

Beat the Stigma: Examining Effectiveness of the Ohio Opioid Alliance Campaign in Reducing  
Stigma Against Alcohol Addiction

Honors Research Thesis

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by

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## **Abstract**

One of the biggest barriers to treatment when it comes to addiction is the stigma that surrounds it. According to the Centers for Disease Control (CDC), one in seven Americans aged 12 or older reports experiencing a substance use disorder (SUD). Moreover, people who perceive high stigma around SUDs are half as likely to receive help (Volkow et al., 2021). To combat this, the Ohio Opioid Alliance launched a campaign to reduce the stigma against those with SUDs. This study analyzed the effects of exposure to the campaign by conducting a secondary data analysis. Specifically, I examined how exposure to the campaign was associated with stigma levels and the likelihood of supporting close friends or immediate family members with SUDs in getting treatment. The analysis found that exposure to the campaign correlated with a reduction in stigma towards those with SUDs, which was, in turn, associated with increased willingness to engage in supportive behaviors for treatment. Exposure to the campaign accounted for 3.2% of the variance in the level of reported stigma. Together, level of stigma and exposure to the campaign accounted for 2.4% of the variance in the likelihood to support treatment for immediate family and close friends with SUDs. Future research can explore other variables that impact stigma and support for treatment, as well as look at the differences in helping family through treatment versus helping friends through treatment.

## **Beat the Stigma: Examining Effectiveness of the Ohio Opioid Alliance Campaign in Reducing Stigma Against Alcohol Addiction**

Recently, the state of Ohio has invested heavily in the Ohio Opioid Alliance's Campaign to "Beat the Stigma" against addiction. They have invested millions of dollars to spearhead their three-pronged approach across platforms like television, radio, and social media. The advertisements and posters attempt to challenge people to empathize with those struggling with addiction instead of judging them. The campaign is aimed at increasing awareness about the genetic factors associated with addiction and how that influences a person's risk. The project also aims to encourage people to take the time to care for their mental health. Though this paints a rosy picture of the program, and it surely has laudable goals, watching the advertisements led me to question whether the desired benefits are being realized.

The advertisement <sup>[1]</sup> demonstrates, quite adeptly, that addiction is not a character flaw of the person: it is influenced by family/genetic factors. Another way of describing the goal of these ads is to shift the cause of addiction from a cause controllable by the addict to a cause uncontrollable by the addict. An assumption underlying this approach seems to be that family/genetic causes would be less stigmatizing to the person than character flaws would be. Yet, when attributing addiction to family/genetic factors, people might become more reluctant to hire someone whose mother or father lives with addiction due to a perceived inherent risk of the job candidate developing an addiction. I know that there are many other factors that contribute to the development of addiction, but the public might look at this campaign and receive the message, "they can't help it, they were bound to become an addict." That might reduce blame of the addict, but it might not reduce the ultimate stigma.

As of 2014, it was found that 20.2 million adults in the US (8.4%) suffered from a substance use disorder (SUD) during the previous year (SAMHSA, 2014). Of the 20.2 million adults, 16.3% of them suffer from an alcohol use disorder. There have been many barriers to reducing the stigma against substance use disorders. A large one is that this stigma is socially endorsed by the public (Corrigan & Nieweglowski, 2018). This is consistent with the statistics on the Beat the Stigma website which state that 67% of people believe it is not a problem to discriminate against someone dealing with an addiction (Ohio Opioid Education Alliance, n.d). The effects of this stigma have potentially far-reaching effects. The prevalent stigma against people with SUDs is one of the primary reasons cited for people not seeking treatment (SAMHSA, 2008). Stigma can arise and be perpetuated by even the words used to discuss substance use disorders and people struggling with them. Referring to a person dealing with an SUD as a substance abuser can cause people to believe that they will benefit less from treatment, more from punishment, and pose a greater social threat as compared to people who are referred to as a person with a substance use disorder. (Kelly, Dow & Westerhoff, 2010).

Many different stigma reduction strategies have been employed in the study of mental health. The more promising strategies include education on the topic and contact with people dealing with mental illnesses (Brown et al., 2010). These are also strategies that can be broadcast widely via television or radio, the same media being used in the current Beat the Stigma campaign. Education can come in the form of advertisements with statistics. Contact can be filmed third-person interactions, direct speeches, or written third-person reports.

My project aims to study the effectiveness of the strategy being employed by the current “Beat the Stigma” campaign and encourage examination of whether a better way to spread the message exists.

