Potential Interventions for Policy Support Targeting Justice Involved People with Mental Illness

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POTENTIAL INTERVENTIONS FOR POLICY SUPPORT TARGETING JUSTICE INVOLVED PEOPLE WITH MENTAL ILLNESS

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Dedication

To my amazing husband, Carlos, and our four wonderful kitties, Marvel, Olive, Yue, and Suki. Thank you for being there for me through everything and for always putting a smile on my face.

To my sweet little brother and sister, I hope you know that you can achieve anything that you dream of.
POTENTIAL INTERVENTIONS FOR POLICY SUPPORT TARGETING JUSTICE INVOLVED PEOPLE WITH MENTAL ILLNESS

by

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THESIS

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Abstract

Many people hold the misconception that people with mental illness are dangerous. Consequently, people with mental illness are often feared. This stigma is reinforced by the overrepresentation of people with mental illness in the criminal legal system. However, many people with mental illness struggle with the legal system due to ineffective policies making it difficult to adequately identify and treat this population within the legal system. The current studies aimed to understand public support of correctional policy aimed at people with mental illness, examine attitudinal factors that may be associated with this support, and test potential interventions for decreasing stigma and increasing rehabilitative support for this group. Findings show that participants were more supportive of rehabilitative policies aimed at justice involved people with mental illness. Participants’ fear of people with mental illness, fear of criminal behavior, perceived mutability of mental illness, and perceived mutability of criminal behavior were examined in relation to support for both punitive and rehabilitative policy. Imagined contact did not effectively increase support for rehabilitative policy, but the education intervention did. These were the first studies to examine the relationship between these attitudinal variables and policy support aimed specifically at justice involved people with mental illness. Future research can build on these findings by improving the interventions tested and identifying other attitudinal factors that could be paths for intervention.

Keywords: stigma, policy support, fear, perceived mutability
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Potential Interventions for Policy Support Targeting Justice Involved People with Mental Illness

Many people hold the belief that people with mental illness are dangerous (Ghiasi et al., 2022; Link et al., 1999). This is a common misconception (Morabito & Socia, 2015) that is reinforced by contemporary policy and rhetoric surrounding people with mental illness and their overrepresentation in the criminal legal system (Bronson & Berzofsky, 2017). This overrepresentation is exacerbated by factors such as homelessness, unemployment (Draine et al., 2002), and the lack of resources and treatment provided to justice involved people (James & Glaze, 2006). Thus, to ameliorate the overrepresentation of mental illness in the criminal legal system, we must improve the resources afforded to this group and create systems that prevent them from being incarcerated simply due to symptomatic behavior and more effectively promote desistance from criminal behavior. Improving resources for justice involved people with mental illness and putting these systems in place can ultimately be accomplished by changing policy and the first step towards policy change is gaining public support (Burstein, 2003). To increase public support for policy change, we must first examine what the current policy surrounding justice involved people with mental illness is, what the public’s current attitudes towards justice involved people with mental illness are, why people hold those attitudes, and if those attitudes can be changed.

In this thesis, I first review existing policies aimed at justice involved people with mental illness, delineating those that can be characterized as helpful for the rehabilitation of this population apart from those that have been criticized as harmful. I then examine the basis of stigma generally and address the components of stigma that are most relevant for this work. Next, I speak to stigma and attitudes about mental illness specifically and describe the factors...
that may underly these attitudes. I also outline which of these factors are unchangeable versus those that are potential targets for interventions. Following that, I address stigma and attitudes about justice involved people and factors that may be relevant to these attitudes. Then, I discuss the need to change attitudes towards justice involved people with mental illness, as well as potential interventions towards this end. Finally, I describe the present studies which aim to identify support for current policies targeted at justice involved people with mental illness, examine the factors related to endorsed stigma towards this group, and test possible interventions for decreasing stigma to increase support for rehabilitative policies for justice involved people with mental illness.
Literature Review

Current Policy

The deinstitutionalization of people from psychiatric hospitals in the 1960s - without appropriate community resources to serve the mass of people being released - resulted in the current state of the U.S. criminal legal system, where symptoms of mental illness and behaviors associated with them are criminalized. Thus, an inordinate number of people with mental illness end up in the criminal legal system and this is exacerbated by the inability of the system to discern symptomatic behavior from criminal behavior (Baillargeon et al., 2009) and the reliance on law enforcement as a “safety net” (Kanapaux, 2002) meant to catch and care for all the people who are not receiving mental health treatment. Several studies suggest that people with mental illness are disproportionally arrested at higher rates compared to those without mental illness (Constantine et al., 2010; White et al., 2006). This may be due to police officers lacking training in how to effectively interact with people who have mental illnesses, particularly those experiencing a mental health crisis (Fiske et al., 2021). Once people with mental illness are incarcerated, they are at higher risk for written and verbal reprimands as a result of violating facility rules (James & Glaze, 2006), punishment, and social isolation (O’Keefe & Schnell, 2007). This is due to factors such as the lack of training in mental illness protocols (Adams & Ferrandino, 2008; Appelbaum et al., 2001) and the emphasis that correctional officers place on maintaining control (Adams & Ferrandino, 2008; O’Keefe & Schnell, 2007). Because of the increased punishments, people with severe mental illness are also more likely to have longer sentences (James & Glaze, 2006; O’Keefe & Schnell, 2007), as collecting various infractions while incarcerated eventually results in the extension of a person’s sentence as punishment for repeated misbehavior. Justice involved people with major psychiatric disorders are also more
likely to be rearrested than those without a major psychiatric disorder (Baillargeon et al., 2009). Thus, after encountering the criminal legal system once, people with mental illness are more likely to stay in the system.

There are multiple points in the criminal legal system where people can be intercepted and diverted, with policies and structures at each point targeting people with mental illness. At the earliest point of contact with the criminal legal system—arrest—many communities have aimed to divert people with mental illness using a co-response model. Co-response models work to prevent the unnecessary admission of people into the criminal legal system by having a team comprised of a trained mental health professional and a police officer report to scenes where a mental health concern is likely involved (Krider et al., 2020). In these cases, the officer takes on the responsibility of securing the area and ensuring the safety of everyone involved, whereas the mental health professional’s primary role is interacting with the person having a crisis and deciding how to proceed. Depending on the implementation, the mental health professional may provide immediate clinical support in the moment, conduct evaluations, provide community resources, or even follow up with the person after the incident (Krider et al., 2020). Co-response models were developed as an extension of Crisis Intervention Teams (CIT) which utilized CIT-trained police officers (but not mental health professionals) to respond to calls that may involve a person having a mental health crisis (Thompson & Borum, 2006). However, research shows that co-response models are more effective than other methods, such as CIT and other variations of CIT (Seo et al., 2021). Co-response models provide a promising method to effectively deflect people with mental illness away from entering the legal system unnecessarily, as well as creating access to resources that they otherwise may not have had.
Another diversion method that is implemented in the U.S. is mental health courts. Mental health courts are a specialty treatment program within the court system in which justice involved people with non-violent offenses and mental health concerns can be diverted to (Bureau of Justice Assistance, 2012). These courts are made up of legal personnel (usually a judge, prosecutor, and defense attorney) who specialize in mental health and/or express interest in working with this specific population (Bureau of Justice Assistance, 2012). Although each court has its own eligibility criteria (California Judicial Branch, n.d.), the aim of mental health courts generally is to redirect eligible participants away from the traditional legal system and connect them with community rehabilitative services and support networks (California Judicial Branch, n.d.; Texas Judicial Commission on Mental Health, n.d). There are currently over 450 mental health courts active in the country (SAMHSA, 2023) and, although the variability between mental health courts makes large scale evaluations difficult, emerging research shows that they are effective at reducing recidivism (Loong et al., 2019; Lowder et al., 2018). There are also other programs, such as specialty mental health probation caseloads, aimed at helping justice involved people with mental illness who are on probation (Skeem et al., 2006) and thus cannot be immediately deflected or diverted out.

Not all policies and structures aimed at people with mental illness are as effective and humane as co-response models and mental health courts; many have been criticized because they prioritize community ‘safety’ over the well-being of the person with mental illness. Examples of this include the CARE act and assertive community care (ACT), that lead to forensic assertive community care (FACT). The CARE Act is a piece of legislation that was recently passed in California that targets people with and without justice involvement. It is presented as a mechanism to facilitate community mental health and substance use treatment for those most in
need of it (California Health and Human Services, n.d.), but the CARE Act really legalizes the forced treatment of vulnerable populations, specifically those who are dealing with both homelessness and schizophrenia or some form of a psychotic disorder. The CARE act accomplishes this forced treatment through the utilization of civil courts to enact court-ordered involuntary treatment and, if one continues not to comply, can result in involuntary commitment or legal conservatorship (Bazelon Center, 2022; Bossing, 2023). Several mental health and disability advocate organizations have come together to oppose this act on the basis that, at its core, it is promoting forced treatment (Bossing, 2023). They argue that the CARE Act reinforces institutional racism and worsening public health by stripping the autonomy of already marginalized people through forced treatment.

