitative research since then exploring what components were utilized most effectively in acquiring this new sense of self. Buckingham, Frings, and Albery (2013) found that the transition from active addiction to abstinence is a sufficient shift in identity for a time, noting that a new social identity facilitated by group membership in 12-step fellowships led to an association with recovery as opposed to one with addiction and that this differentiation boasted lower relapse rates. However, an enduring sense of purpose is suspected for those who stave off the prevalent relapse rates once the newness of a non-using lifestyle fades.

Research on self-complexity further illuminates additional perspective to the benefits of using goal setting and life achievements to ameliorate problematic behavior and identity turbulence. Defining self-complexity as having multiple cognitive self-aspects with clear distinctions among them, Linville (1985; 1987) repeatedly found that people with greater self-complexity experience less variability in affect and self-appraisal, less vulnerability to depression

and perceived stress, and even fewer physical symptoms of illness such as the flu. Regarding the present study, adopting multiple aspects of self might include an identity within a 12-step fellowship, within a budding career or educational journey, and an aspect of self at church or with a new hobby. Linville uses an example of a woman whose only two self-aspects are wife and lawyer (Linville, 1985). If the woman then encounters a divorce, there may be too few other self-supports to fall back on and when these identities are intertwined (if, for example, the couple also worked together), the negative impact of one is even more likely to spill over into the others (Linville, 1985; 1987). A recovering addict could abate negative self-appraisal due to a relapse or depression amidst a difficult stretch of recovery by diversifying their self-aspects. Being a volunteer, hunter, or cook are all self-aspects that could serve to buffer the negative impact on one core aspect of self. Early on, recovering addicts may have this self-complexity limited to “addiction me” and “recovery me”. Based on this research, it seems wise to utilize career and vocational ambition to establish additional identities that are unrelated to addiction to shield themselves from the vulnerability of low self-complexity.

Additional conceptual support for non-addict identity comes from studies that distinguish a clear change in personality for the person recovering from addiction. Dunlop and Tracy (2013) reviewed the narratives of recovering alcoholics with over 4 years sober compared to those with less than six months sober and identified self-redemption, defined as a personal description of a positive personality change following a negative experience, as a significantly distinguished quality of those with more than four years sober (Dunlop & Tracy, 2013). A follow-up portion of the study followed the participants with less than 6 months sober and found that 83% of those who expressed self-redemptive narratives maintained their sobriety between longitudinal assessments compared to only 44% within those who did not share these types of narratives

(Dunlop & Tracy, 2013). Because self-redemption was defined as a positive personality change, the present study's concept of educational/vocational achievement may serve as a component of the internal comparison for self-redemptive stories.

There is virtually no other previous literature directly examining Rutledge's (2004) claims that education can serve as a way out of addiction by qualifying non-addict identity not simply as what one does not do but by providing an alternative conceptualization of who this person is now. If additional quantitative evidence can be found to bolster these findings, then it may reform treatment services with a greater emphasis on educational and vocational reintegration into society. A person in recovery could then experience the benefits of increasing competence with societal norms because the average person unfamiliar with addiction would not necessarily value and respect another individual for simply not indulging in drugs or alcohol as their peers in a 12-step fellowship may praise them for. Reintegration could potentially supplement the individual's acceptance within a recovery network by broadening that base to non-recovery related environments and relationships as well.

Education

One highly relevant study did find a significant negative linear relationship between level of education and relapse rates (Blum et al., 2014). Though the study only followed participants over a 12-month period, education was considered more of a demographic variable, and their main purpose was to identify the need for nutrient therapy for athletes recovering from injury, this study stumbled upon the same effect that the present study aims to solidify. Another study similarly touched on this effect amongst alcohol-dependent participants finding that low educational achievement prior to entering treatment predicted post-treatment relapse (Greenfield, 2003). Low school achievement was also one of many predictors for relapse amongst drug

abusers in a Swedish study (Kendler, Ohlsson, Sundquist, & Sundquist, 2017). A link has also previously been established between education attainment and smoking cessation (Caraballo, 2014; McDermott, Dobson, & Owen, 2009; Higgins, et al., 2009; Solberg, Asche, Boyle, McCarty, & Thoele, 2007; White, Redner, Skelly, & Higgins, 2014). Instead of interest in how previous education level predicts relapse, however, the present study intends to show that those who pursue education after getting clean, are more likely to stay clean longer.

Regarding behavioral change, there is evidence to support that reinforcing alternative behavior facilitates recovery (Lamb et al., 2016). Goal achievement could fit this template of an alternative behavior to addiction and other links from education to recovery from addiction have been investigated. Though the first published study on this topic was conducted at only one institution, collegiate recovery communities/programs have shown some promise in facilitating an environment conducive to recovery by providing students with a variety of on-site support resources such as self-help meetings, sober housing, and counseling services (Cleveland, Harris, Baker, Herbert, & Dean, 2007).

When considering multiple locations more recently, over 400 students participating in collegiate recovery programs reported an average clean time of almost 3 years and a mean relapse rate of just 8% (Laudet, Harris, Kimball, Winters, & Moberg, 2015). These findings suggest two things. First, the combination of a recovering addict directly in a college setting (albeit a recovery supporting one) yields lower relapse rates compared to the 57% to 90% relapse rates mentioned above (Laudet, Harris, Kimball, Winters, & Moberg, 2015; Miller, Walters, & Bennett, 2001; Monahan & Finney, 1996; Smyth, Barry, Keenan, & Ducray, 2010). Secondly, if using a one-time survey design found an average clean time of almost 3 years then it is likely that many of these participants acquired some time abstinent before returning to college

(generally a 4-year endeavor). One additional noteworthy finding from this population was that 89.8% had attended a 12-step meeting within the past month (such as Alcoholics Anonymous), where abstinence is promoted and practicing 12 steps are emphasized as a means of positive change (Laudet et al., 2015). Naturally, this raises the question as to whether these outcomes had anything to do with the college environment or were simply due to 12-step meeting participation. However, another study showed that even with high levels of participation in Alcoholics Anonymous, the lowest relapse rates without this specific consideration for a college environment were 21% (Kaskutas et al., 2005).