## **Methods**

### **Participants and Design**

The study included 1033 participants in Ohio, U.S.A. Data were collected by Brittany Shoots-Reinhard with funding provided by the Ohio Opioid Education Alliance. The sample was a combination of people recruited from social media, Prolific, and Cloud Research (MTurk). Participants on social media were screened using Qualtrics recommendations to limit duplicate and fraudulent responses. In addition, they had to indicate that they were over 18, accessed the survey from a geolocation in Ohio, and report a valid Ohio zip code. MTurk participants were recruited using Cloud Research. We restricted recruitment to participants with geolocations in Ohio, at least 500+ HITS, and at least a 95% approval rate. We also excluded suspicious geolocations. Prolific participants were restricted to Ohio. Participants were between the ages of 19 and 79 (see Appendix A for means and standard deviation). Approximately 30% of the participants identified as male, 68% identified as female, 1.5% identified as non-binary and 0.5% identified as other. MTurk and Prolific participants were paid \$3.50; participants recruited from social media were entered into drawings for \$10-50 Amazon gift cards (1 in 10 were winners) and tickets to central Ohio sporting events.

The participants responded to a survey and answered questions related to their experiences with SUDs, their attitudes towards people with SUDs, and the likelihood of them supporting the treatment of those with SUDs. Participants also rated the level of their exposure to the “Beat the Stigma” campaign and the extent of their interaction with it.

### **Variables**

#### ***Campaign Exposure***

Multiple items were used to measure the level of exposure each participant had to the Beat the Stigma campaign. The items were key phrases used in the campaign such as “addiction

is a disease, not a decision” and, “challenge what you know about addiction.” Participants were asked to indicate how often they had seen or heard each phrase on a four-point scale (never, once or twice, three to five times, more than six times). I selected three items that were the most directly associated with the campaign and measured the mean of the exposure of each phrase to create a variable indicative of the participants’ overall campaign exposure (see Appendix B). Cronbach’s alpha for this variable was 0.855. This variable was referred to as “campaign exposure.”

### *Stigma Measurement*

The scale used to measure the level of stigma was adapted from a study by Griffiths et al. (2004) and modified to ask about addiction. The scale consisted of nine items, each with a seven-point scale (see Appendix B). Respondents were asked to rate the extent to which they agreed or disagreed with each item. The items consisted of statements like, “People with addiction could snap out of it and get better if they wanted.” I initially grouped the items into three categories based on a factor analysis, and then used the means of responses to items in each group. The first group consisted of items related to people’s beliefs regarding addiction. The second group of items was related to the participants’ perceived volatility of people with addiction. The third group of items was related to the agreeableness of participants to hire a person with an addiction or put them in a leadership position. The three aspects of stigma were more coherent separately, but the association with campaign exposure was similar for each set. Thus, for the current purposes, I combined the three variables into a single “stigma level” variable. Cronbach’s alpha for this variable was 0.63.

### ***Personal Experiences with Substance Use Disorders (SUDs)***

Participants were asked to note their individual experiences related to addiction. They could indicate who was involved in the experience (themselves, a close friend, an immediate family member, or someone who is not a close friend or immediate family member) and what type of experience they had (see Appendix B). Because each experience would presumably add to other experiences, the reported experiences were coded and summed to obtain a numerical representation of the extent of their individual experiences with addiction and substance use disorders. The variable representing the extent of their individual experiences with SUDs was named “Experiences.”

### ***Supporting Treatment for Addiction***

Participants rated the likelihood that they would encourage a friend or family member to seek treatment for their addiction (see Appendix B). They also rated the likelihood that they would help a friend or family member to schedule their first appointment and the likelihood of them offering their friend or family member a ride to their first appointment. They rated their responses on a scale of one to five, one being least likely. The average score of their responses was representative of their supportiveness for friends or family suffering with addiction to seek treatment. The variables referring to their supportiveness of friends and family seeking treatment were named “friends' treatment” and “family treatment” respectively. Cronbach’s alpha for Friends Treatment and Family Treatment was 0.80 and 0.85, respectively.

## Results

### Campaign Exposure and Level of Stigma

I examined whether those with higher levels of campaign exposure scored lower on the level of stigma scale (see Appendix C). I found that campaign exposure was indeed negatively correlated with stigma levels ( $r = -0.18$ ;  $p < .001$ ). The r-squared value was 0.032, which led me to conclude that the influence of campaign exposure on the level of stigma is limited in its ability to account for variance, although it is negatively correlated (see Appendix C).