Although the CARE Act is specific to California, many states have some variation of forensic assertive community treatment (FACT), an extension of assertive community treatment (ACT) which is a practice that is intended to help justice involved people with severe mental illness reintegrate back into their community through intensive outpatient supervision and support (Case Western Reserve University, 2021; Lamberti & Weisman, 2010; Office of Inspector General, 2018). FACT utilizes both mental health professionals and criminal legal actors (usually probation officers) to deliver mental health treatment “in a comprehensive and integrated manner through the use of outreach” (Lamberti & Weisman, 2010); this is also accomplished through the use of legal leverage, which is described as the “use of legal authority to promote engagement in necessary interventions” (Lamberti et al., 2017). In practice, legal leverage is wielding legal sanctions to force treatment on people who have been non-compliant. For these reasons, assertive community treatment is so intense that some argue it is just another form of coerced treatment, as people find the intense outpatient treatment is intrusive to their life
and they are not able to exit the program of their own volition, with proponents of FACT arguing that “perceived coercion should be viewed as an undesirable side effect of such intervention” (Lamberti et al., 2014).

Both the CARE act and FACT seem to appeal to the public’s general belief that people with mental illness are dangerous (Jorm et al., 2012; Link et al., 1999) and, as a result, need to be forced into treatment against their will (Pescosolido et al., 2019). This may be why these types of policies generally receive much more public and media attention, despite being harmful towards the people they are targeting. Scholars have raised ethical concerns with forced and coerced treatment, as “these coercive practices are legitimzed, approved, and routinely employed…significant human rights violations…” (Sashidharan et al., 2019). These treatments violate the patient’s rights to equality, liberty, and personal autonomy guaranteed by the United Nations Convention on the Rights of Persons with Disabilities (as cited in Mezina et al., 2019; as cited in Sugiura et al., 2020). Others argue that implementing coercive treatment only serves to further alienate potential patients from seeking mental health care, as people may avoid seeking treatment for fear of being held against their will or not being able to exit the treatment of their own volition (Swartz et al., 2003). Aside from ethical and utilization concerns, there is little to no empirical evidence that coerced treatment is effective (Burns et al., 2016; Molodynski et al., 2010) and research shows that patients are consistently more satisfied with their treatment experience when they perceive less coercion throughout the process (Katsakou et al., 2010). Thus, increasing access to, and utilization of, voluntary mental health resources is likely the most effective and humane method of helping people with mental illness.
Stigma and Attitudes

Stigma is a very broad concept used in several areas of research and thus has many different definitions. In their review, Pescosolido and Martin (2015) identified three overarching theoretical building blocks that can be used to understand stigma conceptually and organize the research that it produces. These three building blocks are the basic concepts of stigma, stigma characteristics, and target variants. The six basic concepts of stigma are intended to organize the various definitions that have been used for understanding stigma and were composed of six parts: stigma, stigmatization, labels, stereotypes, prejudice, and discrimination.

Table 1

The Basic Concepts of Stigma

<table>
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<th>Concept</th>
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<tr>
<td>Stigma</td>
<td>A deeply discrediting attribute; “mark of shame”; “mark of oppression”; devalued social identity</td>
</tr>
<tr>
<td>Stigmatization</td>
<td>A social process embedded in social relationships that devalues through conferring labels and stereotyping</td>
</tr>
<tr>
<td>Labels</td>
<td>Officially sanctioned terms applied to conditions, individual, groups, places, organizations, institutions, or other social entities</td>
</tr>
<tr>
<td>Stereotypes</td>
<td>Negative beliefs and attitudes assigned to labeled social entities</td>
</tr>
<tr>
<td>Prejudice</td>
<td>Endorsement of negative beliefs and attitudes in stereotypes</td>
</tr>
<tr>
<td>Discrimination</td>
<td>Behaviors that act to endorse and reinforce stereotypes, and disadvantage those labeled</td>
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The second overarching building block that Pescosolido and Martin (2015) identified, stigma characteristics, refers to the different types of marks and identities that can be stigmatized. These are broken down into seven characteristics: physical, character, status, discredited, discreditable, changeable, and fixed. The present research will specifically be examining what Pescosolido and Martin (2015) refer to as character marks but may be better understood as either changeable or fixed characteristics. Here, a character mark refers to a moral
weakness in a person that is thought to result in the stigmatized identity. Pescosolido and Martin (2015) explicitly list the present study’s identities of interest (justice involvement and mental illness) as examples of this characteristic. However, this would depend on whether one believes justice involvement and mental illness arise from an individual moral failing. This is tied very closely to attribution theory, which would suggest that the belief that justice involvement and mental illness arise from a moral failing would be considered a dispositional attribution (Solomon, 1978), as dispositional attributions refer to causes of behavior from within oneself. Conversely, attribution theory also describes situational attributions (Solomon, 1978), which refers to holding the belief that external factors are the cause of certain behaviors. Because they originate from within oneself, dispositional attributions are thought to result in unchangeable behavior, whereas situational attributions are associated with more changeable behaviors because they are seen as one reacting to external factors. For the purposes of the present study, justice involvement and mental illness will be considered as either changeable or fixed characteristics of a person, rather than a character mark. This also allows me to examine the perceived mutability of each stigmatizing identity.

The last overarching theoretical building block described in Pescosolido and Martin’s 2015 review was target variants. Experiential target variants aim to understand how stigma is experienced, whereas action-oriented target variants aim to understand who is doing the stigmatizing. The experiential variants include five types of stigma: perceived, endorsed, anticipated, received, enacted. The action-oriented variants also include five types of stigma: self-stigma, courtesy stigma, public stigma, provider-based stigma, and structural stigma. The present research will specifically focus on public stigma, which can further be broken down into
Social distance, traditional prejudice, exclusionary sentiments, negative affect, treatment carryover, disclosure carryover, and perceptions of dangerousness (Pescosolido & Martin, 2015).

Social distance is often used as an operationalization of stigma and refers to a person’s desire to not interact with someone who holds a stigmatized identity (Pescosolido & Martin, 2015). Traditional prejudice refers to holding negative judgements about people with a stigmatized identity, whereas exclusionary sentiments represent the actual act of excluding people from society as a result of their identity (Pescosolido & Martin, 2015). Negative affect refers to the anticipation of negative emotional reactions, if one were to interact with a person who has a stigmatized identity. (Pescosolido & Martin, 2015) Treatment carryover and disclosure carryover refer to the belief that admitting to having received treatment for a stigmatized condition and admitting to having a stigmatized condition, respectively, will elicit negative responses from the public and cause the person to be viewed as lesser than (Pescosolido & Martin, 2015). Lastly, perception of dangerousness refers to the belief that people who hold stigmatized identities are dangerous and will harm themselves and others (Pescosolido & Martin, 2015). This is the main piece of public stigma that this work will focus on and try to target as a means of reducing stigma for justice involved people with mental illness.

Stigma and Attitudes About Mental Illness

Public stigma, particularly perception of dangerousness, is the target of these studies, as people with severe mental illness are highly stigmatized in our society and this is largely due to them being feared and perceived as unstable and unpredictable. Many people hold the belief that people with mental illness are dangerous (Jorm et al., 2012; Link et al., 1999). This perceived dangerousness increases stigma surrounding mental illness which leads to increased avoidance or desire for social distance (Angermeyer & Dietrich, 2006; Corrigan et al., 2002). This then leads
to more negative attitudes about related policy issues (McSween, 2002), which can result in greater exclusionary sentiments. Consequently, believing that people with mental illness are dangerous is positively associated with support for forced treatment (Pescosolido et al., 2019), possibly because people think it may make them less dangerous. However, the belief that people with mental illness are dangerous is a common misconception; research shows that having a mental illness does not in and of itself make a person more dangerous (Morabito & Socia, 2015) or more likely to commit crime (see Shipley & Borinsky, 2013 for a review). When research has found a link between mental illness and violent behavior, it is usually accompanied by a comorbid substance use disorder and, even then, ethnicity and gender were still better predictors of violence than mental illness (Corrigan & Watson, 2005).

Factors Underlying Attitudes About Mental Illness

Unchangeable Factors

Research shows that stigma towards people with mental illness is associated with a variety of features of the person holding the attitude. For example, mental health stigma is associated with age, although the findings are contradictory. A meta-analysis of several international studies shows that older people tend to have more negative attitudes surrounding mental health as compared to younger people (Angermeyer & Dietrich, 2006). Stigma is also negatively associated with education, such that those with higher levels of education tend to hold less negative attitudes towards people with mental illness (Angermeyer & Dietrich, 2006; Gonzales et al., 2017). People who are younger, white, better educated, and attended religious services more often desire less social distance from people with mental illness (Silton et al., 2011). Research also shows that there is an association between gender and mental health stigma, although there is mixed evidence about the directionality of the relationship (Angermeyer &
Dietrich, 2006). Some work suggests that women are more open-minded and empathetic towards people with mental illness, but they are also more fearful of them compared to men (Ewalds-Kvist et al., 2013). Mental health stigma is also associated with conservatism and right-wing authoritarianism, such that those who are more conservative or hold higher endorsements of right-wing authoritarianism also hold more stigma towards people with mental illness (DeLuca et al., 2018; Gonzales et al., 2017). Although political orientation is technically changeable, it is not a factor that researchers can target and attempt to change, thus I include it with our unchangeable factors.

