

Otterbein University

## Digital Commons @ Otterbein

---

Undergraduate Distinction Papers

Student Research & Creative Work

---

2017

### Essentialism of Addiction and Mental Illness

Mary Pirik

mary.pirik@otterbein.edu

Follow this and additional works at: [https://digitalcommons.otterbein.edu/stu\\_dist](https://digitalcommons.otterbein.edu/stu_dist)



Part of the [Social Psychology Commons](#)

---

#### Recommended Citation

Pirik, Mary, "Essentialism of Addiction and Mental Illness" (2017). *Undergraduate Distinction Papers*. 48.  
[https://digitalcommons.otterbein.edu/stu\\_dist/48](https://digitalcommons.otterbein.edu/stu_dist/48)

This Distinction Paper is brought to you for free and open access by the Student Research & Creative Work at Digital Commons @ Otterbein. It has been accepted for inclusion in Undergraduate Distinction Papers by an authorized administrator of Digital Commons @ Otterbein. For more information, please contact [digitalcommons07@otterbein.edu](mailto:digitalcommons07@otterbein.edu).

ESSENTIALISM OF ADDICTION AND MENTAL ILLNESS

Mary J. Pirik

Department of Psychology

Otterbein University

Westerville, Ohio 43081

30 March 2017

Submitted in partial fulfillment of the requirements for  
graduation with Distinction

Advisory Committee:

Meredith Meyer, Ph.D.

*Distinction Advisor*

Michele Acker, Ph.D.

*Second Reader*

Jonathan DeCoster, Ph.D.

*Distinction Representative*

---

---

---

## Table of Contents

|                        |             |
|------------------------|-------------|
| Abstract .....         | page 3      |
| Introduction .....     | pages 4-10  |
| Method .....           | pages 11-12 |
| Results .....          | pages 13-15 |
| Discussion .....       | pages 16-19 |
| References .....       | pages 20-21 |
| Appendices .....       | pages 22-30 |
| Acknowledgements ..... | page 31     |

### Abstract

Essentialism is the belief that certain categories have an underlying essence that is inborn, and cause outward features and characteristics. Many studies have expressed the link between essentialism and stigma in our society which provides evidence that there are stigmas placed on those with mental health disorders, and those negative attitudes create in turn negative behaviors towards these individuals. This evidence has prompted the current study, which primarily considers how essentialist beliefs can enforce harmful attitudes. To do so, two mental illnesses, Heroin addiction and Bipolar I disorder, were looked at in a side by side comparison. Secondly, the study explores how those attitudes relate to potential outward behaviors towards these groups. The main findings supported the hypotheses that mental illness would be more likely essentialized over addiction. Participants responses were more likely to express essentialist attitudes about Bipolar I disorder when compared to Heroin addiction. For example, participants were found to rate Heroin addiction as significantly more curable when compared to Bipolar I disorder. The research also supported the idea that essentialist tendencies can influence potential outward behaviors, and decision making. Participants' reactions were assessed after being asked how they would respond to a patient if said patient was a close co-worker of theirs. As participant's essentialism scores went up, both their confidence in patient's abilities to properly carry out their work, and their likelihood of going to them for help with a work-related matter, went down. Lastly, the study found a main effect for job demands, where individuals across both disorders were judged significantly less suited for high demands jobs vs. low demand jobs.

### Essentialism of Addiction and Mental Illness

In the United States today there is a higher reported diagnosis of mental illness and substance abuse disorders than ever before. Currently in the United States there are approximately 1 in 5 adults living with a diagnosed mental illness (Mental Health by The Numbers, 2015). Beyond this, keep in mind that this statistic doesn't account for the many adults that are predicted to go undiagnosed each year (Data on Behavioral Health in the United States, 2017). According to research conducted by the National Institute on Drug Abuse, about 9 percent of American's needed treatment for an addiction related problem, but only about 1 percent received treatment (Drug Facts: Nationwide Trends, 2015). On top of that about 50 percent of adults struggling with a substance abuse disorder have a co-occurring mental illness alongside it (Mental Health by The Numbers, 2015). All of this research points to the increasing importance of receiving proper mental health care in today's world.

There is popular confusion as to what is considered a mental health disorder. Though substance abuse is outlined in the Diagnostic and Statistical Manual of Mental Disorders, 5<sup>th</sup> Edition, as a psychological disorder, many view it as a separate disorder not affiliated with mental illness. Studies show that there is a clear separation in the believed origin and severity of addictions vs. mental illnesses as well. Whereas mental illness such as bipolar disorder are thought of as diseases or innate sicknesses, something such as heroin addictions are often not. A heroin addiction is instead typically considered a persona choice or due to weakness of character. All of this is problematic when considering that those suffering from mental illness and those with substance abuse disorders both require some means of treatment and support to recover. However, many of these individuals are unable to receive appropriate levels of care. More than 50 percent of individuals who were diagnosed receive no medical help for their disease

(Untreated Mental Illness, 2015). Factors at play which could cause this steep gap in needing medical treatment but being unable to receive it, include inflated costs of insurance for proper health care, rehabilitation, and counseling programs. One of the largest factors in individuals who could benefit from help but aren't actively seeking it out is the presence of harmful stigmas and stereotypes against receiving mental health services (Untreated Mental Illness, 2015).