### Campaign Exposure and Likelihood to Support Seeking Treatment

Level of campaign exposure had a significant positive correlation with the reported likelihood of people performing acts supporting their friends who were seeking treatment for their SUDs ( $r = 0.152$ ;  $p < .001$ ) (see Appendix C). The r-squared value for the regression model of campaign exposure of supporting treatment for friends was 0.023. Campaign exposure was also positively correlated with people supporting immediate family members seeking treatment ( $r = 0.121$ ;  $p < .001$ ) (see Appendix C). The r-squared value for the regression model of campaign exposure of supporting treatment for family members was 0.015.

Though both Pearson correlation coefficients were small, there was a slightly stronger correlation shown between campaign exposure and supporting treatment for friends than between campaign exposure and supporting treatment for family. This might have been for several reasons. People might have more complex emotions towards an immediate family member, especially if they are a parent or child. When comparing the r-squared values for family and friends, campaign exposure accounted for a small amount of the variance in supporting the treatment of friends, and even less in supporting the treatment of family members.



## **Level of Stigma and Likelihood to Support Seeking Treatment**

As expected, there was a negative correlation between the level of stigma and the likelihood to support their friends seeking treatment ( $r = -0.205$ ;  $p < .001$ ) (see Appendix C). There was also a negative correlation between the level of stigma and the likelihood of participants supporting their family seeking treatment ( $r = -0.119$ ;  $p < .001$ ) (see Appendix C). Those who held more stigmatized views were significantly less likely to support their friends and family seeing treatment. On comparing the Pearson correlation coefficients for stigma and friends seeking treatment versus stigma and family seeking treatment, I found there was a slightly weaker correlation between the level of stigma and likelihood to help family members as compared to helping friends.

The r-squared value for the regression model of campaign exposure and level of stigma on supporting treatments for friends was 0.056. This was higher than the r-squared value of 0.024 for the regression model of campaign exposure and level of stigma on supporting treatments for family. Both r-squared values are low. This suggests that although campaign exposure is associated with stigma and in turn the likelihood of people supporting their friends and family through treatment, the potential impact of the campaign is significant but could be improved further.

## **Discussion**

The present study aimed to investigate potential effects of the Beat the Stigma campaign on the level of stigma against people with SUDs and on the likelihood of people to support treatment for their immediate family members and close friends. The study's findings support the hypothesis that exposure to the campaign will be associated with reduced stigma and increased supportive behaviors towards treatment for family members and friends.

The results of this study suggest that being exposed to the Beat the Stigma campaign is associated with lower levels of stigma and higher likelihood to perform supportive behaviors towards treatment for family members and friends. These findings are consistent with previous research that has shown a link between increased awareness and decreased stigma (Murphy & Russell, 2022).

The results of this study will be useful in exploring stigma-reduction strategies that can be generalized to all types of addiction in the United States in order to develop the effectiveness of campaigns to reduce stigma. Next steps will include exploring whether there are differences in stigmatization regarding the people affected by it, i.e. friends as compared to family members. It would also be useful to consider how personal experiences may shape people's stigmas.

With the knowledge gained regarding successful stigma combating strategies, we will reach out to the Beat the Stigma campaign so they can make the necessary changes to create the most effective campaign possible. Further exploration into the how different types of contact affects the stigmatization against people suffering from substance use disorders is also warranted. It is important to understand the degree of intimacy, the stage of recovery, and the mode and medium of outreach that is best suited for decreasing stigma.

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## Appendix A

### 1. Means and Standard Deviations

Variable	Mean	SD
Age	45.08809293	14.39466496
Campaign Exposure	2.622093023	0.933131618
Stigma Level	2.790737872	0.959314251
Treatment Friends	4.583414005	0.638753702
Treatment Family	4.678606002	0.605536715
Experience	10.85479187	8.302786189

## Appendix B

### 1. Campaign Exposure Measure

Please indicate how often you've seen or heard the following messages:

	Never	Once or twice	3-5 times	6+ times
Genetics is responsible for 50% of your risk for addiction.				
Challenge what you know about addiction				
Beat the Stigma				

### 2. Stigma Scale

(Griffiths et al., 2004, p.344), modified to ask about “addiction.”