**Changeable Factors**

Unlike more stable factors like gender and ethnicity, some factors associated with mental illness stigma are changeable, such as knowledge and experience, making them ripe targets for anti-stigma interventions. Knowledge about mental illness is associated with stigma. People who have more knowledge about mental illness hold less stigmatizing attitudes towards people with mental illness (Angermeyer & Dietrich, 2006). Similarly, people who view mental illness as more changeable (i.e., who hold situational attributions) hold less stigmatizing attitudes and have greater support for rehabilitative policies (Falco & Turner, 2014). Additionally, people who have personal experience with someone who has a mental illness have less stigmatizing attitudes (Addison & Thorpe, 2004; Vaudreuil, 2022). Further, perception of dangerousness is strongly associated with stigma of mental illness (Jorm et al., 2012; Link et al., 1999), so by dispelling the myth of dangerousness in people with mental illness through increasing knowledge about and contact with them, we may also be able to reduce the associated fear and, thus, reduce the stigma surrounding this group.
Stigma and Attitudes About Justice Involved People

Justice involved people are also highly stigmatized in our society and research shows that people who experience justice involved stigma have worse life outcomes compared to those who do not. For example, higher perceived stigma as a result of justice involvement is associated with more trouble with reentry (Howell et al., 2022), difficulty attaining a job (Moore & Tangney, 2017), and worse health issues (Wakefield & Uggen, 2010). However, despite knowing the negative impact that perceived stigma has on justice involved people, not a lot of work examines how the general public stigmatizes them. The work that has been done suggests that perceived dangerousness also plays a role in the stigmatization of justice involved people (Pescosolido & Martin, 2015), with people endorsing more stigma about justice involved people who have committed violent crimes as compared to non-violent crimes (Denver et al., 2017). Some research suggests that fear of crime (or the perception of the justice involved person’s incapacity to change) and moral outrage at the crime, along with crime type (Tan et al., 2016), are significant predictors of justice involved stigma. People hold more stigma towards justice involved people when they believe that the justice involved person cannot change their behavior. It is likely that some people believe that because someone already committed a crime in the past, they are bound to remain ‘dangerous’, recidivate, and commit more crime in the future, thus they hold more stigma towards that person compared to someone who does not believe that the justice involved person will necessarily recidivate.

Factors Underlying Attitudes About Justice Involved People

Unchangeable Factors

Similar to what is known about factors underlying stigma towards people with mental illness, research shows that stigma towards justice involved individuals is associated with a
persons’ race and political orientation. People who identify as conservative or Republican hold more negative attitudes towards justice involved people (Wakefield & Uggen, 2010). White non-Latinx people, people who identify as conservative, and residents of southern states hold more negative views justice involved people (Hirschfield & Piquero, 2010).

**Changeable Factors**

As previously stated, people hold varied beliefs about the causes of criminal behavior. Research shows that a person’s attributions of crime are associated with stigma. This research tends to focus on the two types of attributions previously mentioned: dispositional and situational. Dispositional attributions are perceived to be less changeable and have been found to be associated with punitive attitudes (Grasmick & McGill, 1994; Shi et al., 2022; Sims, 2003; Updegrove et al., 2021), conservativeness (Carroll et al., 1987), and higher levels of stigma (Shi et al., 2022). This is most likely due to the fact that people holding dispositional attributions view the cause of criminal behavior as something that is internal to the person and, as a result, they believe that people who commit crime will continue to do so. Situational attributions involve external factors that can be responded to. The behavior in response to the situation is seen as a reaction to the situation, so this attribution considers behavior to be more changeable. Likely as a result of this, situational attributions have been found to be associated with rehabilitative attitudes (Falco & Turner, 2014; Updegrove et al., 2021). Although these findings are illuminating, some research suggests that a person’s punitive attitudes are better predictors of stigma (Hernandez & Eno Louden, in prep) then their attributions of crime, with more punitive attitudes predicting higher levels of stigma (Hernandez & Eno Louden, in prep; Shi et al., 2022). Because of this, rather than examining attributions of criminal behavior and mental illness and
their association with punitive attitudes, I will be focusing on the mechanism that I believe drives this relationship, which is the perceived mutability of justice involvement and mental illness.

**Changing Attitudes to Increase Policy Support**

People living with mental illness make up a large portion of the incarcerated population in America and it is argued that to truly understand the mental health crisis, one must start with the over representation in the criminal legal system (Al-Rousan et al., 2017). However, to our knowledge, there is little to no work done examining the public support of actual policies being implemented to target justice involved people with mental illness such as mental health courts and co-response models. Thus, before attempting to change public attitudes, it is necessary to examine where public support for punitive and rehabilitative policies lie currently and what the factors that underly these attitudes are. Once it is known which policies have more public support and which factors are associated with this support, we can begin to test interventions aimed at changing attitudes and increasing support for more rehabilitative policies.

Potential interventions that can be used to target these factors and reduce stigma for justice involved people include education, perceived variability, and contact. Research shows that both education about and contact with the targeted group can serve as interventions to decrease stigma (Corrigan et al., 2001). Education interventions usually involve providing people with information that is meant to elucidate things that are not common knowledge about the target out group. Often, this involves dispelling common public beliefs about that group and replacing that belief with the correct information. Contact interventions specifically refer to having a positive social interaction with a member of the target outgroup. However, it can be extremely difficult to create instances where people can have positive contact with others of a specific group, such as people who are justice involved and have mental illness. As a result of
this difficulty, studies have been conducted to test the impact of contact through imagined contact (Crisp & Turner, 2009; Stathi et al., 2012). Imagined contact is a technique in which people are provided with a detailed description of a person from a target group and are instructed to imagine that they are having a very positive interaction with the person in which they are conversing pleasantly and getting to know each other (Crisp & Turner, 2009). This technique has been tested in other research areas and has been found to be effective (Turner & West, 2012). Some studies have employed imagined contact as an intervention for mental illness specifically and found that it was successful in this area as well (Na & Chasteen, 2016; Schuhl et al., 2019).

Other research suggests that perceived variability may be a more effective and more easily implemented intervention than traditional contact (Er-rafiy & Brauer, 2012; Hsieh et al., 2022). Perceived variability as an intervention attempts to de-homogenize the out group, showing that members within the targeted outgroup are all very different from each other and, thus, increasing the perceived variability of the people in that group (Er-rafiy & Brauer, 2012). Although the mechanism by which perceived variability operates to decrease prejudice is unclear, it is possible that increasing heterogeneity of the out group is a form of humanization. Because of this, and because of the promising results that perceived variability can decrease stigma and discrimination, these studies combine perceived variability and education into one intervention. As such, the intervention that I refer to as education, contains information aimed at educating people about mental illness and justice involvement, as well as information that is aimed at increasing perceived variability of justice involved people with mental illness.

Present Studies

The present research focused on identifying the factors related to endorsed stigma about mental illness and justice involvement and tested whether possible interventions for decreasing
endorsed stigma would result in increased support for more rehabilitative policies for these
groups. This was conducted in two studies. Specifically, Study 1 examined the current attitudes
about contemporary rehabilitative and punitive policies using a resource allocation task, as well
as assessed what other beliefs and factors were associated with those attitudes.

RQ\textsubscript{1}: Is there a difference in support for rehabilitative policies versus punitive policies
aimed at justice involved people with mental illness?

\textit{H}_1: There is a difference in support for rehabilitative policies versus punitive
policies aimed at justice involved people with mental illness.

RQ\textsubscript{1a}: If so, are rehabilitative policies aimed at justice involved people with mental illness
or punitive policies aimed at this group more supported?

\textit{H}_{1a}: Punitive policies aimed at justice involved people with mental illness are
more supported than rehabilitative policies aimed at this group.

RQ\textsubscript{2}: How are fear and perceived mutability related to support of punitive and
rehabilitative policies for justice involved people with mental illness?

\textit{H}_{2a}: As fear of people with mental illness and crime increase, support for
rehabilitative policies decreases and support for punitive policies increases.

\textit{H}_{2b}: As perceived mutability of mental illness and criminal behavior increase,
support for rehabilitative policies increases and support for punitive policies
decreases.

These findings informed the attitudes and beliefs that were targeted by the interventions in Study
2. Specifically, Study 2 tested whether education about or imagined contact with justice involved
people with mental illness would successfully change people’s attitudes and increase support for
rehabilitative policies targeted at this group.
RQ3: Will education or contact increase support for rehabilitative policies aimed at justice involved people with mental illness?

\( H_3: \) Both education and imagined contact will increase support for rehabilitative policies aimed at justice involved people with mental illness.

RQ3a: If so, which intervention is most successful at increasing support for rehabilitative policies?

\( H_{3a}: \) Imagined contact will be more successful than education at increasing support for rehabilitative policies.
Study 1

Method

Participants

A power analysis performed on G*Power for a multiple linear regression with an effect size of $f^2 = .065$, an $\alpha = .05$ a power of .8, and nine tested predictors yielded a necessary sample size of 250 participants. To account for attrition and unusable data, 10% of the sample size was added to the necessary sample size to achieve a final sample size of 275 participants.