Being socially aware that stigma is one of the biggest factors influencing individuals away from receiving help is a crucial first step in understanding how to stop these stigmas. When combining that awareness of negative attitudes with being open to learning about mental health diagnosis, there is shown to be a substantial decrease in negative outlooks. Several studies illustrate the importance of awareness and education in reducing stigma. For example, Corrigan & Watson (2007) considered demographics such as education level and gender to assess if they had any relationship with stigma towards both the mentally ill and substance abusers. It was found that with higher levels of education and experience with addiction, individuals showed more positive outlooks on the recuperation of the patients. Stigmatization towards patients has even been found in medical school students who are preparing to treat said patients. Telles-Correia, Gama Marques, Gramaça, & Sampaio (2015) showed that there was a significant negative correlation between the knowledge level of students and stigmatizing attitudes. The more knowledge acquired about mental illness, the lesser likelihood of harmful stigmas placed on patients. However, these positive attitude changes were found to not last more than a year or so after they were taught. Negative attitudes towards patients can create an unhealthy atmosphere in which they are not able to accept freely and honestly their diagnosis and go through the steps of proper rehabilitation/therapy. Likewise, these essentialist attitudes which encourage stigma can often develop into outward behaviors of social distancing and isolation from the mentally ill.

The American Psychological Association published a finding that only a mere 1 in 4 adults suffering from a mental illness feel that the general public is understanding and sympathetic towards their mental illness (Data on Behavioral Health in the United States, 2017). These negative behaviors perpetuated in our society pose serious consequences for individuals struggling with mental disorders. It lends to the decreasing numbers of substance abusers making the proper efforts to recover and stay sober, as well as the many individuals living with a mental illness which may get more debilitating as it goes untreated.

It's important for individuals suffering with addiction and/or mental illness to be supported to successfully stabilize themselves and make a lasting recovery. Support can be shown in many ways; one such way is through seeking out the help of health professionals by going to talk therapy, taking proper medications, or a combination of both. If individuals felt accepted and supported by their family, friends and communities with their diagnosis, treatment solutions could be more easily pursued. Tran et al. (2016) found constructive counteractions to negative attitudes that were placed on patients receiving treatment to recover from opiate addiction. They discovered multiple approaches to lessening stigma such as, increasing awareness about the rehabilitation processes and needs of addicts, and making sure that family and friends were knowledgeable and free of any negative attitudes they may impose on the patients, which ultimately helped in their ability to recover.

One key variable which influences harmful stigmas is essentialism. Essentialism is the belief that certain categories have an underlying essence that is inborn, and cause outward features and characteristics. These characteristics are essential to the identity and membership attainment of said groups. Though essentialism can be used as a way of understanding a variety of categories (e.g., natural kinds such as animals), it is particularly interesting when it is used to

draw inferences about social categories. The implications of this can be harmful; for example, a potentially harmful essentialist belief would be believing that there is something innate within men which makes them smarter than women. This characteristic, as defined by psychological essentialism, would also be unchanging and stable. Following such a belief system in relation to any one category can potentially become problematic by encouraging discriminatory separation. Specifically, genetic essentialism is related to stigma, which suggests that if you believe genetic attributions cause illness, it then increases the likelihood of things like social distancing from those with the illness. This was looked at in two studies, namely in research by Rüsch, Todd, Bodenhausen, & Corrigan (2010) and Lee et al. (2013), the findings of which highly pertain to the basis of my research. Initially, Rüsch et al. (2010) examined how introducing genetics as the causation of a mental illness would either positively or negatively impact the likelihood of stigma. It found that when genetics were attributed as the causation of a mental illness it not only increased fear and social distancing, but also increased a sense of guilt in the individual with the mental illness. Findings such as these show the impact that negative associations can have on patients and their acceptance and treatment of their illness. Lee et al. (2013) assessed the effects of different mental illness diagnoses when attributed to genetic or environmental causes. Through creating a manipulation of attribution (genetic vs. environmental) for mental illnesses, the researchers were then able to examine the effects of social distancing and helping decisions in response to mentally ill individuals. The findings supported the genetic contingency theory which states that when subjects attribute mental illness to genetic attributions they are more likely to socially distance themselves from the mentally ill, but most often will only occur when the mentally ill individual is perceived as dangerous or has an illness associated with potential violence such as schizophrenia. It also offers a look at how internalized attitudes can be



transformed into outward behaviors. Similarly, Marsh & Shanks (2014) explored how individual's beliefs change towards the mentally ill across different categories of membership attainment (genetically vs environmentally). Other variables which were secondarily assessed were things like controllability and causal origin. Controllability specifically assessed how much control the subjects believed the mentally ill had over their various symptoms, and causal origin consisted of rating an illness to be either more biological, psychological or environmentally attributed. The study supported that the presence of different causal origins and membership attainment effected how subjects viewed other variables such as controllability. These findings encouraged my current research because they supported that there are stigmas placed on groups when the subjects hold essentialist beliefs, and I'm intrigued to see if these findings will be consistent. When individuals have strong essentialist beliefs it can have serious consequences in the attitudes that they hold towards addicts as well. Such an outlook could mean that their addiction is fundamentally apart of their essence, makes them who they are, and they will not be separated from it or the lifestyle that comes with it.