People with addiction could snap out of it and get better if they wanted.	Group 1: Personal Beliefs
Addiction is a sign of personal weakness.	
Addiction is not a real medical condition.	
People with addiction are dangerous.	Group 2: Perceived Volatility
People with addiction are unpredictable.	
I would not employ someone if I knew they once had an addiction.	Group 3: Employability and Leadership
I would not vote for a politician if I knew they once had an addiction.	
It is best to avoid people with addiction so you don't become addicted yourself.	Not Included
If I had an addiction I would not tell anyone.	

3. Likelihood to Support Seeking Treatment (one set for “friend” then answer again for “immediate family member”)

Scale: 1 = extremely unlikely; 5 = extremely likely

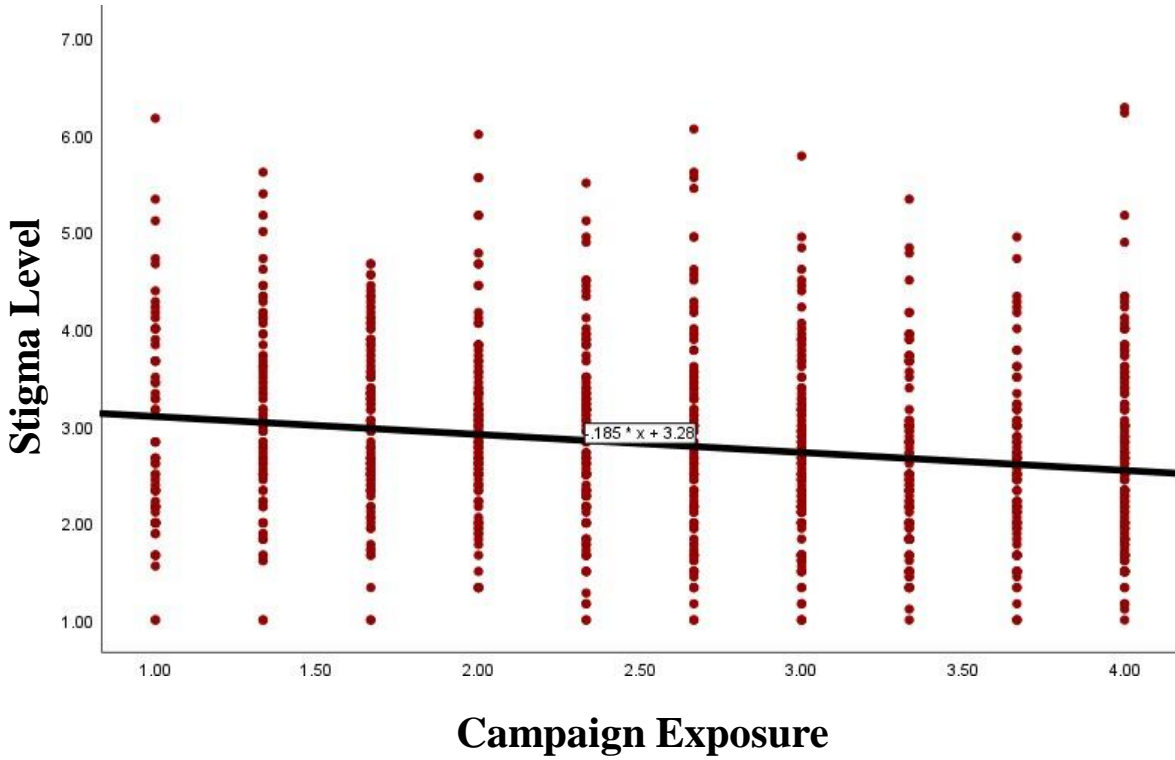
How likely or unlikely is it that you would encourage a [friend/immediate family member] to seek treatment for substance use?
How likely or unlikely is it that you would help a [friend/immediate family member] schedule their first appointment?
How likely or unlikely is it that you would offer a [friend/immediate family member] a ride to their first appointment?