Vocation

Goal achievement does not necessarily need to be focused solely on education. Vocation is another area where achievement could potentially yield strong salience for competency and identity (Eccles, 2009). One study showed no significant differences in acquiring a job between a control group and a group of recovering addicts who were given three sessions of job seeking training (Svikis et al., 2012). Educational/Vocational achievements have, however, been linked with lower recidivism in a different population. A program combining acquiring a GED and vocational training amongst inmates boasted a 6.7% recidivism rate compared to 26% amongst those who completed neither causing the authors of the study to plainly state that “Education is a change agent” (Gordon and Weldon, 2003, p. 200). Interestingly, another similar study touting the benefits of such programs regarding inmate recidivism also seemed to tap into the potential confound of age that Winick (1962) addressed. In this case, employment opportunities were found to reduce recidivism but only for those age 27 and older (Uggen, 2000). There are mixed reviews on the efficacy of these programs with results potentially clouded by gender differences (Richmond, 2014) and selection bias (Visher, Winterfield, & Coggeshall, 2005).

Though this may seem discouraging, it is possible that merely obtaining a job is not a sufficient outcome measure. The book *Make Your Job a Calling*, summarizes empirical work on the importance of finding careers that fulfill a deep sense of purpose or tailoring one's current situation to a calling and how this concept is credited with greater life satisfaction (Dik & Duffy, 2012). At face value, this appears as though it could be especially beneficial for the recovery population. There is likely a difference between discovering a calling (or at least a well-suited fit) for someone experiencing a personality renaissance versus simply finding the next paying gig. That is why educational and vocational achievement are being considered similar in the present study. It is not the job or the act of going to school alone that is suspected to solve anything but rather the value that shaping behavior through achievement brings as a positive reinforcer potentially promoting competence, self-efficacy, self-worth, and ultimately a reborn identity. This "I was able to get a job" mentality may suffice early in recovery but is dubiously analogous to "I am a nurse", an enduring identity change that sustains societal competence, changes personal narratives, and potentially facilitates long-term recovery.

Social Support

If a self-identity overhaul is what is clandestinely behind many success stories, it is reasonable to examine some secondary hypotheses regarding potential components of this new identity as well. Generally speaking, Baumeister and Leary (1995) explored the importance of the need to belong and the negative effects of a lack of interpersonal attachments. Alexander, Coombs, and Hadaway (1978) built what would later be referred to as "Rat Park" in order to challenge the previous common knowledge of drug addiction: chemical hooks. Much of previous drug studies involving rats until that point had only used isolated conditions. So, drug consumption behavior was hypothesized to differ when rats are provided a large, open

environment with toys, exercise, food, and contact with other rats. This groundbreaking study showed that rats who enjoyed the benefits of Rat Park, mainly socialization, were far less likely to consume morphine (Alexander, Coombs, & Hadaway, 1978). Although generalizing from rats to humans is a tenuous exercise, there is certainly value to be drawn from these conclusions.

Like the example given earlier, a recovering alcoholic who continues to hang out with only his former friends who drink or chooses to isolate themselves instead, will likely relapse.

Diminished social support has been linked to increased symptoms of depression (Lakey & Cronin, 2008). This is relevant because depression is often co-morbid with substance abuse disorders and depression can even predict relapse (Bradizza, Stasiewicz, & Paas, 2006).

Evidence has been found to suggest that social support is a critical component of recovery from medical outcomes as well (Lewis, Abramowitz, Koenig, Chandwani, & Orban, 1991).

Spiritual Distress

Another topic with anecdotal evidence, spirituality, has often been difficult to quantify. However, Hill and Pargament (2003; 2008) articulate the importance of expanding the scope of religious and spiritual struggles in future conceptualization and measurement of spirituality research and others have specifically made the same appeal within the context of addiction research (Galanter, 2007; Green, Fullilove, & Fullilove, 1998). One study found significantly higher levels of faith and spirituality for those who were actively maintaining their recovery compared to those who continued to relapse (Jarusiewicz, 2000).

Another study found that guilt and shame, as a result of ‘moral injury’, are significantly associated with suicidal ideation for military populations (Bryan, Morrow, Etienne, & Ray-Sannerud, 2013). The concept of moral injury appears particularly relevant when considering that people in recovery from addiction are analogously more likely to express feelings of shame

(O'Connor, Berry, Inaba, Weiss, & Morrison, 1994) and guilt (Meehan, O'Connor, Berry, Weiss, & Acampora, 1996). Though their guilt may likely be from very different sources, the idea that moral or spiritual distress can lead to such powerfully negative outcomes in populations associated with trauma merits further consideration amongst recovering addicts. Yet another study in this arena discovered that negative religious coping was associated with risk for suicide amongst 125 Iraq and/or Afghanistan Veterans (Currier, Smith & Kuhlman, 2017). Researchers concluded that to the extent that participants experienced spiritual distress (whether identifying as religious or non-religious), they also experienced conflict with their spiritual health and this increased their risk of engaging in suicidal behavior. If these findings generalize to other populations, then a similar scale measuring spiritual struggles could illuminate the relationship with spiritual wellness and long-term recovery from addiction.

Locus of Control

Similarly, Locus of Control has also been implicated as sharing some relationship with addiction. Rotter and Mulry (1965) pioneered the idea that beliefs regarding the source of control over one's life qualify people into one of two categories; external control implies an expectancy that luck, fate, or powerful others determine the course of one's life while internal control suggests that a person largely controls their own life by the choices they make. If someone who has "hit bottom" to the point where they have sought professional treatment, it is reasonable to hypothesize that they feel as though nothing they do matters and that all control of their lives is held by unknown or powerful others. If someone has lost control and the pain is too great to bare, addiction can be perceived as a solution or a better alternative at a minimum. As one remains abstinent, however, it is hypothesized that there is a reclaiming of personal responsibility. In 1978, this idea was generally supported (although, with skepticism) and

researchers suggested that those who succeeded in treatment increasingly developed an internal locus of control (Rohsenow & O’Leary 1978). More recently, this was confirmed in Israel when 112 participants recovering from addiction reported a shift from external towards internal locus of control after 13 months in a therapeutic community program (Amram & Benbenishty, 2014).

