Narrative Enhancement and Cognitive Therapy with Correctional Psychiatric Patients: A Pilot Study

Richelene Cesar
Antioch University of New England

Follow this and additional works at: https://aura.antioch.edu/etds

Part of the Clinical Psychology Commons

Recommended Citation

This Dissertation is brought to you for free and open access by the Antioch University Dissertations and Theses at AURA - Antioch University Repository and Archive. It has been accepted for inclusion in Antioch University Full-Text Dissertations & Theses by an authorized administrator of AURA - Antioch University Repository and Archive. For more information, please contact hhale@antioch.edu.
NARRATIVE ENHANCEMENT AND COGNITIVE THERAPY WITH CORRECTIONAL PSYCHIATRIC PATIENTS: A PILOT STUDY

A Dissertation

Presented to the Faculty of

Antioch University New England

In partial fulfillment for the degree of

DOCTOR OF PSYCHOLOGY

by

Richelene Cesar

ORCID Scholar No. 0000-0001-5650-2446

April 2022
NARRATIVE ENHANCEMENT AND COGNITIVE THERAPY WITH CORRECTIONAL PSYCHIATRIC PATIENTS: A PILOT STUDY

This dissertation, by Richelene Cesar, has been approved by the committee members signed below who recommend that it be accepted by the faculty of Antioch University New England in partial fulfillment of requirements for the degree of

DOCTOR OF PSYCHOLOGY

Dissertation Committee:

Monique Bowen, PhD, Chairperson

Kelly Fricker, PsyD

Philip T. Yanos, PhD
ABSTRACT

NARRATIVE ENHANCEMENT AND COGNITIVE THERAPY WITH CORRECTIONAL PSYCHIATRIC PATIENTS: A PILOT STUDY

Richelene Cesar
Antioch University New England
Keene, NH

Narrative Enhancement and Cognitive Therapy (NECT) is a manualized, group-based intervention that was originally developed to treat self-stigma among individuals who present with severe and persistent mental illnesses (SPMIs; Roe, Lysaker, & Yanos, 2013). NECT has been shown to effectively reduce these individuals’ experience of self-stigma, and diminish its negative effects on their hope, self-esteem, self-efficacy, and quality of life (Yanos, Roe, & Lysaker, 2011). Supportive literature is scarce regarding NECT’s efficacy with people who have multiple stigmatized identities. For the purposes of this pilot study, NECT was implemented with a correctional psychiatric population. Research supports this population is doubly, and sometimes triply, stigmatized, which increases their likelihood of experiencing self-stigma and its negative implications (West, Yanos, & Mulay, 2014). The current study sought to ascertain if mental illness self-stigma and criminality self-stigma scores reduced within this population between the start and end of NECT treatment. This study also explored whether NECT would have a beneficial impact on self-efficacy and self-esteem over the course of the treatment. To address the research questions posed, pre- and post-NECT treatment differences were explored through paired samples t-tests. A repeated measures ANOVA was also completed to evaluate patterns in self-esteem and self-efficacy scores across treatment. Finally, a repeated measures correlation (rmcorr) was conducted to analyze within-individual relationships between self-
efficacy, self-esteem, and self-stigma. Results demonstrated improvements in reported mental health self-stigma, self-esteem, and self-efficacy. Criminality self-stigma increased post-treatment. Results regarding common within-individual patterns between variables were mixed.

This dissertation is available in open access at AURA (https://aura.antioch.edu) and OhioLINK ETD Center (https://etd.ohiolink.edu).

Keywords: self-stigma, forensic psychiatric patients, correctional psychiatric patients, self-efficacy, self-esteem, Narrative Enhancement and Cognitive Therapy, NECT, anti-stigma
Dedication

To the love of my life—Kevin, words cannot express my gratitude for your dedication, your patience, and your unwavering support and allyship. Thank you for always seeing me. Thank you for always believing in me. Thank you for always loving me. I could not have done this without you. You truly make me a better person. Here’s to the next step in our journey.

I love you, eternally.

Cindy, it goes without saying you’ve been the ultimate support and inspiration. I dedicate this to you and our unbreakable bond as twins, as friends, and as partners in this thing called life. Now we can say there are two Dr. Cesars in the family! Thank you so much for always being there to wipe my tears, to make me laugh, and to engage in absolute debauchery that no one else could ever understand. I was able to achieve this because I always had you by my side.

To you. To me. To us. Cheers, twinny poo :F

To Morgan—WE DID IT! We finally did it!

Last, but certainly not least, I dedicate this achievement to myself. Thank you for never faltering, even when you wanted to. Thank you for proving them all wrong. Thank you for showing them that when one of us wins—we all win. Never lose your #BlackGirlMagic, and keep living your life unapologetically.

I guess you’re not stupid after all, kid.

“There’s nothing I’m not worthy of…”
Acknowledgements

I’d like to acknowledge my dissertation committee—Monique, Kelly, and Philip.

Thanks for your support throughout this process.

This journey could not have been possible without the people in my cohort who were there for me from the beginning, and who continue to be there for me now that everything is said and done. Olivia, my day one, you were there for me even before this journey began, and I cannot imagine getting through this without your constant support. You were always my cheerleader, and I appreciate you, always. Thank you for your friendship and for your loyalty. Fazeela, you helped me feel less alone as a brown girl trying to survive in a white space. Thank you for creating a place for me to call home—a place where I could be myself. I can’t wait for you to cross this milestone, too. I’ll be right there when it happens.

Sarah, thank you for helping me get through the hardest part of graduate school. PRISON! I appreciate trauma bonding with you, and I am so grateful to have escaped with a friend for life.