4. Scores for Personal Experiences with SUDs

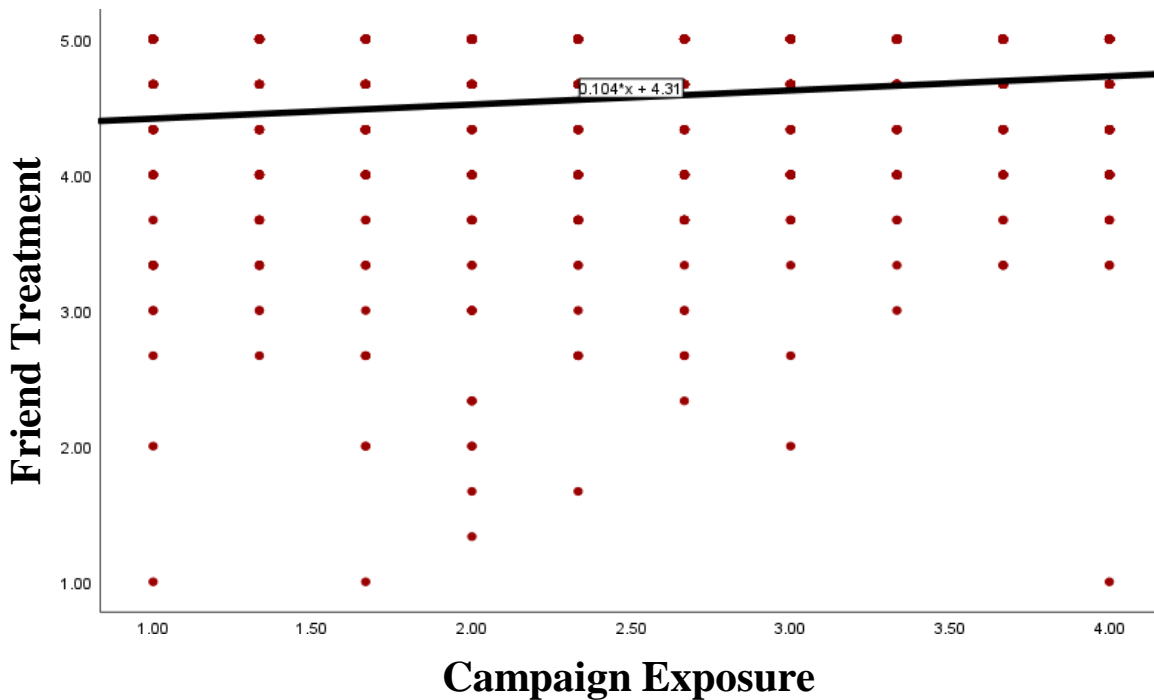
	Myself	Close friend	Immediate family	Someone I know, but not close friend or immediate family	No one I know
Diagnosed with substance use disorder	4	3	3	2	0
Treated for substance use disorder	4	3	3	2	0
Struggles with addiction or substance use	4	3	3	2	0
Injured or killed by someone under the influence	4	3	3	2	0

## Appendix C

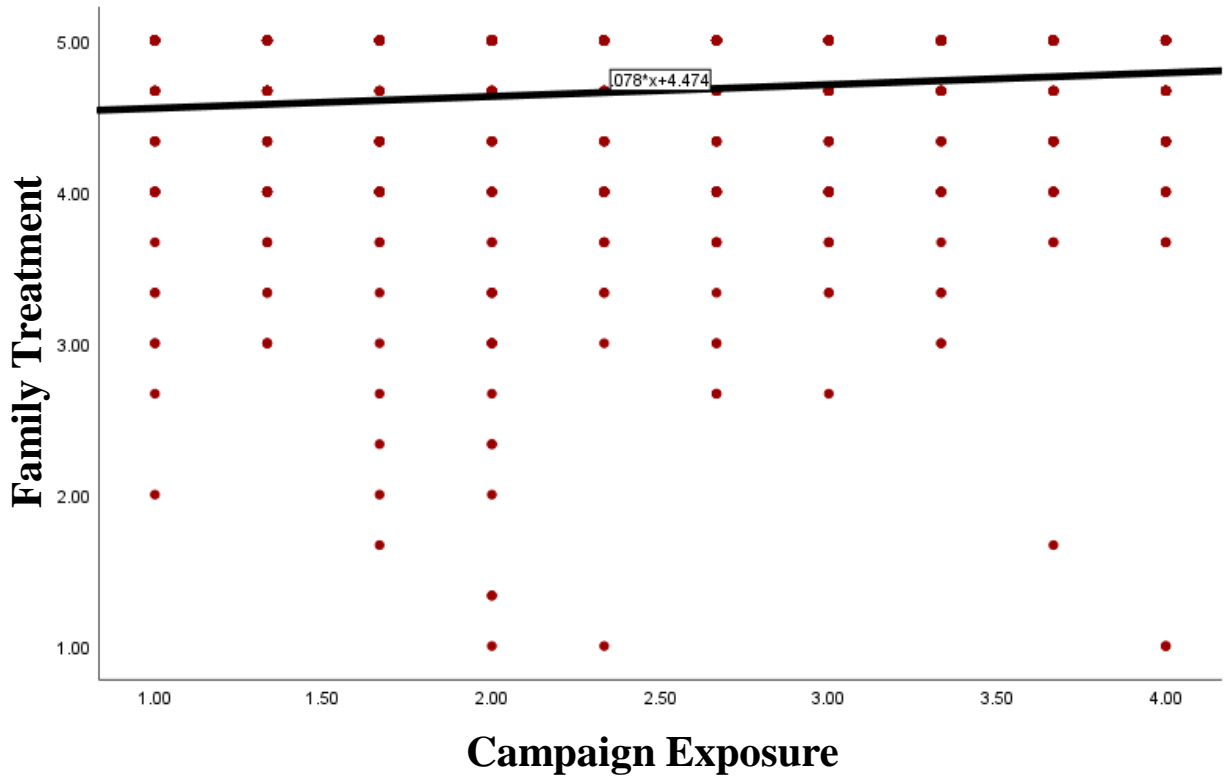
### 1. Campaign Exposure and Stigma Level Scatterplot and Regression Line