The present study will examine whether as participants report accumulating clean time, they shift towards an internal locus of control as they realize that there are some things that they can control to make differences in their lives. A popular prayer within 12-step recovery programs such as Alcoholics Anonymous, which has even been reviewed for its utility in helping teach students about stress management says the following: “God, grant me the serenity to accept the things I cannot change, the courage to change the things that I can, and the wisdom to know the difference” (Campbell, 2015, p. 5). The fact that this is a mainstay and common refrain within these programs suggests that there was previously a problem with acceptance, action, and judgement. While this does not suggest a full swing to internal locus of control, it does imply that learning to change the things that one can, is a target principle to be achieved.

Self-Control

Lastly, many often suggest that addicts simply have no self-control. Healthier people may be forgetting, however, what Kemp, Channer, and Zahn (2016) remind us, which is that Self-Control and Self-Regulation work more like a muscle that can be fatigued or even depleted. When considering that people who struggle with addiction are more likely to have endured a significant trauma at some point (Heffernan, et al 2000; Sacks, McKenrick, & Banks, 2008; Evren, Kural, & Cakmak, 2006), it is easier to understand how self-control may have been depleted. Simply maintaining daily activities could be sufficient expenditures of this energy if the suppression of a past trauma has not been clinically or emotionally confronted. In 2009,

Ferrari, Stevens, and Jason found evidence in a cross-sectional analysis of 600 participants supporting the idea that self-regulation is positively correlated with length of abstinence.

Another study that supports this effect also goes further in proposing a behavioral economic approach while reconstructing the will, including things such as bundling smaller rewards in order to build self-control back up (Monterosso & Ainslie, 2007).

Hypotheses

Each of the previous research questions posed serve as potential proxies for non-addict identity factors. The purpose of this study is to identify the presence of several components, the longer someone remains abstinent from drugs and alcohol. The central hypothesis of the present study is that people who achieve long-term recovery have also incorporated educational and/or vocational achievements into their life that supplement their non-addict identity more so than people with lesser lengths of clean time. Second, a scale of educational/vocational achievement will have a positive correlation with number of days clean. Educational/Vocational achievement will also be a significant predictor of clean time when running a multiple regression amongst the other potential predictors mentioned above. Additionally, long-term recovery is hypothesized to result in greater closeness to others (social support), greater self-control (a.k.a. self-regulation), less spiritual distress, and a shift from external locus of control to internal.

Method

Participants

For the present study, the main statistical analysis of interest was multiple regression. According to a power analysis conducted through G*Power (3.1.9.2), the range of participants required was between 100-225 to ensure statistical significance with 7 predictors and for a small to moderate effect size ranging from .1 to .2.

The participants in this study were 195 adults each at varying stages of recovery from drugs and alcohol. A Snowball technique and convenience sampling were used to collect data. Twenty-four participants started the survey and did not complete it possibly due to computer error of some sort or for other unknown reasons. Although the study originates from one location in the South Eastern United States, the online platform for the survey allowed for data to be collected from participants in over 30 different states and even four participants from different countries. The ages range from 19 to 70 years old ($M = 41.35$, $SD = 11.92$) and included 59% women. Participants originally reported a range from 3 to 13,778 days clean. For most analyses, however, statistical (above 10,000 days clean) and conceptual (unrealistic to assume someone with less than 60 days clean has achieved a license, certificate, or degree) outliers were removed (approximately 23). The findings can be interpreted as a cross-sectional view of recovery on a clean-time based timeline. Participation in the study was completely voluntary and no compensation was offered. Informed consent was given along with a demographic questionnaire.

Instruments

An online survey using Qualtrics was created to assess the various research questions of this study. The survey was comprised of Likert-scale questions and several fill-in-the-blank responses. There were 32 questions total and exploratory findings suggested that participation in the survey would take no longer than 10 minutes. Participants followed a link online to complete the survey from any computer, tablet or phone of their choosing so testing environments were likely to vary greatly. Participants were encouraged to complete the survey based on the suggestion that this survey is intended to collect effective factors or techniques related to their successful length of abstinence and this information may serve to help people in the future who

wish to do the same (See Appendix A). The survey is comprised of several existing scales that were modified for length and focus.

The Religious and Spiritual Struggles Scale (Exline, Pargament, Grubbs, & Yali, 2014) was originally designed to assess not spirituality but spiritual distress in military populations. It does not contain language specifically directed to military personnel. It was also designed to be applicable to participants whether they identify as religious or not. Lower amounts of spiritual distress were described as spiritual wellness in this study to aid interpretation of the variable. This 26-item scale has been found to have a Cronbach's Alpha of .91 and asks participants to indicate their agreement with statements such as, "Felt angry at God" on a 5-point scale (1 = not at all/does not apply, 5 = a great deal). For the purposes of the present study, this survey was reduced to 10-items, excluding the "Demonic" subscale completely and assessed specifically in reference to their "recent" feelings on the topic. At least one question from each of the remaining 5 subscales (Divine, Interpersonal, Moral, Ultimate Meaning, and Doubt) were deemed relevant and kept. The Cronbach's Alpha for the current sample was found to be .84.

A Brief Version of Levenson's Locus of Control Scale (Sapp & Harrod, 1993) was chosen for its concise 9-item scale assessing a participant's orientation towards either external or internal locus of control. This scale included 3 subscales: Internal (Cronbach's Alpha = .58), Chance (Cronbach's Alpha = .65), and Powerful Others (Cronbach's Alpha = .72). Participants are asked to indicate their agreement with statements such as, "My life is determined by my own actions" on a 7-point scale (1 = Strongly Disagree, 7 = Strongly Agree). For the present study, this survey was reduced to 3-items (one from each subscale) including reverse coded questions where higher scores would equal Internal Locus of Control and lower scores would reflect External. The Cronbach's Alpha for the current sample was found to be .42 (more on

this in the limitations section).

A Self-Control Scale (Jeong, Kim, Yum, & Hwang, 2016) was chosen to assess the level of agreement participants have with statements related to self-control such as, “I can deliberately calm down when excited” on a 5-point scale (1 = Strongly Disagree, 5 = Strongly Agree). This measure of self-control carried the benefit of brevity as it is only 6-items long (Cronbach’s Alpha = .77) and the present study included all of the original items. The Cronbach’s Alpha for the current sample was found to be .78.