As a result, 275 participants were recruited through CloudResearch, a subset of Amazon’s MechanicalTurk. To be eligible, participants had to be living in the United States, over the age of 18, have an approval rating of at least 95%, and have completed at least 100 hits on CloudResearch. On CloudResearch, each project or survey that a person completes is counted as a ‘hit’ and each person is given an overall approval rating based on the quality of data they have provided in the past (CloudResearch, n.d.a). The eligibility criteria of having completed at least 100 hits and an approval rating of at least 95% ensured that those who were eligible to participate in the study have provided quality responses in the past and thus were more likely to provide quality data for the current study (Peer et al., 2014). Participants in the top 10% of respondents on CloudResearch were also automatically excluded from eligibility to address concerns about participant non-naivété (Litman, 2020a). Excluding the top 10% of performers on the platform protects against participants who have conducted an excessive amount of hits (Litman, 2020b) and are likely able to guess either the purpose or hypothesis of the study which may impact their responses.

Data were collected from a total of 281 participants. Of these, seven were removed for not completing the allocation task (described below) and four were removed due to failing both
attention checks. Participants’ demographic characteristics were as follows: 65.93% identified as 
female, 33.70% identified as male, 0% identified as non-binary or preferred to self-describe, and 
.0037% preferred not to answer. Most (76.70%) of the sample identified as White and mean age 
of participants was 37.86 years.

Table 2

Demographic Characteristics for Study 1 Participants

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>$n$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
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</tr>
<tr>
<td>White</td>
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<td>Native American or Alaskan Native</td>
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<td>1.5</td>
</tr>
<tr>
<td>Asian</td>
<td>17</td>
<td>6.3</td>
</tr>
<tr>
<td>Other/Prefer not to answer</td>
<td>17</td>
<td>6.3</td>
</tr>
<tr>
<td>Latinx</td>
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<td></td>
</tr>
<tr>
<td>Yes</td>
<td>33</td>
<td>12.2</td>
</tr>
<tr>
<td>No</td>
<td>236</td>
<td>87.4</td>
</tr>
<tr>
<td>Prefer not to answer</td>
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<td>0.4</td>
</tr>
<tr>
<td>Marital status</td>
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<tr>
<td>Married</td>
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<tr>
<td>Living with a partner</td>
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<td>14.1</td>
</tr>
<tr>
<td>In a relationship, not living together</td>
<td>20</td>
<td>7.4</td>
</tr>
<tr>
<td>Widowed</td>
<td>2</td>
<td>0.7</td>
</tr>
<tr>
<td>Divorced or separated</td>
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<td>7.0</td>
</tr>
<tr>
<td>Single</td>
<td>70</td>
<td>25.9</td>
</tr>
<tr>
<td>Highest level of education</td>
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<td></td>
</tr>
<tr>
<td>High school diploma or GED</td>
<td>32</td>
<td>11.9</td>
</tr>
<tr>
<td>Some college, no degree</td>
<td>61</td>
<td>22.6</td>
</tr>
<tr>
<td>Associate’s or technical degree</td>
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<tr>
<td>Bachelor’s degree</td>
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<tr>
<td>Graduate or professional degree</td>
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<td>17.0</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>1</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Materials and Measures

Study 1 had four attitudinal measures, an allocation task, an open-ended question, and 
demographic questions. To obtain scores for each of the attitudinal measures, all items on a 
given measure were averaged, allowing for a maximum of one missing response per measure.
Two attention checks asking participants to indicate a specific response were also integrated into the scales.

**Fear of People with Mental Illness.** Fear of people with mental illness was measured using the dangerousness/avoidance subscale of the Prejudice towards People with Mental Illness (PPMI) scale from Kenny et al. (2018). This subscale has a Cronbach’s alpha of .87 (Kenny et al., 2018) and asks participants to indicate their agreement with statements about people who have a mental illness. The dangerousness/avoidance subscale consists of eight items that were answered on a nine-point Likert scale from *Very Strongly Disagree* to *Very Strongly Agree*. Sample items from this measure include “I would find it hard to talk to someone who has a mental illness” and “I am not scared of people with mental illness.” See Appendix A for the complete measure.

**Fear of Crime.** Fear of crime was measured using a scale developed by Grubb and Bouffard (2014). The scale has a Cronbach’s alpha of .94 (Grubb & Bouffard, 2014) and is comprised of six items that were answered on a four-point Likert scale from *Not worried at all* to *Very Worried*. Sample items from this measure include “How worried are you about being assaulted by someone?” and “How worried are you about having your car stolen?” See Appendix B for the complete measure.

**Perceived Mutability of Mental Illness.** Perceived mutability of mental illness was assessed with a total of six items answered on a seven-point Likert scale from *Completely Disagree* to *Completely Agree*. Five of these items were adapted from the treatability subscale of the Day’s Mental Illness Stigma Scale (Day et al., 2007). The sixth item was created specifically for this project and was as follows: “People with mental illness can improve, whether it is
through overcoming it, through getting it under control, or through some other means.” See Appendix C for the complete measure.

**Perceived Mutability of Criminal Behavior.** Perceived mutability of criminal behavior was assessed with five items answered on a six-point Likert scale from *Strongly Disagree* to *Strongly Agree*. Four of the items were adapted from the belief in redeemability questions ($\alpha = .72$) used in Burton et al. (2020). These questions were adapted by Burton et al. (2020) for an adult population from Maruna and King (2009). The fifth item that was created specifically for this project and was as follows: “If a person has committed crime in the past, it does not necessarily mean that they will commit crime in the future.” See Appendix D for the complete measure.

**Allocation Task.** Support for rehabilitative and punitive public policy was operationalized using an allocation task modeled after Dunbar (2020). Participants were told that they had been given a budget to allocate across four public policies – two rehabilitative and two punitive – and were instructed to allocate whatever percentage they would like to each individual policy. The four policy options included increasing resources for co-response programs, increasing resources for mental health courts, increasing police on the street to detect and apprehend criminals, and building more prisons/increasing prison sentences, with the former two being rehabilitative and the latter two being punitive. Each of these policies were accompanied by a short explanation of what they entail, but whether they are considered rehabilitative or punitive was not explicitly stated. The survey was constructed so that participants could not move on from the task unless all percentages added up to 100%. See Appendix E for an example of the allocation task. After conducting the allocation task, participants were asked what factors
they considered while making their allocations in an open-ended format. Those responses were used to inform the type of information included in the vignettes in Study 2.

**Demographics.** Participants were also asked about their political orientation, age, highest level of education, gender, race, and ethnicity. Political orientation was measured on a sliding scale from 0 (Liberal) to 7 (Conservative).

**Procedure**

After opting into the study, participants were automatically redirected to Qualtrics to complete the survey. All participants were presented with all four measures in a counterbalanced order. They were then all instructed to complete the allocation task, before going on to answer the demographic questions. After completing the survey, each participant was compensated $1.20. This amount was calculated using a pilot study of undergraduate participants to determine the average amount of time of the survey and following best practices recommended by CloudResearch (CloudResearch, n.d.b), which suggest compensating participants $0.10 for every minute the study takes.

**Analytic Strategy**

Data cleaning and analyses were all conducted using version 27.0.1.0 of SPSS Statistics. Before beginning analyses, the seven participants who did not complete the allocation task and the four participants who failed both attention checks were removed. The remaining 270 participants were included in the following analyses. To calculate support for each type of policy from the responses to the allocation task, I summed the percentage allocated to both punitive policies into one variable and the percentage allocated to both rehabilitative policies into another variable. Because of the nature of the allocation task, the possible percent of budget allocated to either rehabilitative or punitive policies ranges from 0% to 100% and these values are dependent
on each other as they must add to 100%. As a result, an equal amount of support to both types of policies would then be represented by each type of policy receiving 50% of the budget. Thus, to address my first research question about whether there is a difference in support for rehabilitative policies versus punitive policies aimed at justice involved people with mental illness, I conducted a single sample t-test comparing the mean support for rehabilitative policies to a value of 50, to represent the scenario of both types of policies being supported equally.

Before beginning analyses to answer my second research question, I conducted three separate one-way ANOVAs with education, gender, and race as the respective grouping variable to test if policy attitudes varied significantly across the different groups within the demographic. If any of these had been significant, I would have dummy coded the variable and entered it into the subsequent analysis. However, none of the ANOVAs were significant – meaning that policy attitudes did not vary across any of the categories in these variables and thus did not need to be controlled for in the main analyses (see Appendix F for ANOVA output). I also examined correlations between age, political ideology, and my four attitudinal measures, with policy attitudes. All of these variables were significantly correlated with policy attitudes and thus were included in analyses (see Table 3 for all correlations).

Table 3

Correlations for Study 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Policy attitudes</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Fear of mental illness</td>
<td>-.26**</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Fear of crime</td>
<td>-.26**</td>
<td>.13*</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Perceived mutability of mental illness</td>
<td>.29**</td>
<td>-.29**</td>
<td>-.11</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Perceived mutability of criminal behavior</td>
<td>.34**</td>
<td>-.39**</td>
<td>-.19**</td>
<td>.31**</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Age</td>
<td>-.18**</td>
<td>.22**</td>
<td>-.19**</td>
<td>-.05</td>
<td>-.13*</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>7. Ideology</td>
<td>-.50**</td>
<td>.27**</td>
<td>.10</td>
<td>-.16*</td>
<td>-.34**</td>
<td>.16*</td>
<td>—</td>
</tr>
</tbody>
</table>
*p < .05. **p < .01.

