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Views of addiction etiology predict religious individuals' willingness to help.

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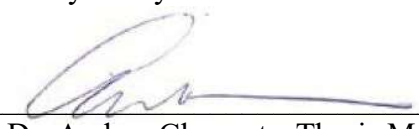
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Views of Addiction Etiology Predict Religious Individuals' Willingness to Help

Addiction is an ever-growing societal concern. According to the Substance Abuse and Mental Health Service Administration (SAMHSA, 2019) as many as 49.5% of surveyed individuals had used illicit drugs (SAMHSA). With this epidemic occurring, many people and organizations in communities have been acting to assist mental health and medical professionals in this fight. Prior research on addiction recovery and its association with religiosity and spirituality seem to point to a potential untapped resource in assisting those in recovery, the church (Brown, Tonigan, Pavlik, Kosten & Volk, 2013; Cole et al, 2018; DeWall et al., 2014; Galbraith & Conner, 2015). However, a potential problem in using this resource lies in church members' potentially stigmatic attitudes towards those addicted. Stigmatic attitudes, whether conscious or unconscious, that the church and its members may hold against those who are addicted to substances, may impact their willingness to help. The current research project will be assessing church members' attitudes towards addiction within the framework of their current religious or spiritual beliefs and their willingness to help those who live with addiction. For the purpose of this paper, the term "church" will be used to capture a broad group of individuals who are religious. Furthermore, the church is a broad inclusion of individuals from different religious backgrounds, that actively engage in church activities and practices.

It is important that we take measures to employ the church in the fight against addiction for many reasons, but significantly because the influence of the church is widespread within the community (Galbraith & Conner, 2015). A diverse variety of community members with varying levels of influence within the community can be found in just one church population. If the church begins assisting those in addiction recovery, hopefully we will soon see the effects of this throughout the community as church members implement these helpful attitudes about those

with addiction into their daily lives. Investigating the presence and degree of stigmatic attitudes across a religious sample, and how stigma predicts willingness to help will allow us to understand potential barriers to mobilizing the church community to address addiction. Assessing these attitudes will expand our understanding of addiction-related stigmas within religious populations. The research conducted in this study will also serve as a steppingstone to future research endeavors.

Addiction

For the purpose of this paper, addiction will be used interchangeably with substance use disorder (SUD) as defined by the Diagnostic and Statistical Manual of Mental Disorders as a "problematic pattern of using alcohol or another substance that results in impairment in daily life or noticeable distress" (APA, 2013, p. 24-25). The etiology of addiction is widely controversial within many fields, namely philosophy, biology, and psychology (Frank & Nagel, 2017). There is noteworthy controversy between two prominent models of addiction: the disease-model and the choice or willpower-model (Heather, 2017). Both of these models clearly articulate addiction as a deviation from societal standards. However, the essence of the current argument centers on which model holds more explanatory power of substance use disorder symptoms.

The disease-model of addiction defines substance use disorder as something that is uncontrollable. Existing research with animals and individuals who are addicted to substances seems to point to the mesolimbic reward system as a main contributor in substance use disorder (Frank & Nagel, 2017). Many researchers explain substance use disorder's grasp on the mesolimbic reward system as a hijacking of the brain's neurologic processes (Henderson & Dressler, 2017). Frank and Nagel (2017) found that rats and mice became addicted to a variety of drugs through repeated use of the substances and engaged in self-destructive behaviors in order

to gain access to those substances. This demonstration of self-destructive behaviors seems to point to compulsory symptomatology within drug-seeking behaviors, even to the point of risking bodily harm. The disease-model of addiction could fuel many different stigmatic attitudes such as the opinion that the disease (addiction) is chronic and relapsing, thus there is little to no chance of an individual completely recovering from it.

Though the disease-model of addiction has done well to explain many of the symptoms and the pathophysiology of substance use disorder, there are a number of critiques. Namely, those who are addicted to drugs can often go long periods of time choosing to refrain from this drug (Frank & Nagel, 2017). Evidence for this statement can be seen through survey data collected that showed most addicted people recover from their addiction, a finding that is inconsistent with the disease-model of addiction (Frank & Nagel, 2017). This has led some researchers to believe that addiction is more of a choice-based disorder, rather than a disease.