The Medical Outcomes Study Social Support Survey (Lewis et al., 1991) assesses closeness and social support in a 20-item questionnaire (Cronbach’s Alpha = .91). Nineteen of the questions are on a 5-point scale (1 = None of the time, 5 = All of the time) and ask how often the participant feels that particular kinds of support are available to them such as, “Someone you can count on to listen to you when you need to talk”. There was also a fill-in-the-blank question that asks, “About how many close friends and close relatives do you have?”. The present study has supplemented this open-ended question with another, “How many of those also share similar struggles with addiction?” Overall, the 20-item survey was reduced to 12 items and the Cronbach’s Alpha for the current sample was .94.

The author of the present study also composed a number of questions related to educational achievement since getting clean, vocational achievement, and details regarding length of sobriety. Questions were presented in either a Likert scale format, yes or no response, multiple choice, or fill-in-the-blank. Several of the most relevant questions to the central hypothesis of this study include, “Have you earned any advanced certificate, licensure, or degree since getting clean?”, “Have you experienced a career change since getting clean/sober?”, and “Have you gained or rediscovered any new skills or hobbies since getting clean/sober?”.

Additional questions evaluate the highest level of education achieved. Six of these types of questions were consolidated to create the Educational/Vocational Achievement Scale. The Cronbach's Alpha for the newly created continuous variable was found to be .62. Demographic questions regarding age, sex, race, and socio-economic status were also included within the survey.

Procedure

A flyer was created (paper and electronic versions) for the study to promote recruitment that contained a link to the survey. Participants could either type in the available link from a paper flyer into their internet-based device or simply click the link if viewing the flyer from such a device. Accepting any range of days clean was especially important in order to compare data from a cross-sectional view. The researchers reached out to members of the addiction community for permission to post the recruitment flyer on several private Facebook groups for both Alcoholics Anonymous and Narcotics Anonymous. Once participants decide to follow the link, they were prompted with a Qualtrics survey from any internet-based device (phone, tablet, computer). The first page of the survey was an informed consent that must be signed before the survey can begin, but participants were free to stop the survey at any time for any reason.

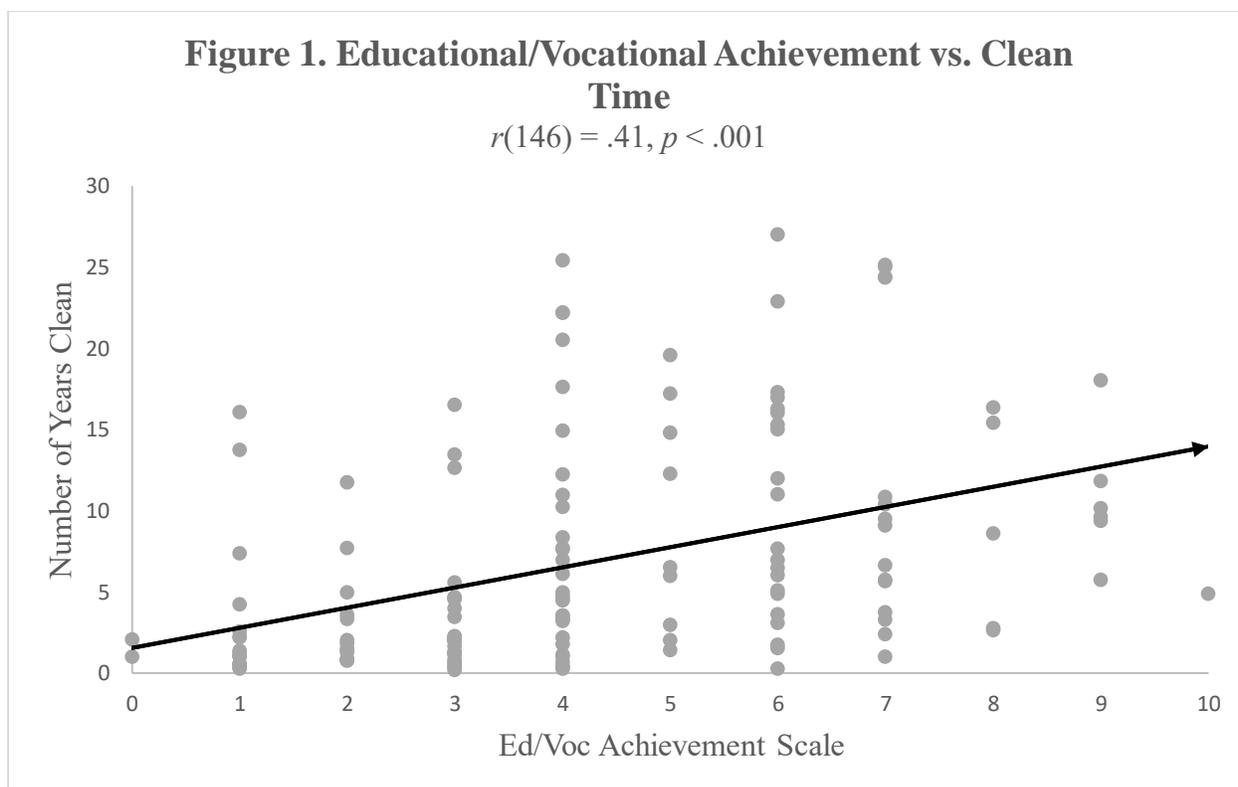
Results

Main Hypotheses

To test the main hypothesis of this study, an independent samples t-test was used to evaluate whether people who answered "yes" to the question "Have you earned any advanced certificate, licensure, or degree since getting clean?" had more clean time than those who said "no". As hypothesized, those who answered "yes" ($M = 3479.37$, $SD = 2553.43$) reported a greater number of days clean on average than those who said "no" ($M = 1762.99$, $SD = 2184.23$;

$t(148) = -4.42, p < .001$). This equates to roughly 10 years clean for those who said “yes” versus 5 years to those who said “no”. The magnitude of the differences in the means (mean difference = -1716.38, 95% CI: -2483.30 to -949.45) was large (eta squared = .12).

The relationship between educational and/or vocational achievement ($M = 4.11, SD = 2.32$) and number of days clean ($M = 2,483, SD = 2487.8$) was investigated using Pearson’s correlation. As hypothesized, there was a moderate, positive correlation between the two variables, $r(146) = .41, p < .001$, with increasing levels of educational/vocational achievement being associated with greater number of days clean (Figure 1). This relationship persisted when controlling for age by using a partial correlation. There was a slightly stronger, medium, positive partial correlation between educational/vocational achievement and number of days clean, controlling for age, $r(145) = .48, p < .001$.