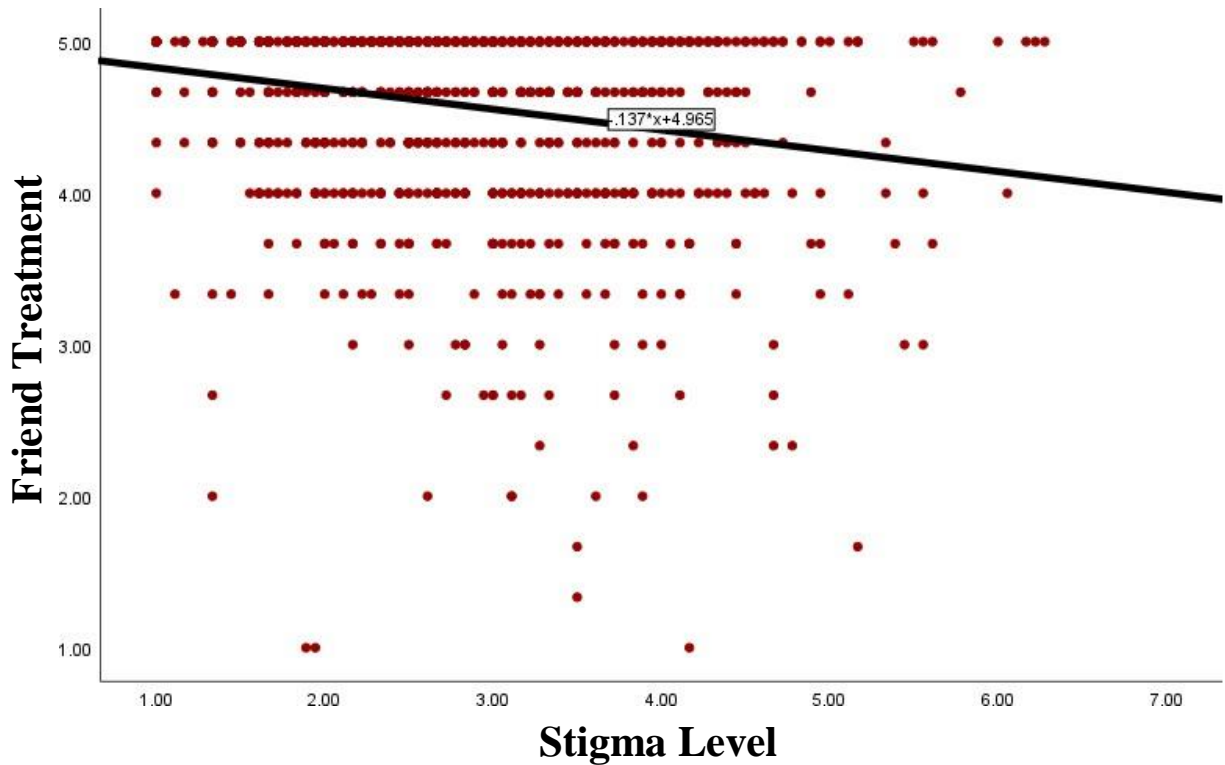
### 2. Campaign Exposure and Friend Treatment Scatterplot and Regression Line



3. Campaign Exposure and Family Treatment Scatterplot and Regression Line



4. Level of Stigma and Friend Treatment Scatterplot and Regression Line





5. Level of Stigma and Family Treatment Scatterplot and Regression Line