The choice-based model of addiction assumes that the addicted person is, to an extent, a willing participant, meaning they choose to engage in their substance use disorder (Henderson & Dressler, 2017). In this way, the choice-based model of addiction succeeds where the disease-model of addiction is critiqued. High percentages of spontaneous recovery coupled with responsiveness to contingencies seem to discredit the disease-model of addiction and point towards a choice-based disorder (Frank & Nagel, 2017). Enthusiasts of this model of addiction point out that the relief, rather than pleasure, of fulfilling the compulsion to use their drug of choice is a rational choice the addicted person makes (Frank & Nagel, 2017). This choice-based model of addiction is thought to fuel many addiction-related stigmatic attitudes (Lang & Rosenberg, 2017; Wiens & Walker, 2015).

Stigma

According to stigma researcher Goffman (1963), stigma is defined as a discrediting attitude regarding individuals toward some, so much so that they are devalued and are perceived as either being weak-willed or having a flawed character. Goffman further explains that individuals may engage in stigma to distance themselves from individuals they feel are potentially dangerous and who they interpret as being inferior to themselves (Goffman, 1963). The most commonly seen forms of stigmatic attitudes or beliefs are judging, mockery, inappropriate comments, and hostile looks (Mora-Ríos, Ortega-Ortega, & Medina-Mora, 2017). As a result of fear of being stigmatized, many stigmatized traits such as mental illness and sexual orientation are masked by the stigmatized individuals (Goffman, 1963).

Stigma towards Substance Abusers

As mentioned in the previous section, the choice-based model of addiction may encourage stigma towards those who are addicted to substances. This stigmatization of addiction and of people who are addicted to substances predicts the development of a negative perception of self and isolating oneself from loved ones (Ashford, Brown, Ashford, & Curtis, 2019). The number of studies assessing addiction-related stigma has paralleled the increasing prevalence rate of addiction. When stigma researchers Dschaak and Jontunen (2018) looked at differences between self-stigma, public stigma and attitudes toward help-seeking behaviors, they found that there was no difference between the effect stigmatization had on the victim of stigmatization and the type of stigma they were victimized using. All types of stigma predict negative outcomes on the person living with addiction (Ashford et al., 2019; Mora-Ríos et al., 2017). However, not all addictions are stigmatized the same way. In many cases, a person who is addicted to intravenous (IV) drugs is looked down upon more than an individual who is addicted to alcohol (Ahern,

Stuber, & Galea, 2017). These inconsistencies in stigmatization can be due to many reasons, however leading theories suggest that people tend to consider IV drug use morally worse than alcohol, partially due to negative stigmatization through media, news sources, and portrayals in movies (Ahern et al., 2017).

Self-Stigmatization

When faced with judgment from the public on a daily basis, it is clear why many of those who have substance use disorder often stigmatize themselves. Within the context of addiction, this is a phenomenon known as self-stigmatization, which is when an individual begins devaluing themselves in response to the behaviors they engage in (Matthews, Dwyer, & Snoek, 2017). As mentioned earlier, self-stigma can arise from shame surrounding an individual's drug use, as well as from society's stigmatization of addiction (Matthews et al., 2017). Self-stigma can result in a vicious cycle comprised of feelings of worthlessness and helplessness. In a recent study on drug use and stigma, it was found that in some cases the stigmatization of addiction was so influential that it rose to the point of being a person's master-status, which is the defining social position a person holds (Andersen & Kessing, 2019).

Stigmatization through Media

According to Cape (2003), stigmatization surrounding substance use is greatly influenced by portrayals of addiction in the media. According to several studies, the degree and nature of addiction stigmatization varies depending on the type of substances a person is misusing (e.g., Ahern et al, 2007; Cape, 2003; Couto e Cruz et al, 2018; Lang & Rosenberg, 2017). For example, those who are addicted to heroin are looked at more harshly than those addicted to alcohol by religious individuals (Ahern et al., 2007; Switzer & Boysen, 2009). Many of the stigmatized attitudes towards addiction come from mass media portrayal of addiction in movies,

video games, and on television; however, most of these attitudes or ideas about addicted people are wrong or misinformed (Cape, 2003). An example of wrong or misinformed attitudes or ideas about addicted people is the common media portrayal of addicted people as a rebellious free spirited, such is the case in Forest Gump in response to Jenny's perceived addiction (Cape, 2003).