To answer my second research question, I conducted a multiple linear regression with support for policies as the continuous outcome variable. Although research shows that support for rehabilitative policy and support for punitive policy do not have a perfect negative relationship with one another (see Vuk et al., 2019 for a review), the design of the allocation task necessitates that they be treated as if they are perfect opposites of each other because any percentage allocated to one type of policy cannot then be allocated to the other type. Thus, to examine the relationship that fear and perceived mutability have with support for both types of policy, I first created a support for policy variable. This continuous variable was calculated by subtracting the total percentage of funds allocated to punitive policies to from the total percentage of funds allocated to rehabilitative policies. As a result, the support for policy variable can range from -100 to 100 and a negative score represents more support for punitive policies whereas a positive score represents more support for rehabilitative policies. This support for policy variable was then used as the dependent variable in a multiple regression with fear of mental illness, fear of crime, perceived mutability of mental illness, perceived mutability of criminal behavior, political ideology and age as predictors.
Study 1 Results

Support for Rehabilitative and Punitive Policies

Participants’ support for rehabilitative and punitive policies were not equivalent, as support for rehabilitative policies ($M = 72.67$) was significantly different than 50%, $t(269) = 16.81, p < .001, d = 2.10$. Because support for punitive policies ($M = 27.33$) is dependent on support for rehabilitative policies, we can also conclude that support for punitive policies is significantly different from equal support for both types of policies. Because the mean support for rehabilitative policies is higher than the mean support for punitive policies, we can conclude that rehabilitative policies were more supported than punitive policies.

Relationship of Fear and Perceived Mutability with Support for Policy

The multiple linear regression model was significant, $R^2 = .36, F(6, 250) = 22.91, p < .001$. Fear of mental illness, $\beta = -.66, p = .733$, and perceived mutability of criminal behavior, $\beta = 5.56, p = .113$, were not significant predictors of support for policy. However, fear of crime, $\beta = -11.63, p < .001$, and perceived mutability of mental illness, $\beta = 8.26, p = .003$, were significant predictors of support for policy. As fear of crime increased, people were more likely to be supportive of punitive policies. Conversely, as perceived mutability of mental illness increased, people were more likely to support rehabilitative policies. Additionally, participant age, $\beta = -.60, p = .015$, and political ideology, $\beta = -9.14, p < .001$, were also significant predictors of support for policy, such that older age and more conservativeness were predictive of support for punitive policies.

Table 4

Descriptive Statistics for Study 1 Dependent and Attitudinal Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Range of Possible Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Fear of Mental Illness\textsuperscript{a} & 270 & 3.74 & 1.35 & 1 – 9 \\
Fear of Crime\textsuperscript{a} & 270 & 1.96 & 0.78 & 1 – 7 \\
Perceived Mutability of Mental Illness\textsuperscript{a} & 270 & 5.78 & 0.87 & 1 – 7 \\
Perceived Mutability of Crime\textsuperscript{a} & 270 & 4.48 & 0.75 & 1 – 6 \\
Support for Policy\textsuperscript{b} & 270 & 45.35 & 44.19 & -100 – 100 \\
a. Total scores calculated by averaging all items on the measure.

b. Calculated by subtracting support for punitive policy from support for rehabilitative policy, so a larger number indicates more support for rehabilitative policy and a smaller number indicates more support for punitive policy.

Factors Considered While Allocating Budget to Policies

After the allocation task, participants were asked “share any and all factors [they] considered while allocating the budget across the policies.” These responses were then coded for any relevant underlying attitudes (e.g., pro-rehabilitation, anti-police, etc.). Of the 270 participants included in analyses, 108 of them either did not respond to the question or their response was so vague or unrelated that it could not be coded for underlying attitudes. An example of a vague response that was included in this category is “I considered which policy was best.” Of the responses that had enough information to code them for underlying attitudes, 105 were pro-rehabilitation and anti-prisons and police, 32 were pro-rehabilitation and police but anti-prison, 11 indicated that all policies were important or that they allocated equally across policies, 10 were solely pro-police, 3 were policy recommendations, 1 indicated that they considered which policy could do more with the money, and 1 indicated that they believed people with mental illness are a danger to the public. Although the responses focused on the specific policies they were presented with and not the explicit factors that they considered while choosing between the policies, the underlying themes of the attitudes expressed in these
responses were still used to inform the type of information that was included in the education vignette for Study 2.


Study 1 Discussion

As hypothesized, there was a difference in support for rehabilitative policies compared to punitive policies aimed at justice involved people with mental illness but, contrary to what was expected, participants were overall more supportive of rehabilitative policies aimed at this group. Also contrary to expectations, participants’ fear of people with mental illness and perceived mutability of criminal behavior were not predictors of participants’ support for policy. However, as hypothesized, their fear of crime and their perceived mutability of mental illness were predictive of participants’ support for policy. In line with previous research (Hernandez & Eno Louden, in prep; Shi et al., 2022), participants who had higher fear of crime were more supportive of punitive policies and those who had lower fear of crime were more supportive of rehabilitative policies. Also replicating previous findings (Falco & Turner, 2014), participants who reported more perceived mutability of mental illness tended to be more supportive of rehabilitative policies and those who reported less perceived mutability of mental illness tended to be more supportive of punitive policies. Additionally, participants’ age and political ideology were predictors of their support for policy. As found in previous work (Angermeyer & Dietrich, 2006; DeLuca et al., 2018; Gonzales et al., 2017; Hirschfield & Piquero, 2010; Wakefield & Uggen, 2010), those who were older and more conservative were more supportive of punitive policies and those who were younger and more liberal were more supportive of rehabilitative policies. These results, coupled with the participants’ responses to the open-ended question, show that participant’s beliefs about mental illness and their fear of criminal behavior are the most effective attitudes to target to increase their support for rehabilitative policy. This knowledge informed the interventions used to attempt to change support for policy in Study 2. The interventions aimed to either inform participants about the treatability of mental illness as
well as explaining that mental illness does not cause crime or to humanize justice involved
people with mental illness to show that this group are not inherently dangerous and that they can
live what most would consider to be a ‘regular’ life.
Study 2

Method

Participants

A power analysis performed in G*Power for an analysis of covariance (ANCOVA) with an effect size of $f = .175$, an $\alpha = .05$, a power of .8, a degrees of freedom numerator of two, three groups, and nine covariates yielded a necessary sample size of 318 participants. To account for attrition and unusable data, 10% of the sample size was added to the necessary sample size to achieve a final sample size of 350 participants.

Participants were again recruited through CloudResearch with the same eligibility and exclusion criteria used in Study 1; to be eligible, participants had to be living in the United States, over the age of 18, have an approval rating of at least 95%, have completed at least 100 hits, and not fall within the top 10% of respondents on CloudResearch.

Data were collected from a total of 359 participants. Of these, seven were removed for not completing the allocation task, 13 were removed for failing the manipulation check, and one was removed due to failing both attention checks. Our participant demographic breakdown was as follows: 69.5% identified as female, 27.5% identified as male, 1.8% identified as non-binary or preferred to self-describe, and 0.3% preferred not to answer. Most (79.9%) of the sample identified as White and the mean age of participants was 37.31 years.

Table 5

Demographic Characteristics for Study 2 Participants

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>270</td>
<td>79.9</td>
</tr>
<tr>
<td>Black or African American</td>
<td>29</td>
<td>8.6</td>
</tr>
<tr>
<td>Native American or Alaskan Native</td>
<td>2</td>
<td>0.6</td>
</tr>
<tr>
<td>Asian</td>
<td>11</td>
<td>3.3</td>
</tr>
</tbody>
</table>
Materials and Measures

Study 2 included the same four measures, allocation task, demographic questions, and attention checks as Study 1. Additionally, it also included an intervention administered through vignettes, as well as a manipulation check administered immediately after the intervention. The manipulation checks asked the participants a single question regarding the information they had read in the vignette and each question was tailored to the content of the respective intervention. As in Study 1, the scores for each of the attitudinal measures were obtained by averaging all the items on the respective measure, allowing for a maximum of one missing response per measure.

Vignettes. Participants in Study 2 were randomly assigned to one of three conditions: control, education, or imagined contact. Those in the control condition received a vignette about climate change. Those in the education condition received an educational vignette created using the open-ended responses about the factors impacting how participants allocated funds in Study
1. It was expected that this would include dispelling the myth of dangerousness in people with mental illness as a cause of criminal behavior. However, the majority of the responses explicitly addressed the policies themselves rather than the underlying cause for why they chose to support the policy. Thus, I coded underlying themes within responses and found patterns that were somewhat consistent with what we originally anticipated. As a result, the education vignette included information about the treatability and mutability of mental illness as well as dispelling the myth that people with mental illness are dangerous and that mental illness causes criminal behavior. Those in the imagined contact condition received an imagined contact vignette that was modeled after the imagined contact vignette used in Schuhl et al. (2019) but was adapted to describe a justice involved person with mental illness rather than a person with schizophrenia. A manipulation check was also included after the vignettes to ensure that participants were reading the material as well as ensuring the manipulations were effective. See Appendix F for full vignettes.