Who would I be if I didn’t shout out my tribe! Mohammed, Marc, Gollone, and Faidat—words can’t even begin to express what you all mean to me. Whenever I felt like giving up, I always looked to you all to remember who this is for. You are my roots, and when one of us wins, we all win. This win is for you. I love you, all—’til the wheels fall off!

TO MY FAMILY—Johnson, I am who I am because of you. I am honored to be your sister, and as proud as you might be of me, I promise I’m just as proud of you. You’re my hero. Joana, baby sis, I hope when you look to me, I can serve as a model and an inspiration. Though our paths look different, please know that I respect and love you. Having you in my corner has
meant more than you’ll ever know. Mommy, I love you. This is for you. Look at what your daughter became. I hope I made you proud.

Ana. Blossom. Karen Smith. Thank you, especially. My sister from another mister—you have been my ROCK. Thank you for your unwavering support. Even from 2,000 miles away, I always felt you with me. This journey would be impossible without you. We did it. We are Black Excellence. It doesn’t stop here—we’re unstoppable now.

Special shout out to Passenger (musical artist), Law and Order: Special Victims Unit (my trash tv), my passport and hiking boots (everyone needs an escape), and tequila (if you know, you know). I could not have survived grad school without you.

Here’s to self-care and indulgences.

I’m a doctor, y’all!

#NeverTellMeTheOdds
Table of Contents

Abstract ................................................................................................................................. iv
Dedication ............................................................................................................................... vi
Acknowledgements ............................................................................................................... vii
List of Tables ........................................................................................................................ xiii
List of Figures ....................................................................................................................... xiv

CHAPTER I: INTRODUCTION ............................................................................................... 1
Severe and Persistent Mental Illness ..................................................................................... 1
Transinstitutionalization ....................................................................................................... 2
Stigma ....................................................................................................................................... 3
Current Study ....................................................................................................................... 5

CHAPTER II: LITERATURE REVIEW ...................................................................................... 6
Self-Stigma is Borne Out of Stigma ...................................................................................... 6
Defining key constructs and concepts .................................................................................. 6
Self-Stigma is a Strong Predictor of Diminished Self-Esteem and Self-Efficacy .............. 8
Correctional Psychiatric Patients are Doubly Stigmatized ................................................ 10
Correctional Psychiatric Patients Integrate Perceived Stigmas into Their Self-Concept .... 10
Initial Anti-Stigma Interventions Have Produced Varying and Short-Term Outcomes ...... 11
Psychoeducational approaches .......................................................................................... 12
Cognitive-behavioral approaches ....................................................................................... 13
Narrative Enhancement and Cognitive Treatment (NECT) Can Improve Self-Stigma Among Individuals with Severe Mental Illnesses .......................................................... 14
Little is Known About the Efficacy of NECT Among Correctional Psychiatric Patients .... 16
The Present Study .............................................................................................................. 16
CHAPTER III: METHOD........................................................................................................................................... 18

Setting ............................................................................................................................................................... 18
Participants........................................................................................................................................................ 19
Recruitment and Selection .............................................................................................................................. 20
Informed Consent.............................................................................................................................................. 21
  Voluntary participation. ................................................................................................................................. 22
  Addressing risks. .......................................................................................................................................... 22
  Confidentiality. ............................................................................................................................................ 22
Inclusion and Exclusion Criteria ...................................................................................................................... 23
  Inclusion criteria. ........................................................................................................................................ 23
  Exclusion criteria. ..................................................................................................................................... 23
Institutional Review Board (IRB) Process ........................................................................................................ 24
Measures ........................................................................................................................................................... 25
  Basic demographics questionnaire. ................................................................................................................ 25
  Self-Stigma of Individuals with Criminal Records (SSICR). ..................................................................... 25
  Internalized Stigma of Mental Illness (ISMI). .............................................................................................. 26
  Rosenberg Self-Esteem Scale (RSE). ............................................................................................................. 27
  General Self-Efficacy Scale (GSES). ........................................................................................................... 27
Procedure ......................................................................................................................................................... 28
Summary of Analyses ...................................................................................................................................... 28

CHAPTER IV: RESULTS.................................................................................................................................... 30
Quantitative Data ............................................................................................................................................. 30
  RQ1: Will self-stigma scores decrease between the start and end of NECT treatment? ..... 30
RQ2: Will NECT have a beneficial relationship with self-efficacy over the course of the treatment (i.e., will scores increase or remain stable over time)? .......................................................... 30

RQ3: Will NECT have a beneficial relationship with self-esteem over the course of the treatment (i.e., will scores increase or remain stable over time)? .......................................................... 31

RQ4: Will a within-individual relationship exist between variables (i.e., self-stigma, self-efficacy, and self-esteem)? ........................................................................................................... 32

CHAPTER V: DISCUSSION .......................................................................................................................................................... 35

Personal Biases ........................................................................................................................................................................... 35

Summary of Findings ...................................................................................................................................................................... 36

RQ1: .......................................................................................................................................................................................... 36

RQ2: .......................................................................................................................................................................................... 38

RQ3: .......................................................................................................................................................................................... 38

RQ4: .......................................................................................................................................................................................... 38

Interpretation of Findings ............................................................................................................................................................... 39

Population and setting ................................................................................................................................................................... 40

Self-concurrence of criminality self-stigma .................................................................................................................................... 41

The environment, self-esteem, and self-efficacy .......................................................................................................................... 42

Self-esteem trends ........................................................................................................................................................................... 44

Participant 4 .................................................................................................................................................................................. 44

Clinical Implications .................................................................................................................................................................... 45