Stigmatization through Language

In addition to looking at different types of stigma related to addiction, there have also been many studies conducted on the language physicians and mental health professionals use concerning addiction. These studies mostly were looking at whether using stigmatized or non-stigmatized language has an effect on efficacy of substance use treatment. In one study, researchers found that the term "drug addict" was associated with higher levels of stigmatized attitudes when compared to the term "opioid use disorder" (Goodyear, Haass-Koffler, & Chavanne, 2018). These results demonstrate that the terminology that doctors, mental health professionals, and the media use to describe those with substance use disorder has the potential to negatively impact those with addiction in their perception of the treatment, and ultimately treatment efficacy.

Addiction-related Stigma from the Church

Related to the choice-based model of addiction, the viewpoint that those who are addicted choose that path, is the morality of addiction. A moral view of addiction is typically used to refer to the weakness of humanity in regard to addiction. Over the last few years there have been multiple psychological studies of how religiousness is related to addiction treatment effectiveness (Allen & Hill, 2014). To begin, we will define and distinguish between religiosity and spirituality. For the purpose of this paper, religiosity and religiousness will be used

interchangeably and be defined as a system of religious attitudes, beliefs, and practices (Krentzman, 2017). This includes how often a person goes to church, whether they are active in their church, and how their church or religious affiliation shapes their lives in terms of discipline. For this paper, the church is defined as a broad inclusion of individuals from different religious backgrounds who are actively engaged in church activities and practices. Spirituality, on the other hand, is defined as an individual's connection to something larger than themselves (Brown et al., 2013). Because spirituality is typically a broader construct than religiousness, and is not necessarily tied to the church, only religiousness will be considered in this study.

To fully understand the church's attitude regarding addiction, one must understand the historical pattern of response the church has had towards mental health. In the past, and to some extent today, the church and the field of psychology have seemingly been in opposition in the matter of mental health treatment. This may go back to the thought that many individuals associated with the church believe that mental health disorders can be treated strictly within the context of the person's religion, while those in the field of psychology believe that mental health problems should be addressed in many aspects of a person's life, including religious beliefs as well as through treatment by credentialed mental health professionals (Innamorati, Taradel, & Foschi, 2019; Lattimore, 1997; Florez et al., 2015). Newberry and Tyler (1997) found that Methodist and Catholic clergy members were likely to think religious commitment to be an indicator of good mental health, while psychologists believe that receptivity to unconventional experiences, such as hearing God speak, is an indication of poor mental health. This argument has led to a rift in the collaboration of the church and psychologists to help religious individuals (Allen & Hill, 2014). This particular rift has caused some distress among religious individuals, with some individuals being looked down upon or mocked by other religious individuals for

going to counseling or therapy to get assistance for their mental health disorder (Innamorati et al., 2019). In response to this phenomenon, research was conducted to measure attitudes of religious people towards psychology, and vice versa. A research survey found that many clergy have differing opinions about psychologists, both positive and negative (Hodge et al., 2019). However, according to an earlier survey, many clergy are willing to work with psychologists to benefit their church members who have mental health disorders (Allen & Hill, 2014; Ellison & Levin, 1998). This indicates a shift in the church towards a more positive outlook on the mental health field and mental health professionals (Allen & Hill, 2014).

Religion has long been associated with addiction recovery. One of the hallmark recovery help organizations is Alcoholics Anonymous (AA), which has a core emphasis on spirituality and spiritual change as what is necessary to successfully recovery from addiction (Kelly & Eddie, 2020). Some researchers believe that religiosity is helpful in addiction recovery as spirituality and religiosity have indirect effects on an individual's psychological well-being (Kelly et al., 2011). These effects, reducing depression-like symptoms, supporting emotion regulation, encouraging participation in community activities, and providing coping mechanisms for day-to-day life stresses, are postulated to be a main factor in religiosity and spirituality's effectiveness in aiding in addiction recovery. We see this in DeWall et al.'s (2014) study that showed religious behaviors such as praying, meditating, and participating in church activities were associated with higher levels of self-control. Another study showed that religiosity was inversely correlated with reports of alcohol, marijuana and tobacco use (Wills, Yaeger, & Sandy, 2003).