**Procedure**

After opting into the study, participants were automatically redirected to Qualtrics to complete the survey. Qualtrics randomly assigned each participant to one of three conditions: control, education, or contact. All participants were first presented with the four measures from Study 1 in a counterbalanced order. Participants then received either the control vignette, the educational vignette, or the imagined contact vignette, based on the condition they were randomly assigned to. After reading their assigned intervention, participants answered a manipulation check before going on to complete the same allocation task that was completed in Study 1. Lastly, all participants answered basic demographic questions. After completing the survey, each participant was compensated $1, following best practices recommended by
CloudResearch (CloudResearch, n.d.b). Again, this amount was calculated using a pilot study of undergraduate participants to determine the average amount of time of the survey and following best practices recommended by CloudResearch (CloudResearch, n.d.b), which suggest compensating participants $0.10 for every minute the study takes.

**Analytic Strategy**

Data cleaning and analyses were all conducted using version 27.0.1.0 of SPSS Statistics. Before beginning any analyses, the seven participants who did not complete the allocation task, the 13 participants who failed the manipulation check, and the one participant who failed both attention checks were removed. The remaining 338 were included in analyses. As in the first study, the support for policy variable was calculated by subtracting the total percentage allocated to punitive policies from the total percentage allocated to rehabilitative policies. Thus, a negative value indicated greater support for punitive policies and a positive value indicated greater support for rehabilitative policies.

Before beginning analyses to answer my third research question, I first examined correlations between age, political ideology, and my four attitudinal measures, with policy attitudes. All of these variables, except fear of crime, were significantly correlated with policy attitudes (see Table 5 for all correlations). Thus, the three significant attitudinal variables (fear of mental illness, perceived mutability of mental illness, and perceived mutability of criminal behavior) were included in the following analyses. Because participants were randomly assigned to the intervention conditions, I did not control for any demographic variables in these analyses (see Table 6 for the demographic breakdown across conditions). To answer my third research question, I conducted a one-way ANCOVA with intervention type (control, education, or contact) as the independent categorical variable, support for policy as the dependent continuous
variable, and fear of mental illness, perceived mutability of mental illness, and perceived mutability of criminal behavior as covariates. I also planned to conduct multiple pairwise comparisons of the interventions using Fischer’s Least Significant Difference (LSD) test if the omnibus test was significant.

**Table 6**

*Correlations for Study 2*

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Policy attitudes</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Fear of mental illness</td>
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<td>—</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3. Fear of crime</td>
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<td>.09</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Perceived mutability of mental illness</td>
<td>.29**</td>
<td>-.33**</td>
<td>-.20**</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Perceived mutability of criminal behavior</td>
<td>.37**</td>
<td>-.52**</td>
<td>-.15**</td>
<td>.33**</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Age</td>
<td>-.16**</td>
<td>.21**</td>
<td>-.17**</td>
<td>.03</td>
<td>.01</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>7. Ideology</td>
<td>-.56**</td>
<td>.39**</td>
<td>-.03</td>
<td>-.20*</td>
<td>-.27**</td>
<td>.12*</td>
<td>—</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01.

**Table 7**

*Study 2 Demographic Breakdown by Intervention*

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Education</th>
<th>Imagined Contact</th>
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<tbody>
<tr>
<td>Mean Age</td>
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<td>36.88</td>
<td>37.35</td>
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<tr>
<td>Mean Political Ideology(a)</td>
<td>2.94</td>
<td>3.01</td>
<td>3.41</td>
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<td>Gender</td>
<td></td>
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<tr>
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<td>76</td>
<td>78</td>
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<tr>
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<td>38</td>
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<tr>
<td>Non-Binary</td>
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<td>3</td>
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<tr>
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<td>1</td>
<td>2</td>
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<td></td>
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<td>88</td>
<td>95</td>
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<td>10</td>
<td>8</td>
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<tr>
<td>Native American or Alaskan Native</td>
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<td>1</td>
</tr>
<tr>
<td>Asian</td>
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<td>2</td>
<td>3</td>
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<tr>
<td>Native Hawaiian or other Pacific Islander</td>
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<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Multiracial</td>
<td>6</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Educational Level</td>
<td>Total</td>
<td>Preferred</td>
<td>Prefer not to answer</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------</td>
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<td>----------------------</td>
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<tr>
<td>Other/Prefer not to answer</td>
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<td>5</td>
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<td>Some high school or less</td>
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<td>0</td>
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<tr>
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<td>Associate’s or technical degree</td>
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<td>16</td>
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<tr>
<td>Bachelor’s degree</td>
<td>30</td>
<td>34</td>
<td>37</td>
</tr>
<tr>
<td>Graduate or professional degree</td>
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<td>14</td>
<td>13</td>
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<td>Prefer not to answer</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

a. Measured on a sliding scale from 0 (Liberal) to 7 (Conservative).
Study 2 Results

Did the Control Condition Replicate Study 1 Results?

Before addressing the main aim of this study, I compared the results of the control condition in Study 2 to the Study 1 results to see if they replicated. As in Study 1, participants supported rehabilitative polices ($M = 73.92$) significantly more than punitive polices ($M = 26.08$), $t(115) = 12.33, p < .001, d = 20.90$. The multiple linear regression model in the control condition was also significant, $R^2 = .44, F(6, 105) = 13.53, p < .001$, as it was in Study 1. However, in this model only the participants’ perceived mutability of criminal behavior, $\beta = .26, p = .003$, and their political ideology, $\beta = -.43, p < .001$, were significant predictors of their support for policy. These relationships occurred such that as one’s perceived mutability of criminal behavior increased so did their support for rehabilitative policy and identifying as more liberal (as opposed to more conservative) was also associated with greater support for rehabilitative policy. Participants’ fear of mental illness, $\beta = -.08, p = .41$, fear of crime, $\beta = .05, p = .48$, perceived mutability of mental illness, $\beta = .15, p = .07$, and age, $\beta = -.08, p = .28$, were not significant predictors in this model.

Do the Interventions Increase Support for Rehabilitative Policies?

When controlling for participants’ fear of people with mental illness, perceived mutability of criminal behavior, and perceived mutability of mental illness, the interventions were significant, $F(2, 331) = 3.87, p = .02, \eta_p^2 = .02$. The pairwise comparison showed that support for policy was significantly higher in the education condition ($M = 56.87$), than in the control ($M = 45.46$) or the imagined contact ($M = 43.60$) condition (see Appendix H for ANCOVA table). There was not a significant difference in support for policy between the control condition and the imagined contact condition.
Table 8

Descriptive Statistics for Study 2 Dependent and Attitudinal Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Range of Possible Scores</th>
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</thead>
<tbody>
<tr>
<td>Fear of Mental Illness&lt;sup&gt;a&lt;/sup&gt;</td>
<td>338</td>
<td>3.72</td>
<td>1.35</td>
<td>1 – 9</td>
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<tr>
<td>Fear of Crime&lt;sup&gt;a&lt;/sup&gt;</td>
<td>338</td>
<td>2.03</td>
<td>0.76</td>
<td>1 – 7</td>
</tr>
<tr>
<td>Perceived Mutability of Mental Illness&lt;sup&gt;a&lt;/sup&gt;</td>
<td>338</td>
<td>5.60</td>
<td>0.99</td>
<td>1 – 7</td>
</tr>
<tr>
<td>Perceived Mutability of Crime&lt;sup&gt;a&lt;/sup&gt;</td>
<td>337</td>
<td>4.47</td>
<td>0.80</td>
<td>1 – 6</td>
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<tr>
<td>Support for Policy&lt;sup&gt;b&lt;/sup&gt;</td>
<td>338</td>
<td>48.57</td>
<td>43.96</td>
<td>-100 – 100</td>
</tr>
</tbody>
</table>

<sup>a</sup> Total scores calculated by averaging all items on the measure.

<sup>b</sup> Calculated by subtracting support for punitive policy from support for rehabilitative policy, so a larger number indicates more support for rehabilitative policy and a smaller number indicates more support for punitive policy.
Study 2 Discussion

These results partially support my hypothesis. Unlike in previous studies (Na & Chasteen, 2016; Schuhl et al., 2019) and differing from my hypothesis, the results also indicate that imagined contact was no more effective than a completely unrelated control vignette at increasing support for rehabilitative policies. However, when examining support for policy and controlling for fear of mental illness, perceived mutability mental illness, and perceived mutability of criminal behavior, the education intervention did significantly increase support for rehabilitative policy compared to the control and the imagined contact intervention. This shows that educating people about the treatability of mental illness and dispelling the myth of dangerousness associated with having a mental illness can effectively increase support for rehabilitative policies aimed at this group.
General Discussion

Although there has been informative research conducted on those with mental illness and those with criminal legal involvement individually, there has been much less research conducted at the intersection of these identities. Specifically, there is little research examining attitudes towards justice involved people with mental illness and how the stigma of holding both of these identities can be reduced. These results add to the growing body of literature on stigma reduction and interventions for increasing public support for specific types of policy.