The environment .............................................................................................................................................................................. 46

The impact of multiple stigmatized identities ................................................................................................................................ 47

NECT prompts .............................................................................................................................................................................. 49

Limitations and Future Research ..................................................................................................................................................... 52

CHAPTER VI: CONCLUSION .......................................................................................................................................................... 56
References .......................................................................................................................... 57
APPENDIX A: Informed Consent to Participate in a Research Study .......................................................... 65
APPENDIX B: Basic Demographic Questionnaire .................................................................................. 68
APPENDIX C: The Self-Stigma of Individuals with Criminal Records (SSICR) ........................................ 70
APPENDIX D: Permission to Reproduce SSICR .................................................................................. 73
**List of Tables**

Table 1–Sample Characteristics of Participants (N = 6) .......................................................................................................... 74
Table 2–Paired Samples T-Test for SSICR .................................................................................................................................. 74
Table 3–Paired Samples T-Test for ISMI ...................................................................................................................................... 75
Table 4–Paired Samples T-Test for RSE ...................................................................................................................................... 76
Table 5–Repeated Measures Anova for RSE ................................................................................................................................. 77
Table 6–Paired Samples T-Test for GSES ...................................................................................................................................... 79
Table 7–Repeated Measures Anova for GSES ................................................................................................................................. 80
List of Figures

Figure 1–Repeated Measures for SSICR and ISMI................................................................. 83
Figure 2–Repeated Measures for SSICR and RSE................................................................. 83
Figure 3–Repeated Measures for SSICR and GSES ........................................................... 84
Figure 4–Repeated Measures for ISMI and RSE................................................................. 85
Figure 5–Repeated Measures for ISMI and GSES ............................................................ 86
Figure 6–Repeated Measures for RSE and GSES ............................................................ 87
CHAPTER I: INTRODUCTION

Severe and Persistent Mental Illness

In 2020, 14.2 million adults in the United States (U.S.) were estimated to have a severe and persistent mental illness (SPMI; National Institute of Mental Health [NIMH], 2022). This statistic accounts for 5.6% of the adult U.S. population. NIMH (2022) defines an SPMI as “a mental, behavioral, or emotional disorder resulting in serious functional impairment, which substantially interferes with or limits one or more major life activities (Severe Mental Illness section, para. 1).” According to the fifth edition of the Diagnostic and Statistical Manual of Mental Disorder (DSM-5; American Psychiatric Association [APA], 2013), psychotic disorders (e.g., schizophrenia, schizoaffective, delusional disorder, etc.), mood disorders (e.g., major depressive disorder, bipolar disorder, etc.), autism, and obsessive-compulsive disorder (OCD) are considered SPMIs. Initially referred to as “chronic mental illness,” the term chronic was replaced with “severe and persistent” because the original descriptor was deemed outdated and pessimistic, as it suggests these illnesses are continuous and untreatable (Parabiaghi, Bonetto, Ruggeri, Lasalvia, & Leese, 2006).

On the contrary, SPMIs are treatable and can be managed using mental health services (inpatient, outpatient, case management, etc.) and medication. Despite treatability, only approximately 65% of individuals with SPMIs received mental health treatment in 2020 (NIMH, 2022). Barriers to treatment include lack of access, inadequate or limited treatment models, social stigma, and insufficient availability (Gorfida, 2021; Link, Struening, Neese-Todd, Asmussen & Phelan, 2001). As such, at least a third of the U.S.’s SPMI population suffer with the effects of their mental illnesses which include increased likelihood of homelessness and poverty, debilitating symptoms, isolation or marginalization due to social stigma, and

**Transinstitutionalization**

With just under 2.1 million individuals in state prisons, federal prisons, and jails, the U.S. has the highest rate of incarceration (Carson, 2021). Al-Rousan, Rubenstein, Sieleni, Deol, and Wallace (2017) report people with mental illness are overrepresented in correctional settings. The prevalence of individuals with SPMIs in jail and prison populations is two to four times that of the general population (Prins & Draper, 2009), and is estimated to be ten times greater than in state mental hospitals (Torrey, Kennard, Eslinger, Lamb, & Pavle, 2010). This prevalence is likely due to transinstitutionalism.

Transinstitutionalization is defined as the placement of individuals with mental illness into the criminal justice system. Due to inadequate funding and availability in community-based treatment for individuals in need of mental health services, researchers posit mentally ill individuals were incarcerated due to the prevalent misconception that their symptoms of mental illness (e.g., psychosis) equated to criminality (Black et al., 2019; Diamond et al., 2001; Prins, 2011). The number of mentally ill people in jails and prisons has continued to grow at an exponential rate since the late 20th century, and researchers attribute this trend to transinstitutionalism (Black et al., 2019; Diamond et al., 2001; Prins, 2011).

The criminalization of mental illness may be another factor contributing to this trend, as the general public and the criminal justice system started to believe the behavior of mentally ill individuals was beyond their control, and their mental illness was the driving force behind their criminal behaviors (Chaimowitz, 2012). Prins (2011) describes the relationship between mentally ill individuals and the criminal justice system as “entrenchment” because these individuals often
remain incarcerated for longer, have a decreased likelihood of being approved for community supervision, and are twice as likely to have their probation or parole revoked when compared to others with similar offenses. As such, the burden of treatment falls onto the criminal justice system.