More recently Galbraith and Conner (2015) found that religiosity was a significant moderator of the relationship between risk-seeking and marijuana usage. In terms of young

people, aged 12-18, risky behaviors such as drug or alcohol use and/or engagement and sexual activity have been found to be mediated by religiosity (Olson & Metsger, 2019). These studies provide evidence of religiosity as a protective buffer on drug usage. Meanwhile other studies have found that religious behaviors such as praying, meditating, and actively participating in church activities moderated alcohol use, and were associated with increases in self-control in terms of alcohol and other drug use (DeWall et al., 2014). According to the choice-based model of addiction, higher self-control would lead to an increased chance of quitting the addiction, meaning that implementing a religious element into treatment of a person with substance use disorder might aid in their recovery. On the other hand, proponents of the disease model would be more likely to believe that churches can help someone enter and stay in medical treatment.

Stigma and Etiology of Addiction

Because research has shown that pastors and religious leaders are willing to collaborate with mental health professionals on mental health matters and that involvement with the church creates a protective buffer against addiction, the question then becomes do some views of the church toward addiction predict how willing someone is to help addicted persons? In my opinion, there is a stigma within religious organizations against addiction, more so than most other physical or other mental health disorders. This stigma may be attributed to various theological ideas embedded within religious organizations.

Though there have been several studies focused on religiosity and spirituality as protective factors in engagement in risky behavior, there is little research assessing negative attitudes towards substance use within church populations. The aim of the current research study is to assess churchgoer's view of addiction as either disease-based or choice-based and whether

that view predicts willingness to help. That will be discussed in terms of whether stigmatic attitudes may be explanatory.

Stigmatic attitudes can serve as a barrier between people who provide community resources and those with substance use disorder, as well as lead to worse overall health and well-being of the addicted person (Couto e Cruz et al, 2018; Spencer, 2018). Beliefs about the etiology of addiction (choice versus disease) may differentially predict stigma, and therefore predict an individual's likelihood of helping someone who is addicted to substances.

Stigmatization (or its lack) has the potential to influence or change a person's willingness to help addicted persons. With instances of substance use disorder increasing, it is important now, more than ever, to assess the outcomes of stigmatization on those living with addiction.

Current Study

In order to research this topic, we administered a survey called the *Addiction, Attitudes, and Beliefs Scale* (AABS). The survey asks questions about demographic characteristics, as well as attitudes about addiction, religious beliefs, willingness to help people living with addiction, and includes a section on employer and employee views that is beyond the scope of the current study. The survey took approximately 20-30 minutes to complete. Our sample consisted of religious individuals across a variety of Christian denominations and nonreligious individuals. For this study, we only included those respondents identifying as religious. Our research question is as follows: Do self-reported attitudes and/or beliefs about addiction and substance use predict self-reported willingness to help individuals living with addiction?

Method

Participants

Upon approval from the Institutional Review Board (IRB), participants were recruited through social media advertising via Facebook and Reddit platforms, email, and through East

Tennessee State University's SONA research portal. Participants in this study included 336 individuals. Demographics indicated that 235 participants (69.9%) self-identified as female, 91 participants (27.1%) self-identified as male, and 10 participants (3.0%) identified as another gender identity. Of this sample, 259 respondents identified as Christian. Of these, 194 participants (74.9%) identified as female, 63 identified as male (24.3%), and 2 indicated another gender identity (0.8%). Age of the participants ranged from age 18-78 (mean = 35.12, SD = 17.74). Race/ethnicity demographics indicated that participants identified as White (91.5%), Hispanic (2.7%), African American (2.7%), Asian (1.2%), American Indian (0.8%), and Other (0.8%). Participation in the study was on a voluntary basis.

Materials

The survey included demographic items, a subset of items from the *Addiction Attitudes and Beliefs Scale* (AABS), and items from the *Tobacco, Alcohol, Prescription medication, and other Substance use Tool* (TAPS; McNeely, Wu, Subramaniam, Sharma, Cathers, et al. 2016). The AABS was developed for the larger study and the subset of items used for this study were adapted from previously validated measures: *Substance Use Stigma Mechanisms Scale* (SU-SMS; Luoma, O'Hair, Kohlenberg, Hayes, & Fletcher, 2010) and *Perceived Stigma Addiction Scale* (PSAS; Smith, Earnshaw, Copenhaver, & Cunningham, 2016). The participants were asked to select the number along the scale that most closely described them or their preferences. To indicate a choice-based etiology of addiction, we used the question "Someone who is addicted to substances could stop if they really wanted to" (1 = Agree Strongly to 5 = Disagree Strongly). The item used to indicate a disease-based etiology of addiction was "Addiction is a medical issue so it should be treated medically" (1 = Agree Strongly to 5 = Disagree Strongly). For this study, the question used to determine willingness to help was "I want to help someone

who is trying to overcome addiction any way I can" (1 = Agree Strongly to 5 = Disagree Strongly).