Punitive Versus Rehabilitative Policy

While my first hypothesis was supported – there was a difference in support for punitive versus rehabilitative policies – this difference was in the opposite direction of what was expected. Participants in both studies were more supportive of rehabilitative policies for justice involved people with mental illness. It is possible that this is due the majority of the samples being female. Research shows that women tend to hold more rehabilitative attitudes generally compared to men (Applegate et al., 2002), so it is possible that the differences in support for policy were driven by such a large portion of participants being women.

Another possible, and perhaps more likely, explanation is that the type of punitive policy options that were presented to participants elicited an unexpected response. Building more prisons/increasing prison sentences and increasing police on the street to detect and apprehend people committing crimes – both of these punitive options have been controversial in the recent past (Enns & Ramirez, 2018; Navarro & Hansen, 2023; Patil, 2018) and it is possible that many participants had a strong immediate reaction against these options causing them to default their support to the rehabilitative policies. This possibility is reflected in the free responses in Study 1. Most participants were vehemently against aiding prisons in any way, often stating that they are
not helpful for treating mental illness or deterring crime. Of those who stated they were against aiding prisons, a small portion of them still indicated that they were pro-police because they thought it deterred crime while the majority shared the view that increasing policing was not going to aid people with mental illness or in deterring crime. These responses show that the punitive policies immediately elicited polarized responses from participants and those who were adamantly against one or both of the punitive options were obligated to support the rehabilitative policies by default. Therefore, had the punitive options been policies that did not deal with controversial topics like prison or policing, participants may have been more supportive of the punitive options as was originally expected.

It is also possible that neither of these explanations are correct and participants were truly more supportive of rehabilitative policy for justice involved people with mental illness. If this is true, then these findings are similar to other (Baker et al., 2015; Vuk et al., 2020) work that suggests that the public sentiment has shifted towards more support for rehabilitative approaches. It is also important to note that the relationship between support for rehabilitative and punitive policy is much more nuanced (see Vuk et al., 2019 for a review) than the allocation task allows researchers to account for. Thus, while it is possible that participants do favor rehabilitative approaches more than punitive approaches, this does not mean that they automatically do not support any punitive policies. It is likely that people endorse both types of policies simultaneously (Vuk et al., 2020) and these findings are looking at a very specific portion of their overall endorsements for punitive and rehabilitative policy.

**Attitudes Associated with Support for Policy**

My second set of hypotheses were partially supported. Study 1 found that participants’ fear of mental illness and perceived mutability of criminal behavior were not predictors of their
support for policy, but their fear of crime and their perceived mutability of mental illness were. These relationships occurred such that participants who had higher fear of crime were more supportive of punitive policies and those who had lower fear of crime were more supportive of rehabilitative policies. In contrast and similar to past research (Falco & Turner, 2014), those who reported more perceived mutability of mental illness tended to be more supportive of rehabilitative polices and those who reported less perceived mutability of mental illness tended to be more supportive of punitive policies. These findings were then used to inform the education intervention in Study 2. Study 2 showed that participants’ fear of people with mental illness, perceived mutability of mental illness, and perceived mutability of criminal behavior (but not fear of crime) were associated with their support for policy. These relationships occurred in the directions that were expected. As in past research (Jorm et al., 2012; Link et al., 1999), higher levels of fear of people with mental illness were associated with more support for punitive policies and less support for rehabilitative policies. Also in line with past research (Falco & Turner, 2014; Grasmick & McGill, 1994; Shi et al., 2022; Sims, 2003; Updegrove et al., 2021), higher levels of perceived mutability of both mental illness and criminal behavior were associated with less support for punitive policies and more support for rehabilitative policies.

**Potential Interventions for Stigma of Justice Involved People with Mental Illness**

Overall, my third hypothesis was partially supported. Contrary to other studies that have test imagined contact in other areas (Na & Chasteen, 2016; Schuhl et al., 2019; Turner & West, 2012), Study 2 found that imagined contact was no better than a completely unrelated reading at increasing support for rehabilitative policy. It did also find that when controlling for participants’ fear of people with mental illness, perceived mutability of mental illness, and perceived mutability of criminal behavior, support for policy did differ significantly across intervention types.
Specifically, as in previous research (Corrigan et al., 2001), those who received the education intervention were more supportive of rehabilitative policies compared to those who received the control and the imagined contact interventions.

One possible explanation as to why education was effective (when imagined contact was not) is the difference in stigma related content in both interventions. The imagined contact intervention was meant to reduce stigma through humanizing someone from the stigmatized group. Thus, justice involvement and mental illness were each only mentioned once within the intervention – just to say that the person held both identities. In contrast, the education intervention was meant to reduce stigma through dispelling the myth that mental illness makes people more dangerous and providing information about the treatability of mental illness. As a result, mental illness is focused on throughout the entire intervention whereas justice involvement is only mentioned in half of it. Although I am not aware of any research that has tested this, it is possible that the public stigma of justice involvement is more severe (and, consequently, harder to change) than the public stigma of mental illness causing the education intervention’s emphasis on mental illness related information to result in a decrease in that stigma. In other words, if the public stigma of mental illness is more easily changed and the education intervention focused more on mental illness, then it is possible that it triggered the stigma of mental illness that could be more readily influenced, whereas the imagined contact intervention only mentioned each identity once, so it did not trigger these differing amounts of stigma where one could be more easily changed than the other.

**Limitations**

These findings are somewhat limited by the method in which the studies were conducted. Using crowdsourcing platforms like CloudResearch and Prolific is often the best option that
researchers have when conducting their studies, but they are not necessarily ideal as they are inherently not representative of whole populations. Often this results in samples containing participants that are more educated, predominately women, and more liberal (Douglass et al., 2023, Suppl. A1). Nonetheless, of all the platform options for research to be conducted online, research shows that CloudResearch is one of the two platforms that provide the best quality data (Douglas et al., 2023). Additionally, both of the interventions used were relatively short, so it is possible that participants were not able to internalize the information given such brief readings. Lastly, the punitive policy options included in the allocation task were politically charged and potentially primed an extremely negative response from participants that would not have been present with more politically neutral punitive policy options.

Implications

Research on justice involvement and mental health individually is flourishing. Both groups of people experience an inordinate amount of stigma that impacts every area of their lives, so it is important that we research practical methods for decreasing stigma and finding ways to aid these groups. Despite this, there is not a lot of research examining the intersection between justice involvement and mental health specifically. To my knowledge, these studies are the first to attempt to understand attitudes towards and to test interventions to decrease stigma for justice involved people with mental illness. Although the results do not replicate findings from other areas (Na & Chasteen, 2016; Schuhl et al., 2019), they still provide the first step to truly understanding the current support for rehabilitative and punitive policies aimed at justice involved people with mental illness, as well as identifying some of the individual factors associated with that support. From these findings, we can continue to improve existing interventions and develop other interventions
for reducing stigma towards this group with the goal of increasing support for rehabilitative policies.

Future research can build on this research by replicating Study 2 with different punitive policy options as well as lengthening the interventions to find an appropriate length that is neither so long that it becomes arduous for participants nor so short that it limits the effectiveness. In the education condition, this would allow the vignettes to convey more information to participants, as well as potentially emphasizing specific parts to them. For the imagined contact condition, this could also include more information about the subject of the vignette or it could simply require participants to spend more time thinking about the interaction. This could be facilitated by setting a time minimum for the vignette or by asking participants to write brief notes about the interaction they are imagining.

Another possibility is to approach the contact intervention in a different way altogether. Research shows that positive in person interactions with someone from the target group does decrease one’s stigma towards that group (Corrigan et al., 2001). Unfortunately, this is hard to facilitate for many groups of interest, so imagined contact was created as a hopeful alternative but, it is possible that imagining an interaction may be too abstract for some people resulting in it being ineffective. A potential compromise between these two interventions could be some sort of digital contact with a person from the group of interest. Some research has been conducted in other areas showing that vicarious contact – simply watching a video of an interaction between and ingroup member and an outgroup member – is effective at reducing negative attitudes towards the outgroup (Vezzali et al., 2014). Since we know this to be effective, it may be helpful to build on this and test a sort of simulated interaction using video. Rather than watching another person have an interaction with the person from the target group, participants could have an ‘interaction’ in which
they can ask questions getting to know the person in the video. This may look like having a large pool of prerecorded responses that a researcher has to play in response to the participant asking a question or it may be possible to set up a virtual ‘conversation’ in which the participant is given a wide range of options they can ask the person and selecting that question automatically plays the prerecorded video response. This may be hard to facilitate initially, but once the logistics of how it can be conducted are figured out, it may be a promising and cost-effective opportunity to reduce stigma towards a variety of groups when direct contact is not possible. When interventions that effectively reduce stigma and increase support for rehabilitative policies aimed at justice involved people with mental illness are identified, research can then turn to testing their effectiveness across time and examine their effectiveness in other stigmatized groups.
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https://doi.org/10.2105/AJPH.89.9.1328


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Appendix A

Fear of People with Mental Illness – Dangerousness/Avoidance Subscale from the Prejudice towards People with Mental Illness (Kenny et al., 2018)

Answered on a nine-point Likert scale from Very Strongly Disagree to Very Strongly Agree

Please read the following statements and indicate how much you agree with each one.