According to Black et al. (2019), the primary goals of the criminal justice system, as they pertain to incarcerated mentally ill individuals, are to reduce rates of recidivism, to identify and treat the root causes of their criminal behaviors, and to assist these individuals in remaining crime-free as they reintegrate into society (p. 7). However, many correctional facilities are overburdened by the treatment needs of the mentally ill, and thus, are underequipped to meet these specific needs (e.g., medication, psychotherapy; Fazel & Danesh, 2002). These burdens can cause mental healthcare providers to experience increased burn out, which creates a context in which they are more likely to act in line with their preconceptions of mentally ill offenders (Black et al., 2019; Brooker & Ullmann, 2008; Fazel & Danesh, 2002). Brooker and Ullmann (2008) state mental healthcare workers, like the general public, tend to endorse the belief that mentally ill offenders are responsible for their criminal behaviors, deserve punishment, and are not worthy of sympathy. Consequently, this population is significantly burdened by the negative stigma held by the public and their providers, as these individuals carry two negative stereotypes: mental illness and criminal offender status (Brooker & Ullmann, 2008; Diamond et al., 2001; West, Mulay, DeLuca, O’Donovan, & Yanos, 2018).

**Stigma**

Though the definition of stigma varies, the first, key contribution to the concept came from Goffman’s (1963) theoretical perspectives on stigmatization, which he characterized as the attribution of negative stereotypes that discredit and reduce a whole and capable person to one
who is somehow defective or tainted. Variations on this early definition each assert that a stigmatized individual carries some undesirable trait that deviates from the normed group with its shared beliefs, values, and ways of living and behaving within its particular social context (Link & Phelan, 2001).

Studies suggest the majority of individuals living in the U.S. hold stigmatizing attitudes about mental illness (Link, 1987; Phelan, Link, Stueve, & Pescosolido, 2000; Rabkin, 1974). Despite efforts to transform the mental health system to one that prioritizes recovery, there is also a culture among service providers that is often stigmatizing toward people they serve (Austin, Goble, & Kelecevic, 2009). Individuals who hold stereotypes about those with mental illness tend to typecast them, support prejudiced beliefs about them, or engage in discriminatory behaviors towards these individuals (Corrigan, Mueser, Bond, Drake, & Solomon, 2008).

Numerous studies have illustrated that the public often blames people who commit criminal offenses for their status as criminals because these individuals are perceived to have control over their criminal behaviors (Bonta et al., 1998; Hirschfield & Piquero, 2010; Moore, Stuewig, & Tangney, 2014; Moore, Stuewig, & Tangney, 2016a). In a poll of 2,000 people, one-half agreed with negative stereotypes about criminal offenders (Hirschfield & Piquero, 2010). Other studies have illustrated public support for structural sanctions and for the exclusion of criminal offenders from local communities (Mezey, Kavuma, Turton, Demetriou, & Wright, 2010; Moore et al., 2016a). Often, stereotypes about people with mental illness and their perceived dangerousness overlap with stereotypes about criminal offenders (Hirschfield & Piquero, 2010), which often causes these individuals to struggle significantly with reintegrating into society post-release (Aksola et al., 2018; Hirschfield & Piquero, 2010; Lebel, 2012; Moore, Milam, Folk, & Tangney, 2018).
Current Study

Research supports that 60% to 70% of individuals with a history of treatment for mental illness believe people with mental illnesses are stigmatized by the public (Link, Cullen, Struening, Shrout, & Dohrenwend, 1989; Markowitz, 1998). Sometimes, these individuals begin to believe these stigmas are true of themselves, as well, which causes them to experience diminished self-esteem, self-efficacy, hope, and quality of life (Corrigan & Watson, 2002a; Lebel, 2012; Link, 1987; Moore et al., 2016a). Narrative Enhancement and Cognitive Therapy (NECT) is an anti-stigma group therapy which aims to diminish individuals with SPMIs’ experience of internalized stigma; also known as self-stigmatization (Roe, Lysaker, & Yanos, 2013). Supportive literature is scarce regarding NECT’s efficacy with people who are as likely to experience self-stigma as those with SPMIs; namely, individuals with multiple stigmatized identities.

For the purposes of this pilot study, NECT was implemented with a correctional psychiatric population. Research supports this population is doubly, and sometimes triply, stigmatized which increases their likelihood of experiencing self-stigma and its negative implications (West, Yanos, & Mulay, 2014). The current study sought to ascertain if mental illness self-stigma and criminality self-stigma scores reduced within this population between the start and end of NECT treatment. This study also explored whether NECT would have a beneficial impact on self-efficacy and self-esteem over the course of the treatment.
CHAPTER II: LITERATURE REVIEW

Self-Stigma is Borne Out of Stigma

Self-stigmatization (herein after referred to as self-stigma) is a process in which people internalize negative stereotypes held by the public about the marginalized group(s) with which they identify (Corrigan & Watson, 2002a; Lebel, 2012; Link, 1987; Moore et al., 2016a).

Evidence suggests about a third of people with severe and persistent mental illnesses (SPMIs) exhibit signs of elevated self-stigma (Lysaker, Roe, & Yanos, 2007; Ritsher & Phelan, 2004). Along with societal reactions (e.g., prejudice, discrimination, typecasting), self-stigma can elicit its own set of negative consequences including, but not limited to, diminished self-esteem, devaluation of self, and lowered self-efficacy (Corrigan, Watson, & Barr, 2006; Fung, Tsang, Corrigan, Lam, & Wai-Ming, 2007).

Defining key constructs and concepts. The development of self-stigma can be understood as occurring in a series of stages. The first involves an awareness that societal labels exist about the social groups to which one belong. The second includes an acceptance of these labels as being generally true. The final stage occurs when an individual applies these labels to the self because they belong to the stigmatized and marginalized group (Corrigan & Rao, 2012; West et al., 2014). To better understand these phenomena, key constructs and concepts of both self-stigma and internalized stigma will be explored, as each term has been used interchangeably in the literature (Moore et al., 2016a; West et al., 2014).