Alternative predictors and exploratory analyses

In the spirit of discovery, further variables and analyses were considered. Below, Table 1 displays additional intercorrelations of the main variables of interest, the alternative predictors of clean time previously discussed, and several demographic variables such as age, sex, and income as a proxy for socio-economic status.

Table 1.

Correlation Matrix

Measure	1	2	3	4	5	6	7
1. Clean Time	-						
2. Ed/Voc Achievement	.41**	-					
3. SES (Income)	.11	-.01	-				
4. Locus of Control	.23**	-.00	.14	-			
5. Self-Regulation	.11	.16*	.02	.09	-		
6. Spiritual Wellness	.26**	.25**	.08	.18*	.18*	-	
7. Social Support	.07	.19*	.16*	.03	.18*	.27**	-
8. Age	.57**	.08	.12	.30**	.20**	.23**	-.02

* $p < .05$, ** $p < .001$

A multiple regression analysis, with age, sex, socio-economic status, locus of control, self-regulation, spiritual wellness, social support, and education/vocational achievement, was also conducted. The regression analysis was significant, with the model explaining 49.6% of the variance in clean time, $F(8, 129) = 15.87, p < .001$. As a result of this analysis, the only two measures that emerged as statistically significant predictors of clean time were age (beta = .52, $p < .001$) and educational/vocational achievement (beta = .40, $p < .001$)(See also Table 2 below).

Table 2.*Multiple Regression of Predictors on Days Clean*

Predictors	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Age	.52	14.50	7.77	< .001
Ed/Voc Achievement	.40	70.70	6.18	< .001
Social Support	.06	24.92	.87	.39
Spiritual Wellness	.04	25.79	.54	.59
Locus of Control	.04	52.60	.65	.52
SES (Income)	.03	241.31	.53	.60
Self-Regulation	-.06	38.21	-.87	.39
Sex	-.09	318.71	-1.50	.14

$F(8, 129) = 15.87, p < .001, R = .70, R^2 = .496$

Hierarchical Linear Regression was used to assess the ability of the educational/vocational achievement scale to predict clean time, after controlling for the influence of the demographic variables (age, sex, and SES) and then the four alternative predictors (social support, spiritual wellness, locus of control, and self-regulation). The demographic variables were entered at step one and explained 34% of the variance in days clean, F change (3, 139) = 23.51, $p < .001$. After the four alternative predictor variables were entered at step two, the model as a whole explained 36% of the variance in days clean. However, changes in R squared at this step were not significant, F change (4, 135) = 1.26, $p = .287$.

After entry of the educational/vocational achievement scale at step three the total variance explained by the model as a whole was 48%, $F(8, 134) = 15.461, p < .001$ (see also Table 3 below). The educational/vocational achievement scale explained an additional 12% of

the variance in clean time, after controlling for age, sex, SES, social support, spiritual wellness, locus of control, and self-regulation, R squared change = .119, F change (1, 134) = 30.77, $p < .001$. In the final model, only two measures were statistically significant, with age recording a higher beta value ($beta = .51$, $p < .001$) than the educational/vocational achievement scale ($beta = .36$, $p < .01$). Additionally, sex was found to be marginally significant ($beta = -.12$, $p = .06$).

Table 3.

Hierarchical Regression of Predictors on Days Clean

Steps/Predictors	Step 1	Step 2	Step 3
1. Age	.56*	.53*	.51*
SES (income)	.04	.02	.04
Sex	-.12	-.13	-.12
2. Social Support	-	.05	-.01
Spiritual Wellness	-	.13	.05
Self-Regulation	-	-.03	-.07
Locus of Control	-	.06	.08
3. Ed/Voc Achievement	-	-	.36*
R^2	.34*	.36	.48*
R^2 Change	-	.02	.12*

$F(8, 129) = 15.87$, $p < .001$, $R = .70$, $R^2 = .496$ Note. * $p < .001$, otherwise $p > .05$

Furthermore, 27 participants provided the specific certification, license, or degree earned in response to the questions regarding their achievements and the average reported length of clean time upon reaching these achievements was 5.7 years.

Discussion

The perspective of this study is heavily influenced by the field of positive psychology in that, examining recovery from a condition such as addiction may be more valuable than focusing

solely on the pathology inherent to disease models (Seligman, 2002). The bulk of previous and present research in addiction still rests on this old thinking, suggesting that this creative perspective has yet to permeate the field entirely. A telling synopsis of this point can be derived from names alone. We study addiction. We don't study recovery.

For the sake of parsimony, the central hypothesis of this study can be summarized with the comparison of those who reported earning an advanced certification, license, or degree since getting clean and those who did not. Those who answered "yes" to this question reported having almost twice as many days clean (about 10 years) as those who said "no" (about 5 years), confirming the first research hypothesis. Though there was not a significant correlation directly between clean time and the singular item "level of education" alone, this may be due to confounds regarding the tense of education questions listed below in the limitations. Regardless, the fact that those who did achieve either educational or vocational accomplishments - since getting clean - had more clean time than those who did not still echoes the sentiment that there is a relationship between educational achievement and lower relapse rates (Blum et al., 2014; Greenfield, 2003) and between vocational achievements and lower relapse rates (Gordon and Weldon, 2003; Uggen, 2000). Though it may lend itself to a stronger effect, it may also be wise to distinguish educational and vocational achievement from each other. However, the purpose of this study was to show that competency and identity building achievements were of a similar nature in their effect on enduring recovery.

Although not as empirically evaluated, 27 of the 63 participants who responded "yes" to earning a certificate, license, or degree also provided specifics in open-ended follow-up questions inquiring further about the specific accomplishments and the amount of clean time they had when these goals were achieved. Considering only the participants who provided this

additional information, the average clean time reported when these goals were reached was 5.7 years and because the large majority of those accomplishments were educational or vocational achievements that range between two to four years to achieve, it can be tentatively deduced that initiation of these goals may occur between two and four years clean. This finding parallels the previous interpretation of collegiate recovery programs boasting an average clean time of three years, implying that some participants may have entered these programs with at least a year clean (Laudet et al, 2015). If accurate, not only did this study confirm previous qualitative research that there is a link between educational/vocational achievement and recovery (Blum et al., 2014; Greenfield, 2003; Rutledge, 2004) but a critical period when a qualitative shift in identity occurs during recovery may have been discovered as well.