Design and Procedure

A cross-sectional survey research design was used to determine churchgoers' attitudes towards individuals who are addicted to substances. Using correlational analyses, the study assessed to what extent these attitudes predicted churchgoers' willingness to help an addicted person. The opening page of the survey contained the informed consent document. In order to participate, participants clicked to continue to the survey. Those who did not agree to continue were redirected to a thank you page. Upon providing informed consent, participants completed a survey on REDCap consisting of a battery of measures. Participants were prompted to fill out the demographic section containing 16 questions and to read a short excerpt operationally defining substance misuse for the purpose of the survey. They were then asked to respond to 41 items assessing their individual attitudes and beliefs about substance misuse. The survey took approximately 20-30 minutes for participants to complete.

Analyses

For the purpose of this study, we conducted descriptive statistics for demographic information and we specifically assessed whether churchgoers' attitudes and beliefs about the etiology of addiction predicted their willingness to help addicted persons. As mentioned, two questions from the AABS were chosen to indicate view of addiction etiology. The item "Someone who is addicted to substances could stop if they really wanted to" was used to indicate a choice-based etiology of addiction. The second item "Addiction is a medical issue so it should be treated medically" was used to indicate a disease-based etiology of addiction. The item "I want to help someone who is trying to overcome addiction any way I can used to measure

willingness to help" was used to indicate participants' willingness to help. Each item was treated as a single-item measure of one of the constructs of interests. Percentages were calculated to see how commonly each view was endorsed and how likely individuals were to express willingness to help. Each was analyzed as an ordinal, 5-choice Likert scale. A Spearman's Rho correlational matrix was created using SPSS software to assess the relationship among these ordinal variables of interest to determine if willingness to help was predicted more strongly by either view of etiology.

Results

The present study assessed addiction etiology among religious individuals and attempted to predict their willingness to help based on the addiction etiology. Of the 259 participants in the study, 174 individuals (67.2%) reported that they had a close friend or relative who struggled/struggles with addiction. The data also indicates that 14 participants (6.3%) felt that they would benefit from treatment for substance misuse, 29 participants (12.9%) indicated they would not benefit from treatment for substance misuse, and 181 participants (80.8%) responded that the question was not applicable, they did not misuse substances. When asked if participants had ever had more than 5 alcoholic drinks (men) or 4 alcoholic drinks (women) in one day within the last year, 68 individuals (30.5%) reported they had. Participants were also asked to disclose their use of other substances. It was reported that 15 individuals (6.7%) of participants had used prescription medications recreationally within the last year. 34 individuals (15.2%) indicated they had used illicit drugs. Participants were asked to assess if they believed they had a problem misusing substances; 83 (37.4%) participants indicated they did feel they had a problem misusing substances.

Spearman's Rho correlation s showed a significant negative relationship between belief in a choice-based etiology and willingness to help across religious individuals ($\rho = -0.333$, $p = 0.01$). Belief in a disease-based etiology of addiction did not significantly predict willingness to help ($\rho = 0.64$; $p > .05$). Furthermore, our analyses also indicated that if an individual holds the belief of a disease etiology, they are less likely to believe that an individual can stop their addiction if they wanted to ($\rho = -0.196$, $p = 0.01$). Interestingly, our data also indicated that the older an individual is, the more likely they are to believe that a person with an addiction can stop if they want to ($\rho = 0.300$, $p = 0.01$).

Discussion

The results from our analyses partially supported our hypothesis that addiction etiology beliefs of religious individuals would predict their willingness to help. For the present study, the question used to define a moral etiology of addiction was "Someone who is addicted to substances could stop if they really wanted to", while the question used to define a disease etiology of addiction was "Addiction is a medical issue so it should be treated medically". Results support our original hypothesis of addiction etiology predicting willingness to help among religious individuals, but only for those who believe the person has a choice in their drug use. This belief predicted less willingness to help. Our results indicated that a belief in a disease etiology of addiction had no significant relationship with an individual's willingness to help.