Stereotype awareness. Also known as perceived stigma, this first stage of the development of self-stigma is described as an individual’s perception that others hold negative stereotypes about a group, or population, to which they belong (Corrigan et al., 2006; Moore et al., 2016a). Link (1987) reported people gain this perception as early as childhood by developing
a lay theory about mental illness that reflects the cultural images they received about mental illness—whether these cultural depictions are accurate or not. This lay theory can subsequently cause individuals to endorse commonly perpetuated negative beliefs about people with mental illness, such as they are dangerous, unpredictable, and not to be trusted (Corrigan et al., 2006; Link, 1987; Moore, Tangney, & Stuewig, 2016b). It is well-established in the literature that individuals with mental illness possess degrees of awareness about these negative beliefs being held by the general public (Corrigan et al., 2006; Lebel, 2012; Link, 1987). Researchers (Corrigan et al., 2006; Lebel, 2012; Link, 1987) identify this first stage as essential to development of self-stigma because people cannot come to internalize what they have never been exposed to.

**Stereotype agreement.** Corrigan et al. (2006) define this concept as, “endorsing the same stereotypes perceived to be common in the public” (p. 876). In other words, the individual with mental illness holds the same negative beliefs about mental illness that the general population does, and attributes them to other individuals with mental illness. This second stage of the development of self-stigma is influenced by repeated exposure to stereotypes about one’s group.

For example, Quinn, Williams, and Weisz (2015) explore the relationship between discrimination experiences, anticipated stigma, and self-stigma to understand how self-stigma might develop. Their findings suggest prior experiences of discrimination may increase the likelihood that individuals with mental illness will anticipate or expect stigmatization which, in turn, may contribute to a belief that the stereotypes involved are true (Quinn et al., 2015). Stereotype agreement is described as an internal process that can be evaluated, such as with a measure like the Internalized Stigma of Mental Illness (ISMI; Ritsher, Otilingam, & Grajales,
2003) scale. For this scale, however, researchers describe the phenomenon as stereotype endorsement (Ritsher et al., 2003).

**Self-concurrence.** Researchers Quinn and Chaudoir (2009) label acknowledging stereotypes as personally descriptive as a defining feature of self-stigma. Referred to as self-concurrence, this phenomenon occurs when an individual not only holds the same negative beliefs that the general public does about mental illness, but they also apply these stereotypes to themselves (Quinn & Chaudoir, 2009). Self-concurrence is the third, and final, stage in the development of self-stigma.

**Self-efficacy.** Self-efficacy refers to an individual’s confidence that they can act successfully in a given situation (Corrigan, Bink, Schmidt, Jones, & Rusch, 2016; Luszczynska, Scholz, & Schwarzer, 2005). A person who harbors low self-efficacy lacks a general belief in his or her personal effectiveness. Diminished belief in personal effectiveness has been shown to be associated with lack of confidence in one’s abilities, finding tasks to be harder than they actually are, avoiding taking risks, and not seeking opportunities (Corrigan et al., 2016; Fung et al., 2007; Luszczynska et al., 2005).

**Self-esteem.** Self-esteem refers to an individual’s appraisal of his or her own worth (Madsen, 2014). Decreases in self-esteem can cause individuals to question their worthiness and capabilities. It can also diminish their drive to pursue personal goals, create meaningful relationships, or take healthy risks (Corrigan et al., 2016; Luszczynska et al., 2005; Madsen, 2014).

**Self-Stigma is a Strong Predictor of Diminished Self-Esteem and Self-Efficacy**

Self-stigma has a significant effect on an individual’s psychological well-being. This is especially true for individuals with SPMIs (Corrigan & Watson, 2002b; Corrigan et al., 2006).
Most prominently studied is self-stigma’s influence on self-esteem and self-efficacy (Bonta, Law, & Hanson, 1998; Corrigan & Watson, 2002b; Corrigan et al., 2006; Lebel, 2012; Link & Cullen, 1990; Ritsher et al., 2003). As described above, diminished self-esteem and self-efficacy can cause individuals to doubt their worth and their capabilities (Corrigan et al., 2016; Luszczynska et al., 2005; Madsen, 2014).

Link et al. (1989) evaluated the consequences of stigma on the self-esteem of people with mental illness. Perceived stigma (an essential component of self-stigma) and self-esteem were assessed among 70 individuals with mental illness. Baseline self-esteem, depressive symptoms, demographic characteristics, and pre-existing diagnoses were controlled for. Results showed perceptions of stigma were strongly associated with diminished self-esteem (Link et al., 1989). A multitude of other studies have demonstrated similar negative consequences to include changes in identity and self-concept, harboring negative views of self, and an overall devaluation of self (Bonta et al., 1998; Corrigan & Watson, 2002b; Corrigan et al., 2006; Lebel, 2012; Link & Cullen, 1990; Ritsher et al., 2003).

Corrigan et al. (2006) found significant associations between components of self-stigma and levels of self-esteem and self-efficacy among individuals with severe mental illnesses. In their study (Corrigan et al., 2006), self-stigma was parsed into three levels (i.e., stereotype agreement, self-concurrence, and self-esteem decrement), and followed by an exploration of the relationship to self-esteem, self-efficacy, and depression. Participants’ experiences were assessed utilizing the Self-Stigma of Mental Illness (SSMI; Corrigan et al., 2006) scale. According to their findings, self-concurrence and self-esteem decrement were significantly correlated with measures of both self-esteem and self-efficacy. Specifically, participants who endorsed higher
levels of self-stigma were also more likely to experience loss of self-esteem and diminished self-efficacy (Corrigan et al., 2006).