Originally perceived as insensitive to the recovery of people under 30 years old, Winick's (1962) claim that addicts "mature out" of addiction was evident in this study by the strong positive correlation between clean time and age. Naturally, as one accumulates days abstinent from drugs and alcohol they are simultaneously increasing in age as well, so there is some face validity linked to this conclusion. Controlling for age, however, not only yielded a significant positive correlation between educational/vocational achievements and clean time but in fact a stronger one, confirming the second hypothesis of the study.

Though it was not specifically projected which variables would be the best predictors, the third hypothesis of the study was simply that educational/vocational achievement would be a significant predictor amongst the other variables. Multiple regression including age, sex, socio-economic status, locus of control, self-regulation, spiritual wellness, social support, and education/vocational achievement revealed that only age and educational/vocational achievement emerged as significant predictors (confirming the third hypothesis). Though age was found to be

a stronger predictor than educational/vocational achievement, it was encouraging to know that education/vocational achievement possessed unique variance that did not overlap with other predictors. Furthermore, educational/vocational achievement was not anticipated to outperform social support, locus of control, or lack of spiritual distress though some of these variables did positively predict clean time when considered individually (See Table 1 above). The hierarchical regression shows that only considering those four psychological variables together had a significant effect on clean time.

Limitations

First, it is necessary to discuss that several issues arose relative to the scale for educational/vocational achievement. The Cronbach's Alpha for this was somewhat low (.62) and at first this was believed to be because the scale is made up of more "yes/no" questions than Likert scale response options. Upon closer review, there appeared to be confusion on the question regarding highest level of education "prior" and "since" getting clean. On the "since" getting clean question, there was no response available to indicate "no change" which often forced a response that implied that someone who earned a college degree before getting clean then went back after getting clean and pursued their GED or high school diploma (as just one example). Further confusion was evident by people who reported "yes" to earning a certificate, license, or degree *since* getting clean but indicated a higher level of education *prior* to getting clean. A few cases didn't make sense at all. One participant, as an example, marked "0" for highest level of education prior and since getting clean (suggesting they have never achieved so much as a GED or high school degree) but then indicated that they achieved a nursing degree at 6 years clean and became a Registered Nurse. For 17 cases, researchers took great care to correct data such as these appropriately, err on the side of being conservative in ambiguous

cases, or change to missing values when it would be too presumptuous to accurately interpret responses. Obviously, these were novel measures being tested and further consideration should go into designing a clearer and appropriate scale in the future.

Also, the reliability of the Locus of Control scale was significantly lower (Cronbach's Alpha = .42) than the traditional requirement of a minimum Alpha of .7, causing any direct interpretation of Locus of Control in this study to be suspect although this may have been deflated in part due to the limited number of questions the scale was reduced to. This was also the only section of the survey that contained reverse coding so it is possible that it was perceived as unclear or confusing to participants.

Finally, there are inherent limitations included with cross-sectional research. This study draws conclusions from assumptions between persons reporting various lengths of clean time as though they were occurring within individuals. Obviously, individuals are unique and what works for one person may not work for another. It would be optimal to find participants at the beginning of their recovery journey and follow them over time. This would be especially interesting because it would allow researchers to pin-point if there is a window of clean time that is best to start planning and initiating effort towards educational and vocational achievements. Longitudinal study designs, however, are not without their limitations. These studies are more expensive to conduct and with such a potentially volatile group of participants, attrition is a paramount concern. Patients' medical confidentiality rights also make it difficult for treatment centers to cooperate. Even when willing, seeking treatment can be a deeply private experience and participants' concerns about their anonymity being violated may outweigh their willingness to participate. Furthermore, not everyone in recovery from addiction goes to treatment and a systematic collection of participants who take alternative routes could be even more difficult.

Conclusions

Although genetic research is valuable regarding the etiology and prevention of substance abuse disorders, it does not solve the immediate problem of someone struggling with addiction nor inspire the motivation necessary to commit to recovery. The treatment approach of promoting educational and vocational achievement is closely intertwined with a shift in environmental influence and the resulting benefits may shift life experiences to a less destructive trajectory. This relationship simultaneously may serve to bolster identity transformation. These points support that the development of non-addict identity is important in the process of recovery from addiction and that educational and/or vocational achievement may serve to facilitate this transformation. After confirming the hypotheses in this study, it is apparent that promoting the development of non-addict identity and a framework for educational/vocational rehabilitation should move to the forefront of consideration in treatment practices for those in recovery from substance abuse disorders. It can be concluded that direct service providers to people recovering from addiction can consider emphasizing the importance of pursuing educational and vocational accomplishments as they are linked with longer lengths of clean time, likely because legitimacy promotes non-addict identity. Future studies should also consider other factors that may contribute to identity such as parenthood. Further investigation is needed to tease apart what achievements are more effective and for whom but clearly there is a gap in the body of knowledge surrounding addiction that this study addresses.