The results of this study indicate that a belief in a choice-based etiology of addiction has a significant negative relationship with an individual's willingness to help an addicted person. It could be that believing a person has a choice about whether they use substances could lead to stigmatic attitudes regarding individuals who were addicted to substances. The moral etiology of addiction is defined as the belief that addiction is a choice and furthermore the only way an

individual can recover from an addiction is to repent and right themselves in God's eyes (Holt, 2015). We theorized that individuals who follow this pattern of thinking likely believe that those who are addicted to substances are less valuable or less worthy of help before proving their repentance. The results indicate that this is a plausible explanation.

The church has the ability to be a quintessential partner in fighting addiction within our country. These results allow us to see what may hold a religious individual back from being willing to help an individual with an addiction. If we are able to modify some of these factors, we can anticipate more community resources available to individuals with an addiction, as well as a feeling of support or encouragement directed towards addicted individuals from the church.

It is important that we take measures to employ the church in the fight against addiction because the influence of the church is widespread within the community. A diverse variety of community members with varying levels of influence within the community can be found in just one church population. If the church begins assisting those in addiction recovery, we will soon see the effects of this throughout the community as church members implement these changes in their daily lives. Researching these attitudes across differing church populations will allow us to know the extent that the stigma against addicted people spreads and what educational tools can be used to remedy the stigma.

The potential implications that this research can have are important. Our research indicated that there are religious individuals who believe that substance use is largely based on user choice. By identifying this way of thinking, we can help to provide understanding the limitations this way of thinking may predict. This research can also be used as a stepping-stone for many future research projects about addiction and the attitudes held about addiction by those who are religious or spiritual.

Limitations to this research include a lack of generalizability due to the majority of participants being female (73.6%) and White (92.1%). Another limitation is that the measure is based on self-report, and given the sensitivity on the topic, individuals may not be willing to report accurately. Additionally, using one item for each etiology construct does not give a complete picture of someone's beliefs about etiology of addiction, and the one-item measures have not been validated.

In conclusion, the present study was created to assess the relationship between self-reported view of addiction etiology and willingness to help someone living with addiction. We specifically used religious individuals for our participants, as we wanted to see how etiology of addiction may predict the impact the church can have in the community in regard to assisting individuals with addiction. Our results indicated that a choice-based etiology of addiction predicted less willingness to help. We believe that these results reflect a need for education and further assessment into whether stigmatic attitudes or beliefs are created by a belief in this etiology of addiction. Ultimately we anticipate that the results of this study will be used as a stepping stone for further research into views of addiction etiology and religious individual's willingness to help, as well as serve as a primary guideline as to what may inhibit religious individuals' willingness to help the population of individuals who are living with an addiction.

References

Ahern, J., Stuber, J., & Galea, S. (2007). Stigma, discrimination and the health of illicit drug users. Drug and Alcohol Dependence, 88, 188–196. http://dx.doi.org/10.1016/j.drugalcdep.2006.10 .014

Allen, G. E. K., & Hill, C. (2014). Exploring perceived attitudes of counseling between LDS religious leaders and mental health therapists. Religion and Psychotherapy, 36, 71–82.

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Washington, DC: Author.

Andersen, D., & Kessing, M. L. (2019). Stigma, problem drug use, and welfare state encounters: Changing contours of stigmatization in the era of social investment. Addiction Research & Theory, 27(4), 277–284. https://doi.org/10.1080/16066359.2018.1508568

Ashford, R. D., Brown, A. M., Ashford, A., & Curtis, B. (2019). Recovery dialects: A pilot study of stigmatizing and nonstigmatizing label use by individuals in recovery from substance use disorders. Experimental and Clinical Psychopharmacology. https://doi.org/10.1037/pha0000286.supp (Supplemental)

Brown, A. E., Tonigan, J. S., Pavlik, V. N., Kosten, T. R., & Volk, R. J. (2013). Spirituality and confidence to resist substance use among celebrate recovery participants. Journal of Religion and Health, 52, 107–113. http://dx.doi.org/10.1007/ s10943-011-9456-x