**Correctional Psychiatric Patients are Doubly Stigmatized**

Rates of severe mental illness were found to be higher in correctional settings in comparison to the general public (Diamond et al., 2001). As such, prevalence of stigma about correctional psychiatric patients (also referred to in the literature as forensic psychiatric patients) is often at a rate of a two-fold increase (Aksola et al., 2018; Diamond et al., 2001; West et al., 2018). This population is significantly burdened by the negative stereotypes held by the public, as they carry two negative stereotypes: mental illness and criminal offender status (Brooker & Ullmann, 2008; Diamond et al., 2001; West et al., 2018).

The public has endorsed beliefs about people with mental illness as being incompetent, unintelligent, unpredictable, childish, and weak (Bonta et al., 1998). Criminal offenders are thought to be threatening, indefensible, dangerous, and deserving of punishment and alienation (Hirschfield & Piquero, 2010). The overlap of these labels has a significant impact on sense of self and self-concept among this population, especially when people come to believe these stigmas to be true testaments of their character and self-worth (West et al., 2014; West et al., 2018).

**Correctional Psychiatric Patients Integrate Perceived Stigmas into Their Self-Concept**

Moore et al. (2016b) examined the process of self-stigma in 203 male inmates, and found forensic psychiatric patients are likely to internalize perceived stigmas, and subsequently believe themselves to be bad and dangerous people who cannot be trusted, rehabilitated, or reintegrated into society. The study participants completed an adapted version of the Self-Stigma of Mental Illness (SSMI; Corrigan et al., 2006) scale to assess the degree to which they believed their
personal characteristics matched negative stereotypes about criminal offenders. Utilizing the revised scale, entitled the Self-Stigma of Individuals with Criminal Records (SSICR; Moore et al., 2016b), the researchers measured the subjective experience of stigma among individuals with mental illness and criminal offenses. Results demonstrated that the internalization of stigma among criminal offenders with mental illnesses occurs when these individuals perceive stereotypes about their population from the general population, there is agreement with these stereotypes, and there is subsequent acceptance of these stereotypes as being personally descriptive (Moore et al., 2016b).

This study (Moore et al., 2016b) provides support that the self-stigma process occurs with correctional psychiatric patients, as it outlined the three stages of the process. However, one limitation is the study’s lack of information about the participants’ criminal offenses, criminal and personal histories, and past incarceration experiences. This information may have provided more descriptive results, as results from Lebel’s (2012) study found elevations in perceived stigma in criminal offenders were related to having multiple parole violations, identifying strongly with other prisoners, having poor relationships with family and friends, and growing up in an environment where incarceration is a norm.

**Initial Anti-Stigma Interventions Have Produced Varying and Short-Term Outcomes**

By developing an understanding of self-stigma, its stages, and its implications, mental health professionals may be better able to identify and, subsequently, treat self-stigma. Research has shown in addition to affecting a person’s self-esteem, self-efficacy and self-worth, self-stigma also influences the therapeutic relationship, treatment-seeking behaviors, and treatment outcomes (Brooker & Ullmann, 2008; Corrigan et al., 2016; Diamond et al., 2001;
Grambal et al., 2016; West et al., 2018). The following section outlines efforts to address self-stigma through treatment.

**Psychoeducational approaches.** Early anti-stigma treatment interventions for self-stigma were psychoeducational in nature, and the results showed only limited changes in participants’ experiences of self-stigma. Wieczynski’s (2000) psychoeducational stigma management group is an example of a treatment model deemed helpful only anecdotally by inpatient psychiatric participants, but the research lacked statistically significant results. The aim of the psychoeducational stigma management group was to teach individuals with mental illnesses how to navigate social situations which may involve stigma by increasing self-efficacy using coping techniques. However, analyses (Wiecynski, 2000) suggested the group intervention did not produce significant effects on participants’ experience of self-efficacy, despite self-reports of increased satisfaction. The study described above suggests limited long-term efficiency in providing psychoeducation to mentally ill individuals. Future efforts were aimed at education the public.

Efforts to educate the public about mental illness and stigma also produced mixed results in terms of the longevity of beneficial outcomes. Gronholm, Henderson, Deb, and Thornicroft (2017) conducted a narrative synthesis of systematic reviews of interventions aimed at reducing discrimination and stigma towards individuals with mental illness. Although efforts to educate the general population were found to be popular, there was limited evidence to support the long-term impact of these types of interventions (Gronholm et al., 2017). Results of the studies described above suggest there is an importance and relevance in educating patients and the public about mental illness to mitigate stigma. Beneficial outcomes were generally short-term, and interventions that might produce lasting effects were viewed as being more effective at
diminishing the development and perpetuation of stigmas about mental illness (Gronholm et al., 2017; Wiecynski, 2000).

**Cognitive-behavioral approaches.** Cognitive-behavioral anti-stigma interventions were often implemented in group settings (Knight, Wykes, & Hayward, 2006; McCay et al., 2006; Yanos, Roe, & Lysaker, 2011). Their main goals included helping participants to improve their self-concepts, while simultaneously helping them feel more empowered and supported (Knight et al., 2006; Yanos et al., 2011). These groups also aimed to help participants learn strategies to help them cope more adaptively with their symptoms of mental illness (Knight et al., 2006). Cognitive-behavioral interventions incorporated psychoeducational components, as well, but emphasized the need to provide support, and impacting how individuals described themselves and narrated their life experiences (Yanos et al., 2011). These approaches demonstrated significant results; however, the period of effectiveness post-intervention was short-lived (Knight et al., 2006; McCay et al. 2006; Yanos et al., 2011).