1. I would find it hard to talk to someone who has a mental illness
2. I would be just as happy to invite a person with mental illness into my home as I would anyone else*
3. I would feel relaxed if I had to talk to someone who was mentally ill*
4. I am not scared of people with mental illness*
5. In general it is easy to interact with someone who has mental illness*
6. I would be less likely to become romantically involved with someone if I knew they were mentally ill
7. It is best to avoid people who have mental illness
8. I would feel unsafe being around someone who is mentally ill

*indicates items that are reverse coded
Appendix B

Fear of Crime (Grubb and Bouffard, 2014)

*Answered on a four-point scale: 1 = Not worried at all, 2 = Slightly worried, 3 = Somewhat worried, 4 = Very worried*

“How worried are you about . . .”:
(a) being assaulted by someone
(b) having your car stolen
(c) being robbed or mugged on the street
(d) having someone break into your home
(e) having your property damaged
(f) being sexually assaulted
Appendix C

Perceived Mutability of Mental Illness – Treatability Items (Items 2 - 6) from Day et al. (2007)

Answered on a 7-point Likert scale from Completely Disagree to Completely Agree

Please read the following statements and indicate how much you agree with each one.
1. People with mental illness can improve, whether it is through overcoming it, through getting it under control, or through some other means
2. There are effective medications for mental illnesses that allow people to return to normal and productive lives
3. There are no effective treatments for mental illnesses*
4. There is little that can be done to control the symptoms of mental illness*
5. Once someone develops a mental illness, he or she will never be able to fully recover from it*
6. People with mental illnesses will remain ill for the rest of their lives*

*indicates items that are reverse coded
Appendix D

Perceived Mutability of Criminal Behavior – Adapted from Burton et al. (2020) and Maruna & King (2009)

Answered on a 6-point Likert scale from Strongly Disagree to Strongly Agree

Please read the following statements and indicate how much you agree with each one.

1. If a person has committed crime in the past, it does not necessarily mean that they will commit crime in the future
2. Most people who commit crime can go on to lead productive lives with help and hard work
3. Given the right conditions, a great number of people who commit crime can turn their lives around and become law-abiding citizens
4. Most people who commit crime are unlikely to change for the better*
5. Some people who commit crime are so damaged that they can never lead productive lives *

*indicates items that are reverse coded
Appendix E

Allocation Task (modeled after Dunbar, 2020)

You have been given a budget to allocate across four policies. Please allocate a percentage of the budget to each policy based on which policies you believe to be the most effective for reducing the prevalence of mental illness in the criminal legal system.

Potential Policies:
1. Increasing resources for co-response programs
   Co-response programs are programs that connect law enforcement with mental health professionals. When the police get a call that the mental health professional believes may be related to mental illness, both the police and the mental health professional respond to the call.
2. Increasing police on the street to detect and apprehend people committing crime
   Increasing police on the street involves hiring and training more police officers, so that there can be more police patrolling all areas of the city at all times of the day.
3. Increasing resources for mental health courts
   Mental health courts are legal courts that were created specifically for people who have committed a crime and have a mental illness. These courts have the authority to include mental health treatment as part of a person’s sentence or probation. Increasing resources for these courts would include creating more of these courts and funding the community treatment centers that provide the mental health treatment.
4. Building more prisons/increasing prison sentences
   Increasing prison sentences would mean that people who commit crime and have a mental illness will automatically be sentenced to a longer time in prison because of their mental illness. This would also include building more prisons to hold these people who have longer sentences.
Appendix F

Study 1 ANOVA Test of Between-Subjects Effects of Education
*Dependent variable: Policy Attitudes*

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<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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<td>2854.76</td>
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a. $R^2 = .02$ (Adjusted $R^2 = .01$)

Study 1 ANOVA Test of Between-Subjects Effects of Gender
*Dependent variable: Policy Attitudes*

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<tr>
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<th>Mean Square</th>
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<th>Sig.</th>
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<tr>
<td>Gender</td>
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<td>2</td>
<td>2318.66</td>
<td>1.19</td>
<td>.306</td>
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<tr>
<td>Error</td>
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<td>1950.38</td>
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<tr>
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a. $R^2 = .01$ (Adjusted $R^2 = .001$)

Study 1 ANOVA Test of Between-Subjects Effects of Race
*Dependent variable: Policy Attitudes*

<table>
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<th>Source</th>
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<th>df</th>
<th>Mean Square</th>
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<tbody>
<tr>
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<td>1618.84</td>
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<tr>
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<td>108865.47</td>
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<td>1618.84</td>
<td>0.84</td>
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<td>Corrected Total</td>
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</table>

a. $R^2 = .01$ (Adjusted $R^2 = -.002$)
Appendix G

Study 2 Vignettes

Control

*Please take some time to read the following information:*

NASA and SpaceX recently completed the first joint human spaceflight. SpaceX is a privately contracted company. NASA partnered with SpaceX to provide the Dragon capsule that would transport astronauts Bob Behnken and Doug Hurley to the International Space Station (ISS). This is the first time since 2011 that astronauts have gone to space from American soil. The launch occurred on May 30, 2020. The Dragon capsule was named “Endeavor” by the two astronauts as an homage to the working relationship between NASA and SpaceX. This launch was the first crewed test flight for NASA’s new Commercial Crew Program (CCP). During their two months onboard the ISS, Behnken and Hurley contributed over 100 hours of scientific work and technology demonstrations. One American astronaut and two Russian cosmonauts were onboard the ISS when Behnken and Hurley arrived. The Dragon capsule entered back into Earth’s atmosphere on August 7, 2020. The capsule landed in the Gulf of Mexico after an 18-hour flight back. This mission was the first time in 59 years that American astronauts used the Gulf of Mexico as a landing site.


Education

*Please take some time to read the following information:*

People often think of having a mental illness as having an incurable condition. They believe that once someone has a mental illness that person will have to struggle with that condition for the rest of their lives. Fortunately, this is not true. Research shows that receiving the appropriate treatment for mental illness effectively reduces the symptoms associated with the mental illness. This means that treatment successfully reduces the impact that the mental illness may have on a person’s life and allows them to lead an independent and ordinary life.

Many people also believe that people who have mental illnesses are dangerous. However, only about 3% of all violent crimes are committed by someone who has a mental illness. Research shows that mental illness is not a direct cause of violent or criminal behavior and people with mental illnesses are actually more likely to be the victim of a crime than a perpetrator. For the 3% of violent crimes that are committed by people with mental illness, the people committing those crimes are also often struggling with some sort of substance use disorder.

*About mental illness.* NAMI California. (2021, July 26). https://namica.org/what-is-mental-illness/#section-about-mental-health-conditions


Imagined Contact (adapted from Crisp and Turner, 2009)

*Please take some time to imagine the following scenario:*
One day you find yourself on a busy train. You get a seat and start reading the novel you brought with you to pass the time. At the next stop, a man boards the train and sits down next to you. After a few minutes, the man looks at what you are reading, introduces himself as Andrew, and comments that the book you are reading is one of his favorites. This begins a discussion in which you share your thoughts on the book and what you both enjoyed about it. The conversation continues in a positive way and, during it, you find out that he is living with a mental illness and was recently released from prison. Aside from that, you also learn that he likes the same type of music as you and has a loving family that he cares deeply about. By the time you get off the train, 30 minutes later, you have discussed a whole range of topics, from the stresses of having to commute to work every day, to what neighborhood you live in, to what your children’s favorite subjects are at school.
### Appendix H

ANCOVA Test of Between-Subjects Effects Controlling for Attitudinal Variables

**Dependent variable: Policy Attitudes**

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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<tr>
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<td>5</td>
<td>29090.67</td>
<td>20.20</td>
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<td>2.63</td>
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<td>.966</td>
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<td>31051.83</td>
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<tr>
<td>Mutability of Mental Illness</td>
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<td>331</td>
<td>1440.24</td>
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<td></td>
</tr>
<tr>
<td>Total</td>
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<td>337</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>622172.73</td>
<td>336</td>
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<td></td>
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</table>

*a.  \( R^2 = .41 \) (Adjusted \( R^2 = .40 \))

**Pairwise Comparisons**

**Dependent variable: Policy Attitudes**

<table>
<thead>
<tr>
<th>(I) Intervention</th>
<th>(J) Intervention</th>
<th>Mean Difference (I – J)</th>
<th>Sig.</th>
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<td>.027</td>
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<td>1.86</td>
<td>.711</td>
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<tr>
<td>Education</td>
<td>Control</td>
<td>11.41*</td>
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<td></td>
<td>Imagined Contact</td>
<td>13.27*</td>
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<tr>
<td></td>
<td>Education</td>
<td>-13.27*</td>
<td>.010</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the .05 level
Vita

Betel Hernandez is a Legal Psychology doctoral student at the University of Texas at El Paso. She earned her Bachelor of Arts in Psychology from Rice University in Houston, Texas in 2021 where she also earned the Rice Undergraduate Distinction in Research and Creative Work for her senior Honors Thesis. Her research interests focus on the intersection of mental health and criminal legal involvement including the stigma surrounding these identities as well as the current state of mental health treatment within the legal system and, more specifically, in jails and prisons. Betel hopes that her research will ultimately influence policy to decrease stigmatizing attitudes about criminal legal involvement and mental illness and to improve mental health treatment within the legal system.

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