In a pilot study I conducted in 2016, essentialism and those stigmas associated with such attitudes were considered in relation to Heroin addiction. In this study, subjects' attitudes were assessed after they were given a manipulation which attributed a patient's Heroin addiction to either genetics or environmental influences. The results suggested that there is a strong relationship between essentialist beliefs and certain attitudes held about addiction such as how responsible individuals believe addicts are for their addiction. These findings have prompted my current study. However, instead of giving participants a manipulation to react to, in the current study I was interested in giving the participants objective background information of a mental illness or addiction, and then assessing for their underlying initial essentialist attitudes. I then

examined how these attitudes related to other behaviors and beliefs regarding individuals with mental disorders.

The current study primarily aims to examine the significance of how individuals' essentialist attitudes change on average towards a patient with an addiction vs a patient with a mental illness. Secondly, it will assess the relationship between individuals' initial attitudes towards addicts/mentally ill and their expected outward behaviors towards said individuals. To do so, I will be looking at levels of essentialism in participants. Though there has been an adequate amount of research done on psychological essentialism as it relates to mental illness, there hasn't been research done relating this belief system to addiction. In response to this, the current study sets up mental illness and addiction independently from one another so that they can be compared for commonalities and differences. Though health care professionals group both mental illnesses and additions into the one category of mental disorders, the common conception in society is that these mental disorders are separate and present with differing characteristics and therefore typically (in layman's terms) aren't categorized together in the same group. So, for the purposes of this study, both groups will therefore be two distinct and separate entities. In outlining the current study there were many factors to consider. For instance, which mental illnesses and addictions were appropriate to include in testing. Although an illness such as Bipolar I disorder isn't uncommon it is often misunderstood. Especially when compared to the general population's understanding of other mental illnesses such as depression, I would predict that Bipolar I is typically less understood by the general population. I would expect that the nature of Heroin addiction is similarly less understood when compared to something like Alcohol addiction. This is due to the many studies which support that certain genes influence Alcohol addiction. Therefore, in deciphering the study's' variables, bipolar I became the variable

for mental illness and heroin as the addiction variable as they both seem to offer the least risk of being universally associated as either essentialist or nonessentialist. It was important not only to eliminate any one addiction or mental disorder which by the public's interpretation was already significantly swayed prior to any manipulation, but also to make sure that the variables chosen were on a seemingly level playing field.

My prediction for the current study is that those who are more essentialist in their beliefs will be the ones more likely to turn those essentialist attitudes into outward behaviors towards both addicts and the mentally ill. I also predict that there will be higher levels of essentialist attitudes when it comes to evaluating the mentally ill when compared to the levels of essentialism towards addicts. For example, I believe that participants will be more likely to rate that a patient with an addiction is more personally responsible for their disease and in more control of their symptoms than they would when asked to rate a patient with a mental illness. In my secondary assessments which look at attitudes as they relate to behaviors, I predict that there will be a significant relationship between attitudes of essentialism and attitudes which predict negative behaviors. In other words, though physical behaviors of participants cannot be assessed, a series of questions compiled specifically to assess attitudes which predict behaviors can offer insight into what those outward behaviors may be. These hypotheses are supported by past research which points towards individuals as more knowledgeable about a mental illness being categorized as a disease rather than an addiction. Therefore, participants are quicker to sympathize in response to those diagnosed with a mental illness, and hold them less responsible for their illness.

## **Method**

### **Participants**

Participants included 74 individuals (male  $n = 47$ , female  $n = 27$ , other  $n = 0$ ) recruited via Amazon's Mechanical Turk (MTurk), an online crowd-sourcing platform. Only participants reporting themselves as living in the United States and with prior MTurk approval rates of 90% or above were included. Participants were compensated \$1 for survey completion. Data were excluded from an additional 3 individuals who failed to complete the entirety of the survey.

### **Materials and Procedure**

Participants were first asked to complete an informed consent form and after completion were then able to continue to the survey. Given the survey, participants were asked to provide answers to a series of demographic background questions. Next, participants were randomly assigned to one of two conditions. In both conditions, fabricated medical files of a patient (Riley) were presented to the participants based from legitimate samples of records. In Condition 1, Riley was a patient that had been admitted and diagnosed as a Heroin Addict upon evaluation. In Condition 2, Riley was diagnosed after evaluation as having Bipolar I Disorder. In both conditions, Riley was a 22-year-old male. Based on the Condition in which Riley appeared, a pertinent description of his symptoms and diagnosis was given to the participants for them to gain any necessary knowledge regarding the nature of the disease. There were 38 participants who received and completed C1, and 36 participants for C2. (see Appendix B)