McCay et al. (2006) referred to self-stigma as “illness engulfment” and described it as occurring when one’s “personal identity is lost and replaced with a sense of self defined entirely by the illness” (p. 105). These researchers conducted a pre-treatment/post-treatment study in which 52 young adults diagnosed with a schizophrenia spectrum disorder were separated into two groups for treatment. One group received a cognitive-behavioral group intervention that helped members attain healthy self-concepts, while the other group received treatment-as-usual (TAU). The cognitive-behavioral group experienced improvement in their self-concepts, quality of lives, and other symptoms; meanwhile, the TAU group saw no change across domains (McCay et al., 2006). Limitations of this study include its quasi-experimental design, small
sample size, and the number of participants who dropped out of the treatment group (McCay et al., 2006).

The combination of cognitive behavioral groups and anti-stigma psychoeducational interventions demonstrate that both can have positive effects. Namely, there were beneficial effects on participants’ experiences of self-stigma, as well as self-stigma’s negative implications (e.g., diminished self-esteem, poor self-concept, lack of hope; Knight et al., 2006; McCay et al. 2006; Yanos et al., 2011). However, due to the limited long-term effects, it can be inferred anti-stigma interventions continue to miss some other essential treatment or maintenance aspect.

**Narrative Enhancement and Cognitive Treatment (NECT) Can Improve Self-Stigma Among Individuals with Severe Mental Illnesses**

Developed by Yanos et al. (2011), Narrative Enhancement and Cognitive Therapy (NECT) is a manualized, group-based intervention that was originally developed to treat self-stigma among individuals who present with severe and persistent mental illnesses (SPMIs; Roe et al., 2013). The program is designed to be completed in 20 weekly sessions, or in 10 weeks with sessions taking place twice a week, and is comprised of three components: psychoeducation, cognitive restructuring, and narrative therapy. Yanos et al. (2011) stated their main goal in developing this anti-stigma therapeutic intervention was to “help persons not only recognize and discard stigma, but also be better able to recognize and correct dysfunctional cognitions which might impede the development of a new sense of self and positive identity” (p. 580). NECT has been shown to be effective at reducing individuals with SPMI’s experience of self-stigma, and diminishing its negative effects on hope, self-esteem, self-efficacy, and quality of life (Yanos et al., 2011).

Roe et al.’s (2014) qualitative study in which NECT was implemented with an SPMI population was linked to increased hope and a “richer and fuller experience of one’s identity” (p.
Yanos, Roe, West, Smith, and Lysaker (2012) conducted a small randomized controlled trial (RCT) designed to evaluate the feasibility and effectiveness of the intervention. Their findings suggested NECT was not more effective than TAU; however, contributions to this outcome likely included the small sample size and dropout rates (Yanos et al., 2012).

Following Yanos et al.’s (2012) RCT, Roe et al. (2014) also conducted a quasi-experiment study in which pre- and post-data was collected and compared between a group receiving NECT and a group receiving TAU. The NECT treatment group exhibited significant decreases in their experiences of self-stigma, despite limitations in the study to include a lack of random assignment, dropout rates, and a lack of a follow-up assessment. Notably, though, treatment increased reported self-esteem, quality of life, and Hope-Agency scores, as compared to the control group (Roe et al., 2014). This study demonstrated NECT’s efficacy in the outcomes it was designed to target and provided additional support of this approach’s potential to help individuals with SPMIs diminish their experiences of self-stigma.

To further demonstrate the potential efficacy of NECT, Hansson and Yanos (2016) facilitated NECT in a Swedish clinical context. Results demonstrated significant improvements in self-stigma, self-esteem, and quality of life. Hansson, Lexen, and Holmen (2017) conducted another RCT using a sample size with adequate power, and results illustrated NECT was effective in diminishing self-stigma and improving self-esteem in comparison to the TAU group. At a 6-month follow-up, the intervention group was assessed to have maintained the changes they achieved from exposure to NECT. The latter study supports the longevity of this intervention’s therapeutic benefits, which was often lacking in previous anti-stigma interventions. However, it is important to note longitudinal studies are still lacking in terms of
supporting NECT’s long-term (e.g., longer than 6 months) effects on self-stigma and its negative effects.

**Little is Known About the Efficacy of NECT Among Correctional Psychiatric Patients**

It has been demonstrated that the correctional psychiatric population is doubly stigmatized, thus increasing their likelihood of experiencing self-stigma and its negative implications (Aksola et al., 2018; Brooker & Ullmann, 2008; Diamond et al., 2001; West et al., 2014; West et al., 2018). Supportive literature is scarce regarding NECT’s efficacy with people who are as likely to experience self-stigma as those with SPMIs; namely, correctional psychiatric populations (referred interchangeably as forensic psychiatric patients). Research of this nature may stimulate awareness of a subsequent need to identify strategies that can help interrupt or eliminate the effects of the self-stigma process in correctional psychiatric populations, while simultaneously illustrating the impact NECT can have on the overall quality of life of these individuals.

**The Present Study**

This current study investigated the relationship between self-stigma, self-efficacy, and self-esteem in correctional psychiatric patients, as well as NECT’s relationship to each variable. For the purposes of this exploratory pilot study, NECT was implemented with a correctional psychiatric population at the Federal Medical Center in Devens, Massachusetts (FMC Devens). Through inferential analyses, this study addressed the following research questions (RQx):

**RQ1:** Will self-stigma scores decrease between the start and end of NECT treatment?

**RQ2:** Will NECT have a beneficial relationship with self-efficacy over the course of the treatment (i.e., will scores increase or remain stable over time)?
**RQ3:** Will NECT have a beneficial relationship with self-esteem over the course of the treatment (i.e., will scores increase or remain stable over time)?