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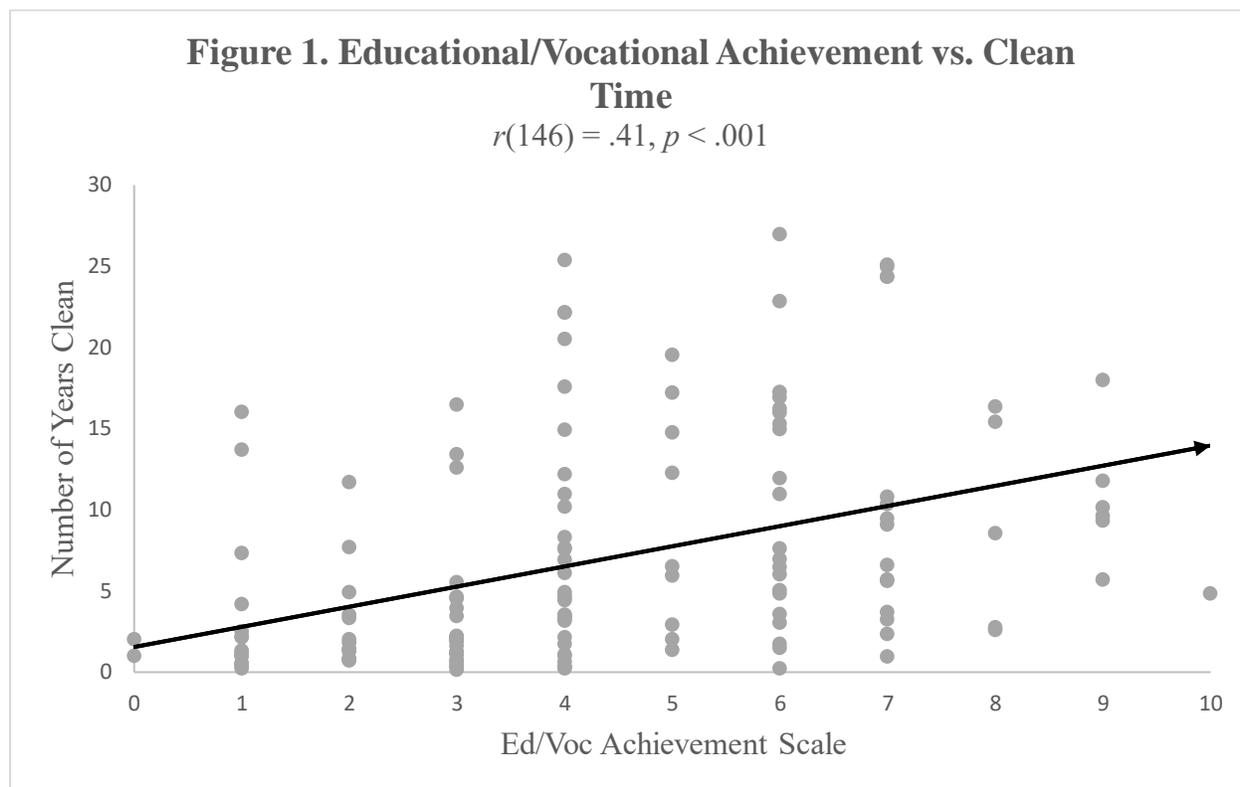
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Appendices

**Table 1.***Correlation Matrix*

Measure	1	2	3	4	5	6	7
1. Clean Time	-						
2. Ed/Voc Achievement	.41**	-					
3. SES (Income)	.11	-.01	-				
4. Locus of Control	.23**	-.00	.14	-			
5. Self-Regulation	.11	.16*	.02	.09	-		
6. Spiritual Wellness	.26**	.25**	.08	.18*	.18*	-	
7. Social Support	.07	.19*	.16*	.03	.18*	.27**	-
8. Age	.57**	.08	.12	.30**	.20**	.23**	-.02

* $p < .05$, ** $p < .001$

Table 2.*Multiple Regression of Predictors on Days Clean*

Predictors	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Age	.52	14.50	7.77	< .001
Ed/Voc Achievement	.40	70.70	6.18	< .001
Social Support	.06	24.92	.87	.39
Spiritual Wellness	.04	25.79	.54	.59
Locus of Control	.04	52.60	.65	.52
SES (Income)	.03	241.31	.53	.60
Self-Regulation	-.06	38.21	-.87	.39
Sex	-.09	318.71	-1.50	.14

$F(8, 129) = 15.87, p < .001, R = .70, R^2 = .496$

Table 3.*Hierarchical Regression of Predictors on Days Clean*

Steps/Predictors	Step 1	Step 2	Step 3
1. Age	.56*	.53*	.51*
SES (income)	.04	.02	.04
Sex	-.12	-.13	-.12
2. Social Support	-	.05	-.01
Spiritual Wellness	-	.13	.05
Self-Regulation	-	-.03	-.07
Locus of Control	-	.06	.08
3. Ed/Voc Achievement	-	-	.36*
R^2	.34*	.36	.48*
R^2 Change	-	.02	.12*

$F(8, 129) = 15.87, p < .001, R = .70, R^2 = .496$ Note. * $p < .001$, otherwise $p > .05$

Curriculum Vitae

Daniel Alan Crutchfield Jr.**Education**

Master of Science in Psychological Sciences | University of North Florida | Jacksonville, Florida

- MS anticipated April 2018
- Current GPA: 4.0

Bachelor of Arts in Psychology 2016 | University of North Florida | Jacksonville, Florida

- Summa Cum Laude
- Psychology GPA: 4.0

Bachelor of Business Administration in Business Management 2007 | University of North Florida

- Cumulative Undergraduate GPA 3.13
- Minor in Marketing

Research Experience

University of North Florida | Jacksonville, Florida

Master's Thesis, Supervised by Dominik Guess, Ph.D., 2016 to 2018

- Developed and executed study examining substance abuse and factors that facilitate long-term recovery by rebuilding a non-addict identity such as educational/vocational achievement
- Conducted literature review, composed survey, and created recruiting collateral
- Collaborated with community partners such as addiction treatment centers and recovery organizations to develop participant surveys, IRB protocols, and ethical recruitment techniques
- Led data collection process, ran analyses, interpreted results, and authored the manuscript

Mayo Clinic | Jacksonville, Florida

Clinical Research Internship Study Program (CRISP), Summer 2016

- Intervention Radiology Department, mentored by Glenn Sturchio, Ph.D.
- Assisted in a project assessing radioactive risk of cremated post-mortem liver treatment patients
- Prepared manuscript for publication including literature review, entering data, coding data, analyzing data and manuscript writing
- Orally presented project findings via power point at CRISP campus-wide symposium
- Developed qualitative family impact survey in collaboration with Survey Research Center
- Participated in IRB and HIPPA continuing education training

New York University | New York, New York

Extern for NYU Summer Program for Kids (SPK), Summer 2015

- Department of Child and Adolescent Psychiatry, mentored by Yamalis Diaz, Ph.D.
- Assisted in a project examining the efficacy of behavior therapy on children with ADHD
- Conducted in-field daily data collection and analysis of token economy strategies to guide treatment decisions during summer camp program
- Implemented daily report card system to review and track children's progress on target behaviors
- Implemented individual behavior plans, tracking reinforcement, contingency plans and outcomes

University of North Florida | Jacksonville, Florida
 Research Assistant to Angela Mann, Ph.D., 2015 to 2016

- Developed the research design and executed undergraduate research project examining college student perceptions of diagnosis disclosure from fellow students with Autism Spectrum Disorders
- Conducted literature review and created vignettes to be used with study design
- Composed participant survey and developed IRB protocols
- Conducted exploratory factor analysis & MANOVA analyses to address research questions
- Led data collection process for project/manuscript which is still in progress