Following their given condition (C1 or C2), participants were then asked to rate a series of questions on 7 point Likert scales which assessed their Essentialist Attitudes towards Riley's diagnosis. These questions looked at how participants viewed the stability of Riley's

addiction/mental illness, the likelihood of him to relapse, his controllability of the disease, the likelihood for him to exhibit reoccurring behavior associated with the disease, the extent to which it was a core part of his identity, and the extent to which Riley's addiction/mental illness was due to either genetic or environmental factors. These Essentialist Attitude questions were then averaged (low scores= low essentialism, high scores = high essentialism) and each participant was given an average essentialism score. Participants were also asked to rate what treatment methods they believed Riley would benefit from the most: talk therapy, medication, or some combination, as well as the likelihood that Riley could be cured of his disorder on a scale of X to Y (X=unlikely to be cured, Y=likely to be cured). They were also asked if they or a close friend or family member of theirs had experienced mental illness/addiction. Following these came a set of questions which evaluated Related Behaviors and Beliefs. The predicted behavior questions looked primarily at addiction and mental illness when related to certain social contexts. For example, participants were asked to answer a series of questions about their actions towards Riley given the hypothetical situation that he was a close coworker of theirs. They were then again asked which jobs they believed Riley would succeed at if he had gone back into sobriety/stopped showing symptoms of his mental illness. These jobs as presented to the participants were considered in pairs for different attributes which they each required of employees (see Appendix D).

### Results

An essentialism score was calculated by taking and averaging the attitude scores for perceived stability of the disorder, core characteristic of personhood, likelihood of relapse, continued behaviors associated with the disorder, controllability of the disorder, and genetic over environmental origins of the disorder. The first test conducted was an Independent Samples T-Test which looked at average essentialist judgements for Heroin addicts when compared to Bipolar I patients. The results found that participants were significantly more likely to essentialize a Bipolar I disorder ( $M = 5.23$ ,  $SD = .911$ ) than a Heroin addiction ( $M = 4.30$ ,  $SD = .98$ ),  $t(72) = 4.24$ ,  $p < .05$ . In a secondary analysis I compared means on each of the individual items that went into the essentialism average according to condition. This data found that when compared to Heroin addiction participants were significantly more likely to believe Bipolar I patients as: Having a more stable disease (Bipolar  $M = 5.00$ ,  $SD = 1.78$ ), (Heroin  $M = 3.66$ ,  $SD = 1.80$ ),  $t(72) = 3.23$ ,  $p < .05$ , being more likely to experience reoccurring symptoms (Bipolar  $M = 5.9$ ,  $SD = 1.03$ ), (Heroin  $M = 4.61$ ,  $SD = 1.32$ ),  $t(72) = 4.62$ ,  $p < .05$ , more likely to exhibit behavior associated with their disease again in the future (Bipolar  $M = 5.64$ ,  $SD = .96$ ), (Heroin  $M = 5.0$ ,  $SD = 1.10$ ),  $t(72) = 2.92$ ,  $p < .05$ , and more likely to attribute the diagnosis as stemming from genetic factors rather than environmental influences (Bipolar  $M = 5.22$ ,  $SD = 1.34$ ), (Heroin  $M = 3.3$ ,  $SD = 1.34$ ),  $t(72) = 6.32$ ,  $p < .05$ . No significant differences were found between the conditions for the controllability or core part of personhood items ( $p \geq .05$ ). Also, 47% of participants rated that they had personal experience with mental illness/addiction, but there were no significant results found between average essentialist scores and participant's prior personal experience ( $p \geq .05$ ).

Next, I examined condition differences on beliefs related to curability, appropriateness of therapy, how much money people believed should be spent on rehabilitation/treatment programs, and people's responses to Riley. I first compared how curable people judged heroin addiction vs. bipolar, and found that heroin addiction was judged as more curable than bipolar disorder (Heroin  $M = 5.0$ ,  $SD = 1.80$ ; Bipolar  $M = 3.39$ ,  $SD = 1.35$ ),  $t(72) = -4.3$ ,  $p < .05$ . However, there were no significant differences in means between conditions when looking at participants' beliefs of how much money should be spent on treatment, their beliefs about treatment, or their reactions to Riley if he was a hypothetical coworker of theirs.

Next a series of Pearson Correlations were conducted assessing how levels of essentialism correlated with other attitudes and beliefs, broken down by group (bipolar vs. heroin addiction). That is, correlations for judgments of Bipolar I disorder and Heroin addiction were analyzed independently of each other for these correlations. For Bipolar I the results found a negative correlation between average essentialism and disease curability ( $r(34) = -.50$ ,  $p < .05$ ). Similarly, for Heroin addiction, the data showed a correlation for perceived disease curability ( $r(36) = -.57$ ,  $p < .05$ ). Lastly within the Heroin condition, there was a negative correlation found between essentialism and participant's attitudes towards Riley when asked to think of him as a hypothetical coworker. When asked about their confidence in Riley's ability to get work done the results showed a significant negative correlation ( $r(36) = -.38$ ,  $p < .05$ ), and when asked about their willingness to ask him for help with their work a negative correlation was seen again ( $r(36) = -.38$ ,  $p < .05$ ). There were no correlations for either condition when it came to comparing average essentialism scores with participant's demographics such as highest level of education received, or other beliefs such as treatment methodology.