Cape, G. S. (2003). Addiction, stigma and movies. Acta Psychiatrica Scandinavica, 107(3), 163–169. https://doi.org/10.1034/j.1600-0447.2003.00075.x

Cole, H. A., Prassel, H. B., Keller, P. S., & Carlson, C. R. (2018). Religious beliefs and behaviors as predictors of substance use among college students. *Psychology of Religion and Spirituality*. https://doi.org/10.1037/rel0000227

Couto e Cruz, C., Salom, C. L., Dietze, P., Lenton, S., Burns, L., & Alati, R. (2018). Frequent experience of discrimination among people who inject drugs: Links with health and wellbeing. Drug and Alcohol Dependence, 190, 188–194. https://doi.org/10.1016/j.drugalcdep.2018.06.009

DeWall, C. N., Pond, R. S., Jr., Carter, E. C., McCullough, M. E., Lambert, N. M., Fincham, F. D., & Nezlek, J. B. (2014). Explaining the relationship between religiousness and substance use: Self-control matters. *Journal of Personality and Social Psychology*, *107*(2), 339–351. https://doi.org/10.1037/a0036853

Dschaak, Z. A., & Juntunen, C. L. (2018). Stigma, substance use, and help-seeking attitudes among rural and urban individuals. Journal of Rural Mental Health, 42(3–4), 184–195. https://doi.org/10.1037/rmh0000097

Ellison, C. G., & Levin, J. S. (1998). The religion– health connection: Evidence, theory, and future directions. Health Education & Behavior, 25, 700 –720. http://dx.doi.org/10.1177/109019819802500603

Flórez, K. R., Derose, K. P., Breslau, J., Griffin, B. A., Haas, A. C., Kanouse, D. E., … Williams, M. V. (2015). Acculturation and drug use stigma among Latinos and African Americans: An examination of a church-based sample. Journal of Immigrant and Minority Health, 17(6), 1607–1614. https://doi.org/10.1007/s10903-015-0161-9

rank, L. E., & Nagel, S. K. (2017). Addiction and moralization: The role of the underlying model of addiction. Neuroethics, 10(1), 129–139. https://doi.org/10.1007/s12152-017-9307-x

Galbraith, T., & Conner, B. T. (2015). Religiosity as a moderator of the relation between sensation seeking and substance use for college-aged individuals. *Psychology of Addictive Behaviors*, *29*(1), 168–175. https://doi.org/10.1037/adb0000037

Goffman, E. (1963). Stigma: Notes on the management of spoiled identity. Englewood Cliffs, NJ: Prentice Hall, Inc

Goodyear, K., Haass-Koffler, C. L., & Chavanne, D. (2018). Opioid use and stigma: The role of gender, language and precipitating events. Drug and Alcohol Dependence, 185, 339–346. https://doi.org/10.1016/j.drugalcdep.2017.12.037

Heather, N. (2017). Q: Is addiction a brain disease or a moral failing? A: Neither. Neuroethics, 10(1), 115–124. https://doi.org/10.1007/s12152-016-9289-0

Henderson, N. L., & Dressler, W. W. (2017). Medical disease or moral defect? Stigma attribution and cultural models of addiction causality in a university population. Culture, Medicine, and Psychiatry: An International Journal of Cross-Cultural Health Research, 41(4), 480–498. https://doi.org/10.1007/s11013-017-9531-1

Hodge, A. S., Hook, J. N., Davis, D. E., & McMinn, M. R. (2019). Attitudes of religious leaders toward integrating psychology and church ministry. Spirituality in Clinical Practice. https://doi.org/10.1037/scp0000200

Holt, James D. (2015) A Latter-day Saint Approach to Addiction: Aetiology, Consequences and Treatment in a Theological Context. Religions, Vol. 6 Issue 1, p1-13, 13p.

Innamorati, M., Taradel, R., & Foschi, R. (2019). Between sacred and profane: Possession, psychopathology, and the Catholic church. History of Psychology, 22(1), 1–16. https://doi.org/10.1037/hop0000106

Kelly, J. F., & Eddie, D. (2020). The role of spirituality and religiousness in aiding recovery from alcohol and other drug problems: An investigation in a national US sample. Psychology of Religion and Spirituality, 12(1), 116–123. https://doi.org/10.1037/rel0000295

Kelly, J. F., Stout, R. L., Magill, M., & Tonigan, J. S. (2011). The role of Alcoholics Anonymous in mobilizing adaptive social network changes: A prospective lagged mediational analysis. Drug and Alcohol Dependence, 114, 119 –126.