Manuscripts in Preparation

- Crutchfield, D. A.** (Master's Thesis submitted for publication). *Get legitimate: Achievements, non-addict identity, and recovery from addiction.*
- Sturchio, G. & **Crutchfield, D.A.** (in preparation). *Handling of radioactive decedents: What are the risks and psychological impact?*
- Mott, R., Mann, A., & **Crutchfield, D. A.** (in preparation). *College student perceptions of Autism disclosure amongst peers.*

Conference Presentations

- Crutchfield, D. A.**, & Guess, D. G. (2018). *Building non-addict identity: Educational/Vocational achievement linked to recovery from addiction.* Poster accepted to the annual APA Convention, San Francisco, California
- Crutchfield, D. A.**, & Sturchio, G. (2017). *Handling of radioactive decedents – What is the risk?* Oral presentation at the annual conference of the International Cemetery, Cremation & Funeral Association (ICCF), Nashville, Tennessee
- Crutchfield, D. A.** & Sturchio, G. (2016). *Psychological impact & radiation risk assessment for cremation of deceased Y-90 treatment patients.* Oral presentation at the Clinical Research Internship Study Program campus-wide symposium hosted by Mayo Clinic, Jacksonville, Florida
- Crutchfield, D. A.**, Mott, R., & Mann, A. (2016). *Effects of disclosure for college students with Autism.* Poster presented at the Diversifying Clinical Psychology Networking Event hosted by the Council of University Directors of Clinical Psychology (CUDCP), Miami, Florida
- Mott, R., **Crutchfield, D. A.**, & Mann, A. (2016). *Peer perceptions of diagnosis disclosure of ASD in college students.* Poster presented at the annual conference of the Florida Association of School Psychologists (FASP), Palm Harbor, Florida

Clinical Experience

River Point Behavioral Health | Jacksonville, Florida
 Therapist Intern, Spring 2017

- Supervisors: Rick Titus LMHC, CAP and Vincenza Stone, RMHCI
- Delivered therapy at in-patient dual diagnosis psychiatric facility via UNF practicum course
- Executed psycho-social assessments of patients in emergency stabilization unit (Baker Act)
- Facilitated process groups and psycho-educational group therapy sessions on various topics such as coping skills, problem solving, setting healthy boundaries, etc.
- Learned to observe individuals while conducting group, match their progress with goals, execute formal documentation related to patient care and relay updates to staff Psychiatrist, Dr. Boaz

New York University | Jacksonville, Florida

Counselor for NYU Summer Program for Kids (SPK), Summer 2015

- Child Study Center, mentored by Yamalis Diaz, Ph.D.
- Delivered an all-day-evidence-based, intensive, seven-week therapeutic behavioral treatment program for children (ages 7-11) with ADHD and other co-morbid emotional, behavioral, & social impairments
- Received one month of extensive behavioral training emphasizing positive reinforcement
- Utilized a point system, token economy, group problem-solving, time-out, social skills training, coping skills strategies and sports skills training to help the children label and modify behavior
- Assisted staff with crisis intervention and management
- Presented child cases to Howard Abikoff, Ph.D. in weekly group supervision consultations
- Received group consultation and supervision with Howard Abikoff, Ph.D., Yamalis Diaz, Ph.D., Karen Fleiss, Psy.D. and Stephanie Wagner, Ph.D.

Volunteer Experience

Conversation Partner Program | Jacksonville, Florida

Mentor, Summer 2017

- Supervisor: Sarah Flaniken, English Language Program at University of North Florida
- Met one-on-one with international student mentee weekly to facilitate a service for student to practice their conversational English with a patient, fluent American student
- Learned the value of clear communication, appreciation for different culture and cultural norms

Ready to Achieve Mentoring Program (RAMP) | Jacksonville, Florida

Lead Mentor for RAMP directed by the Independent Living Resource Center, 2015 to 2016

- Supervisor: Julie Gilson, RAMP Program Coordinator
- Taught and promoted independent living skills to at-risk high school students with Autism Spectrum Disorder and Emotional Behavior Disorders
- Collected & analyzed data for completing Individualized Mentoring Plans to aid in goal setting
- Assisted youth with making and achieving weekly goals related to student's career interests
- Discussed child cases in weekly direct supervision consultations with Program Coordinator

Research Interest

- Internalizing disorders including depression, anxiety, substance abuse and suicidality as well as novel techniques to combat these conditions through the lens of a positive psychology approach
- Practical recovery from mental health conditions and potential facilitating factors such as goal achievement, pursuit of education, and developing vocational purpose

Awards & Certifications

- Collaborative Institutional Training Initiative (CITI) certified 2016
- University of North Florida Dean's List 2016
- Outstanding Research Poster Award CUDCP Event 2016
- American Heart Association BLS/CPR Certified since 2014
- 2+2 Scholarship Award Recipient 2002-2007
- Bright Futures Scholarship Award Recipient 2002-2007

Work Experience

University of North Florida | Jacksonville, Florida

Graduate Teaching Assistant, 2017 to present

- Department of Psychology, supervised by Jennifer Wolff, Ph.D.
- Taught 2 sections of PSY3213L Research Methods Lab to undergraduate students
- Delivered lectures, graded all course work and maintained online learning platform
- Maintained regular office hours and assisted students outside of class as needed
- Chosen from highly selective pool of applicants

University of North Florida | Jacksonville, Florida

Academic Coach, Fall of 2016

- Department of Psychology, mentored by Elizabeth Brown, Ph.D.
- Served as teacher's assistant for SOP3004 Social Psychology Distance Learning Course
- Assisted course instructor with facilitation of the course & maintain weekly planning meetings
- Graded assignments, assessments, and discussions
- Participated in discussions and assisted students with technical and content related questions
- Sent out weekly announcements to inform students of upcoming assignments or course changes

Professional Affiliations

- Psi Chi (The National Honor Society in Psychology) UNF Chapter President, 2017 - present
- Graduate Psychology Organization (UNF) Academic Chair, 2017 - present
- Graduate Psychology Organization (UNF) Student Member, 2016 - present
- Psi Chi (The National Honor Society in Psychology) Student Member 2015 - present
- APA (American Psychological Association) Student Affiliate 2015 - present