A 2 (individuals' disorder type: heroin addiction vs. bipolar) x 2 (job demands: high interpersonal and ethical demands vs. low interpersonal and ethical demands) mixed between-within ANOVA was used to assess subjects' evaluations of an individual's job suitability. Disorder type was the between-subjects variable, and job demands was the within-subjects variable. Results indicated a main effect for job demands,  $F(1, 71) = 70.19, p < .001$ , with individuals judged significantly less suited for high demands jobs ( $M = 3.43, SD = 1.43$ ) vs. low demand jobs ( $M = 4.53, SD = 1.30$ ). There was, however, no main effect for disorder type,  $F(1, 71) = 1.61, p > .05$ ; suitability judgments of individuals with heroin addiction ( $M = 4.17, SD = 1.18$ ) did not differ from judgments of individuals with bipolar disorder ( $M = 3.80, SD = 1.32$ ). Finally, there was also no disorder type x demands interaction,  $F(1, 71) = .14, p > .05$  (see Appendix E for means).



### Discussion

The data found reflect that participants were more prone to exhibiting essentialist attitudes when given the Bipolar I condition (C2) as opposed to the Heroin condition (C1). This strongly supports my hypothesis in which I predicted that participants would be more likely to view a diagnosis of Bipolar I disorder as an identifying quality in one's personhood. Testing attribution is another way of gauging essentialist beliefs. By attributing disease to genetics, participants were portraying a belief that Bipolar I is again, an inseparable factor of the patient, because a characteristic that is a part of one's genetic code is an essential part of their genetic makeup. Nearly all the questions assessing attitudes and beliefs about Riley's disease showed that when compared to Bipolar I, Heroin addiction was again far less likely to be essentialized. This conclusion can be made, when looking at scores of stability for instance. When participants were asked how strongly they agreed with the statement, "Given that Riley is an addict/bipolar I patient now, he will always be an addict/bipolar I patient," the participants within the Bipolar I condition were far more likely to rate in strong agreement with the statement, than those participants within the heroin condition. Being in strong agreement with a disease as a stable characteristic reflects essentialist attitudes. Another interesting conclusion which was consistent with my hypothesis, is that while essentialism in the Bipolar I condition was higher when compared to the Heroin condition, beliefs about curability were lower. This supports psychological essentialism, because as one category becomes more essentialist (Bipolar I) the characteristics that go with that category are more constant and unchanging, which would make it presumably less curable than a category that is less essentialist (Heroin).

The Pearson Correlations similarly showed that when higher average essentialist scores were seen in a given participant, their scores for attitudes such as curability were also given

higher scores. Keeping in mind that the higher the rating on any attitude question corresponded with a stronger essentialist belief system, these findings greatly support that essentialist beliefs directly correspond to negative essentialist attitudes towards individuals diagnosed with a disease. This finding was consistent across conditions as well, which shows that regardless of which condition a participant was given, participants were more likely to reflect poor attitudes when their overall average essentialism score was higher. An interesting set of correlations were seen when average essentialism was related to how participants rated their behaviors toward Riley as if they were his hypothetical coworkers. As participant's essentialism scores went up, both their confidence in Riley's abilities to properly carry out his work, and their likelihood of going to him for help with a work-related matter, went down. This supports the idea that not only can essentialist tendencies fall in line with the way that individuals perceive patients with a disease, but it also correlates to influencing outward behavior, and decision making.

The 2x2 ANOVA's results showed a main effect between how participants on average rated the patient's suitability for each position. Each job which had been categorized as a highly-qualified job, participants rated that Riley would be more likely to succeed at, when compared to the jobs which didn't require as much qualification. These results held true across conditions. Strongly supports my theory that when high essentialist tendencies are seen in reviewing attitude questions, these negative beliefs can also then be exhibited as estimated negative behaviors. The results were analyzed from my ANOVA may be arguably the most significant in terms of seeing a direct relationship between essentialism and harmful stigmas placed on those with a diagnosed disease. These results were expected in terms of essentialist attitudes predicting potential outward behaviors. The findings were also surprising because, there were no interactions between conditions. With Bipolar I disorder presenting with higher scores of average

essentialisms, I would have predicted that there would've been a more significant gap between the conditions, with Bipolar I rating as significantly more suitable for low demanding jobs and less suitable for high demanding jobs. However, the results show that both conditions had similar projections across both job types.

The findings from this study support the importance in the exploration of negative attitudes which can enforce stigmatic behavior. Specifically, in relation to mental disorders such as Bipolar I and Heroin addiction, stigmas brought on by essentialist beliefs have the potential to provoke lasting consequences on those individuals making a healthy and lasting recovery. About 4% of adults suffering from a mental illness were reported to be so severely impaired by their illness that they couldn't function in their day to day lives (Nearly 1 in 5 Americans Suffers from Mental Illness each Year, 2014). That is a portion of the population that is unable to go to work, unable to provide support for themselves and their families, because of the debilitation that comes with their mental disorder. By having negative outlooks on patients receiving treatment, it further limits those who are already severely impaired by their disorder. The findings in this study show that from the pool of participants there were no significant difference between demographics, showing that regardless of things like education level, the population as a whole reflected negative outlooks by essentializing mental disorders.