Krentzman, A. R. (2017). Longitudinal differences in spirituality and religiousness between men and women in treatment for alcohol use disorders. Psychology of Religion and Spirituality, 9(Suppl 1), S11–S21. https://doi.org/10.1037/rel0000096

Lang, B., & Rosenberg, H. (2017). Public perceptions of behavioral and substance addictions. Psychology of Addictive Behaviors, 31(1), 79–84. https://doi.org/10.1037/adb0000228

Lattimore, V. L. (1997). A theology of addiction: Spiritual, psychological, and social roots. Lattimore, Vergel L.. Journal of Ministry in Addiction & Recovery, Vol. 4 Issue 1, p47-62, 16p. Publisher: Taylor & Francis Ltd.

Luoma, J., O'Hair, A., Kohlenberg, B., Hayes, S., & Fletcher, L. (2010). The development and psychometric properties of a new measure of perceived stigma toward substance users, *Substance Use & Misuse, 45*(1-2), 47-57, http://dx.doi.org/10.3109/10826080902864712

Matthews, S., Dwyer, R., & Snoek, A. (2017). Stigma and self-stigma in addiction. Journal of Bioethical Inquiry, 14(2), 275–286. https://doi.org/10.1007/s11673-017-9784-y

McNeely, J., Wu, L. T., Subramaniam, G., Sharma, G., Cathers, L. A., Svikis, D., ... & O'Grady, K. E. (2016). Performance of the tobacco, alcohol, prescription medication, and other substance use (TAPS) tool for substance use screening in primary care patients. *Annals of internal medicine, 165*(10), 690-699.

Mora-Ríos, J., Ortega-Ortega, M., & Medina-Mora, M. E. (2017). Addiction-related stigma and discrimination: A qualitative study in treatment centers in Mexico City. Substance Use & Misuse, 52(5), 594–603. https://doi.org/10.1080/10826084.2016.1245744

Newberry, D. E., & Tyler, J. D. (1997). Mental health value differences between psychologists and clergy. Counseling and Values, 41, 155–158. http://dx .doi.org/10.1002/j.2161-007X.1997.tb00397.x

Olson, R., & Metzger, A. (2019). Disaggregating behavioral and psychological components of religious and spiritual development across adolescence: Variations by geographic location. *Psychology of Religion and Spirituality*, *11*(1), 1–8. https://doi.org/10.1037/rel0000132.supp (Supplemental)

Smith, L. R., Earnshaw, V. A., Copenhaver, M. M., & Cunningham, C. O. (2016). Substance use stigma: Reliability and validity of a theory-based scale for substance-using populations. Drug and Alcohol Dependence, 162, 34–43. http://dx.doi.org/10.1016/j.drugalcdep.2016.02.019

Spencer, K. M. (2018). Voices of recovery: An exploration of stigma experienced by college students in recovery from alcohol and/or other drug addiction through photovoice. Dissertation Abstracts International: Section B: The Sciences and Engineering. ProQuest Information & Learning. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=psyh&AN=2018-11223-022&site=ehost-live&scope=site

Substance Abuse and Mental Health Services Administration. (2019). Key substance use and mental health indicators in the United States: Results from the 2018 National Survey on Drug Use and Health (HHS Publication No. PEP19-5068, NSDUH Series H-54). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from https://www.samhsa.gov/data/

Switzer, B., & Boysen, G. A. (2009). The impact of religiosity and attribution theory on attitudes toward addiction and cancer. Mental Health, Religion & Culture, 12(3), 241–245. https://doi.org/10.1080/13674670802428449

Wiens, T. K., & Walker, L. J. (2015). The chronic disease concept of addiction: Helpful or harmful? Addiction Research & Theory, 23(4), 309–321. https://doi.org/10.3109/16066359.2014.987760

Wills, T. A., Yaeger, A. M., & Sandy, J. M. (2003). Buffering effect of religiosity for adolescent substance use. Psychology of Addictive Behaviors, 17(1), 24–31. https://doi.org/10.1037/0893-164X.17.1.24