Further research could perhaps consider the viewpoints that children hold regarding mental disorders. It has been shown by numerous other studies that essentialist beliefs and categorizations can lead to children internalizing those ideals, which then have the potential to aid in harmful stigmas. Testing for children's viewpoints regarding addiction may be problematic because often families don't introduce and discuss topics such as addiction with young children. However, looking at children's essentialist attitudes towards mental illness may

be more practical, and if methodized properly could prove for some very interesting findings. To get rid of harmful stigmas, it is important to recognize the age at which those negative attitudes become internalized, which is why testing children's viewpoints would be so valuable. Future studies could also expand the mental disorders and explore a different array of mental illnesses such as personality disorders, and addictions such as gambling. It would also be interesting to develop new and improved ways to gauge how attitudes can predict behaviors.

There is a lot of work to be done regarding the proper treatment of addicts and the mentally ill, and a stepping stone in improvement is finding effective methods to end the chain of harmful stigmas. Stigmas placed on individuals and groups aren't fleeting and momentary, they can pose severe consequences to patient's wellbeing. One method to eliminate harmful attitudes is to be knowledgeable about illnesses such as Heroin addiction and Bipolar I and acknowledging them as diseases. As such, being cognizant that these illnesses are complex and present themselves not in black and white categories but instead on sliding scales. It takes a community of support systems for an addict to successfully recover, and likewise for all of those with a mental illness. Stigma placed on those in need of help, simply isolates them and weakens their confidence in their ability to get better. The psychological essentialism outlined in this study often present as subconscious belief systems. In other words, many individuals may not be aware of these essentialist attitudes. They are then equally unaware that though ignorant to these attitudes, they could still be reflected in their outward behaviors. That is why the awareness of these stigmas, which this research supports are present, is the first step in eradicating harmful stereotypes to in turn end discrimination between groups.

## References

American Psychological Association. (2017). *Data on Behavioral Health in the United States*.

Retrieved from <http://www.apa.org/helpcenter/data-behavioral-health.aspx>

Bekiempis, Victoria. (2014, Feb. 28). Nearly 1 in 5 Americans Suffers from Mental Illness Each

Year. *Newsweek*. Retrieved from <http://www.newsweek.com/nearly-1-5-americans-suffer-mental-illness-each-year-230608>

Corrigan, P. W., & Watson, A. C. (2007). The stigma of psychiatric disorders and the gender, ethnicity, and education of the perceiver. *Community Mental Health Journal*, 43, 439-458. doi: 10.1007/s10597-007-9084-9

Lee, A. A, Laurent, S. M., Wykes, T. L., Kitchen Andren, K. A., Bourassa, K. A., & McKibbin, C. L. (2013) Genetic attributions and mental illness diagnosis: effects on perceptions of danger, social distance, and real helping decisions. *Social Psychiatry and Psychiatric Epidemiology*, 49, 781-789. doi: 10.1007/s00127-013-0764-1

Marsh, J. K., & Shanks, L. L. (2014). Thinking you can catch mental illness: How beliefs about membership attainment and category structure influence interaction with mental health category members. *Memory & Cognition*, 42, 1011-1025. doi: 10.3758/s13421-014-0427-9

National Alliance on Mental Health. (2017). *Mental Health by the Numbers*. Retrieved from <http://www.nami.org/Learn-More/Mental-Health-By-the-Numbers>

- Reiter, A. M., Deserno, L., Wilbertz, T., Heinze, H.J., & Schlagenhauf, F. (2016). Risk factors for addiction and their association with model-based behavioral control. *Frontiers in Behavioral Neuroscience*, 10. doi: 10.3389/fnbeh.2016.00026
- Rüsch, N., Todd, A. R., Bodenhausen, G. V., & Corrigan, P. W. (2010). Biogenetic models of psychopathology, implicit guilt, and mental illness stigma. *Psychiatry Research*, 179, 328–332. doi: 10.1016/j.psychres.2009.09.010
- Telles-Correia, D., Gama Marques, J., Gramaça, J., & Sampaio, D. (2015). Stigma and attitudes towards psychiatric patients in portuguese medical students. *Acta Medica Portuguesa*, 28, 715-719.  
<http://www.actamedicaportuguesa.com/revista/index.php/amp/article/view/6231/4550>
- Tran, B. X., Vu P. B., Nguyen, L. H., Latkin, S. K., Nguyen, C. T., Phan, H. T., & Latkin C. A. (2016). Drug addiction stigma in relation to methadone maintenance treatment by different service delivery models in Vietnam. *BMC Public Health*, 16.  
doi:10.1186/s12889-016-2897-0
- Unknown. (June 2015). Drug Facts: Nationwide Trends. *National Institute on Drug Abuse*.  
Retrieved from  
[https://www.drugabuse.gov/sites/default/files/drugfacts\\_nationtrends\\_6\\_15.pdf](https://www.drugabuse.gov/sites/default/files/drugfacts_nationtrends_6_15.pdf)
- Young, Joel. L. (2015, Dec. 30). Untreated Mental Illness. *Psychology Today*. Retrieved from  
<https://www.psychologytoday.com/blog/when-your-adult-child-breaks-your-heart/201512/untreated-mental-illness>

## Appendix A

*Demographics*

---

Subjects were first asked to read and agree to the informed consent form attached before the study began. The subjects were then asked to answer a series of demographic questions:

What is your sex?

Male/Female/Other

What is your ethnic origin/race?

White/Hispanic or Latino/Black or African American/American Indian or Alaska Native/Asian/Native Hawaiian or Pacific Islander/Other

What is your age group?

18-24/25-34/35-44/45-54/55-64/65-74/75+

What is the highest degree or level of school you have completed?

No schooling completed/Some high school completed/High school graduate/Some college credit and/or associates degree/Bachelor's degree/Master's degree and/or above

## Appendix B

*Conditions*

---

*C1 (Heroin Addiction)*

The following is a patient file based from patient records of a person being treated for: Heroin Addiction

Please read through the following patient file before continuing to the next page where you will be asked some questions pertaining to the case.

Patient file No. 8723609

Name: Riley

DOB: 07/18/1994

Age: 22 yrs

Admitted for evaluation: 09/03/2016

Evaluation:

Exhibiting all the symptoms of heroin withdrawal. Runny nose, stomach cramps, dilated pupils, muscle spasms, chills despite the warm weather, elevated heart rate and blood pressure, and is running a slight temperature. Aside from withdrawal symptoms, is in fairly good physical shape. No other adverse medical or psychological problems. His affect is polite and even charming toward the staff. Patient asks for some medication to tide him over until he can see his regular doctor. However, he becomes angry and threatening when he's told that may not be a possibility. Patient said that he is truly ready to give up his addiction and turn his life around if he's just given a chance and some medication.

Diagnosis: Heroin Addiction

Physical addiction to heroin, signs of withdrawal. Repeatedly unable to carry out major obligations at work, school, or home due to opioid use. Consistent use of opioids despite acknowledgment of persistent or recurrent physical or psychological difficulties from using opioids.



*C2 (Bipolar I Disorder)*

The following is a patient file based from patient records of a person being treated for: Bipolar I Disorder

Please read through the following patient file before continuing to the next page where you will be asked some questions pertaining to the case.

Patient file No. 8723609

Name: Riley

DOB: 07/18/1994

Age: 22 yrs

Admitted for evaluation: 09/03/2016

Evaluation:

Presented with nervousness, headache, and insomnia. Experienced periods of sadness, often unexplained, as well as difficulty controlling his temper and dealing with stressful situations. His sadness would occasionally last as long as a week and, when present, was intense, occurring all day every day. Reported that he would then “bounce back” to usual self. At times, the sadness would be accompanied by a restless energy and irritability that precipitated arguments with family and friends. These periods of restless and boundless energy would then switch abruptly back to a state of intense, depressed mood. When depressed, he would sleep excessively and tended to overeat. Isolate himself, let the housework go, and found it hard to get things done. Particularly sensitive to feelings of rejection by others, but his mood could be temporarily brightened, if he were occupied by activities he enjoyed.

Diagnosis: Bipolar I Disorder

One or more manic episodes or mixed (mania and depression) episodes and at least one major depressive episode. The episodes are not due to a medical condition or substance use.

## Appendix C

*Questionnaire*

---

*Question assessing: Background*

I.

C1: Have you, a close friend, or family member struggled with an addiction? (Yes/No)

C2: Have you, a close friend, or family member struggled with a mental illness?  
(Yes/No)*Questions assessing: Essentialist Attitudes*

I.

C1: Given that Riley is an addict now, he will always be an addict.

1= strongly disagree to 7= strongly agree

C2: Given that Riley has bipolar I disorder now, he will always have bipolar I disorder.

1= strongly disagree to 7= strongly agree

II.

C1: Riley's addiction is a core part of him.

1= strongly disagree to 7= strongly agree

C2: Riley's mental illness is a core part of him.

1= strongly disagree to 7= strongly agree

III.

C1: Riley is likely to relapse from his sobriety.

1= not at all likely to 7= extremely likely

C2: Riley is likely to experience symptoms from his mental illness in the future.

1= not at all likely to 7= extremely likely

## IV:

C1: Riley has exhibited angry behavior associated with his addiction. Based on his past behavior it's likely Riley will act out in angry behavior again.

1= not at all likely to 7= extremely likely

C2: Riley has exhibited irritable behavior associated with his mental illness. Based on his past behavior it's likely Riley will act out in irritable behavior again.

1= not at all likely to 7= extremely likely

## V:

C1: Riley is in control of his addiction. (\* *Reverse Sored*)

1= strongly disagree to 7= strongly agree

C2: Riley is in control of his mental illness. (\* *Reverse Sored*)

1= strongly disagree to 7= strongly agree

## VI:

C1: In your opinion rate the extent to which Riley's addiction is due to environmental or genetic factors.

1= completely environmental to 7= completely genetic

C2: In your opinion rate to the extent that Riley's mental illness is due to either environmental or genetic factors.

1= completely environmental to 7= completely genetic

C2:

## VII:

C1: Riley can be cured of his addiction

1= strongly disagree to 7= strongly agree

C2: Riley can be cured of his mental illness

1= strongly disagree to 7= strongly agree

## VIII:

C1: Given Riley's diagnosis, rate which treatment method you think he will benefit from the most.

1=primarily talk therapy based treatment to 7=primarily medication based treatment

C2: C1: Given Riley's diagnosis, rate which treatment method he will benefit from the most.

1=primarily talk therapy based treatment to 7=primarily medication based treatment

*Questions assessing: Attitudes Predicting Behaviors*

I.

C1: How much money do you believe the government should spend each year on treatment for addiction?

1=none at all to 7= a great deal

C2: How much money do you believe the government should spend each year on treatment for mental illness?

1=none at all to 7= a great deal

II.

C1: Assuming Riley goes into sobriety, how well do you think he would be suited for the following professions? Preschooler teacher/Car salesperson/Clergy member/Stockbroker/Engineer/Mail man/Manager of a store/ Professional blogger

1= very poorly suited to 7 = very well suited

C2: Assuming Riley stops experiencing symptoms from his mental illness, how well do you think he would be suited for the following professions? Preschooler teacher/Car salesperson/Clergy member/Stockbroker/Engineer/Mail man/Manager of a store/ Professional blogger

1= very poorly suited to 7 = very well suited

III:

Assume that Riley is a close coworker of yours just transitioning back into the work place after having been diagnosed...

How concerned would you be about his well-being?

1=not at all concerned to 7= extremely concerned

How confident would you be that he could get his work done?

1=not at all confident to 7=extremely confident

If you were struggling with a work matter you would actively seek out his help.

1=not at all likely to 7= extremely likely

## Appendix D

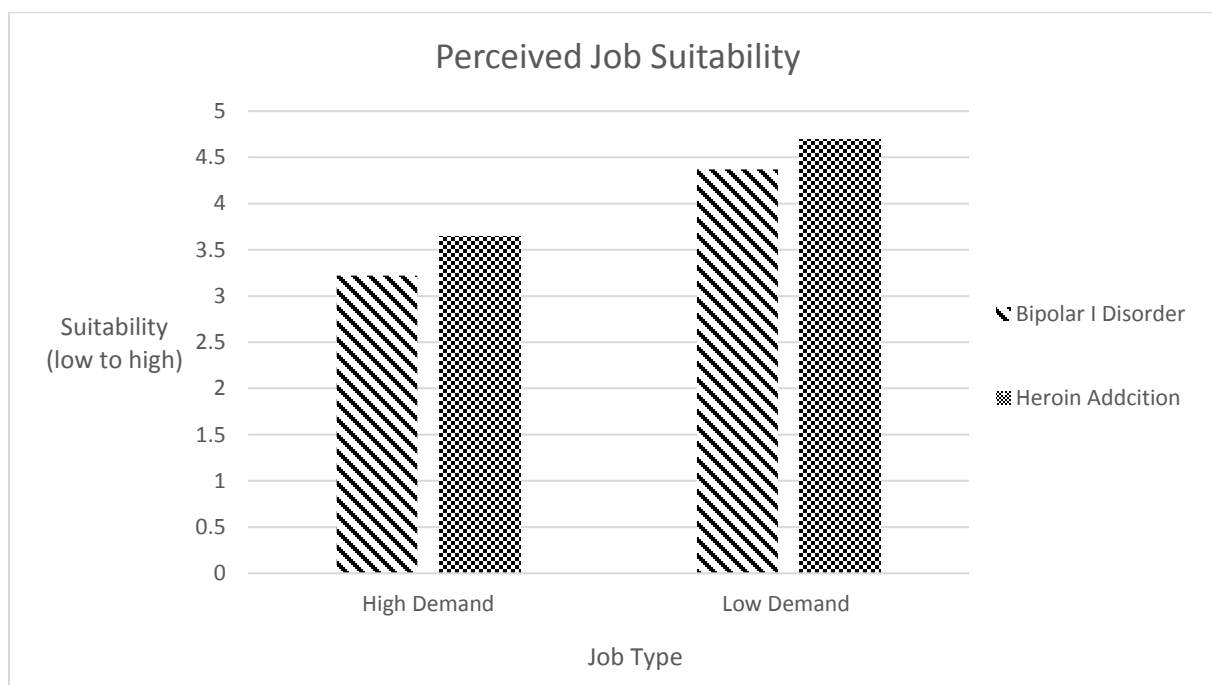
*Job Suitability*

---

## Job Type

|              |                        |                    |                      |
|--------------|------------------------|--------------------|----------------------|
| Attributions |                        | <b>High Demand</b> | <b>Low Demand</b>    |
|              | <b>Trustworthiness</b> | Preschool teacher  | Car salesperson      |
|              | <b>Honesty</b>         | Clergy member      | Stockbroker          |
|              | <b>Intelligence</b>    | Engineer           | Mail man             |
|              | <b>Responsibility</b>  | Manager of a store | Professional blogger |

## Appendix E

*2x2 ANOVA*

### Acknowledgments

I would like to acknowledge and show my appreciation to those who assisted me in my endeavor to carry out this research and ultimately, to be considered for Distinction. First to Otterbein University's, Psychology Department, Distinction Committee, and Student Research Fund, I would like to thank all members involved for the opportunity to participate in the Distinction program, and be able to carry out such meaningful research. To Dr. Michelle Acker, thank you for the time and encouragement you lent me as my second reader throughout this process, it has been greatly appreciated. Lastly, I would like to give special acknowledgment and thanks to Dr. Meredith Meyer, without her support and guidance this project wouldn't have been achievable; it has been a pleasure to work with such an esteemed and knowledgeable professor.