**RQ4:** Will a within-individual relationship exist between variables (i.e., self-stigma, self-efficacy, and self-esteem)?

Based on the findings from previous research, it was predicted participation in NECT would result in an increase in both self-efficacy and self-esteem. It was also hypothesized that the reported experience of self-stigma among this sample of correctional psychiatric inmates would diminish after NECT. Additionally, it was posited that the relationship between the three variables would demonstrate a shared, within-individual pattern across participants.
CHAPTER III: METHOD

Narrative Enhancement and Cognitive Therapy (NECT) is a manualized, group-based intervention that was originally developed to treat self-stigma among individuals who present with SPMIs (Roe et al., 2013). NECT has been shown to effectively reduce these individuals’ experience of self-stigma, and diminish its negative effects on their hope, self-esteem, self-efficacy, and quality of life (Yanos et al., 2011). In the present multiple case comparison study, NECT was implemented with a correctional psychiatric population. This study used a within-participant, quantitative approach to assess if mental illness self-stigma and criminality self-stigma scores reduced within this population treated. This study also explored whether NECT would have a beneficial impact on self-efficacy and self-esteem over the course of the treatment.

Participants responded to surveys (Likert-scale format) which elicited information about their experience of the variables described above. Data on criminality and mental illness self-stigma were collected at the beginning of the first NECT session and at the end of the last session. Self-esteem and self-efficacy were measured at six points throughout treatment (i.e., every fourth session).

Setting

The Federal Medical Center in Devens, Massachusetts (FMC Devens) is an all-male federal prison in the Bureau of Prisons (BOP) with the capacity to house over 1,000 inmates. It is one of six federal medical centers in the BOP, and the facility houses inmates with various psychiatric diagnoses and medical conditions. Regarding mental health treatment, FMC Devens houses inmates who present with both chronic and acute mental health symptoms and diagnoses. Inmates receive treatment and support on either the two locked units or the two unlocked units.
The locked units are typically designated for individuals presenting with severe mental illness or acute symptoms, while the unlocked units typically house those individuals whose psychiatric conditions are well-managed. Of note, inmates move from locked to unlocked units depending on the severity or impact of their symptoms. Individuals are more likely to be housed on the locked units if they are deemed a danger to themselves or others secondary to the manifestation of their mental health symptoms (FMC Devens, 2021).

At FMC Devens, psychology services are not limited to inmates with SPMIs. General population inmates also have access to mental health treatment and resources through the prison’s Psychology Services Department. These inmates receive individual and group therapy, as well as treatment geared towards specific presenting problems (e.g., substance use, sex offender treatment, forensic evaluation, etc.). Psychologists in the Psychology Services Department also assist with crisis negotiation and crisis support (FMC Devens, 2021).

**Participants**

A total of six individuals participated in this study. Participants were inmates with SPMIs receiving mental health treatment on one of the unlocked units at FMC Devens. Table 1 depicts demographic, educational, and marital statistics for the study sample of six participants, 100% of whom identified as male. Participants ranged in age from 27 years old to 57 years old. Four participants (66.7%) identified as Black or African American, and two participants (33.3%) identified as White. Regarding education level, four participants (66.7%) attended some college but earned no degree, while two participants (33.3%) earned high school diplomas. Of the six participants, five (83.3%) identified as single, and one (16.7%) identified as married. All participants, except “Participant 4,” attended 100% of the 20 NECT sessions; “Participant 4” missed one session due to illness.
Recruitment and Selection

This study’s principal investigator (i.e., this writer) consulted with four licensed psychologists in FMC Devens’ Psychology Services Department to determine which inmates would be appropriate for or would benefit from NECT (i.e., inmates who met the inclusion criteria described below). Of note, these four psychologists were consulted because they are the only providers who treat inmates with SPMIs. This writer informed each psychologist of the purposes and intents of NECT treatment and the present study by reciting the following script:

Self-stigma happens when people believe that negative stereotypes held by society are true about themselves. These beliefs can cause people to feel badly about themselves, feel depressed, or feel hopeless about themselves and their futures. Narrative Enhancement and Cognitive Therapy is a kind of group therapy shown to help people with SPMIs who are dealing with self-stigma. I am conducting research on how NECT can help correctional psychiatric populations since they are at high risk of experiencing self-stigma. By participating in the group, I hope participants will experience less self-stigma, have better feelings about themselves, and start to believe that they can achieve their goals or handle difficult situations. Participation in the group is completely voluntary, and participation in the study would include filling out questionnaires every so often that ask about participants’ thoughts about themselves and their capabilities. If you have any patients who you believe might present with signs of self-stigma, and who would like to get some support, would you be interested in recruiting them to participate in this NECT group? The group takes place two times a week for ten weeks, and participants should be capable of engaging in talk therapy, have some writing skills, and have their symptoms managed by medication.

If any of the psychologists consulted had follow-up questions, this writer answered them accordingly. The first psychologist reportedly had two patients in mind, the second psychologist had three people in mind, and the third psychologist had one patient in mind. The fourth psychologist had one patient in mind, but after speaking to the patient, he declined interest in participation. Viable participants were informed of the NECT group by their individual psychologist who recited the following recruitment script:
Sometimes people receiving mental health treatment can feel down or bad about themselves. We’re offering a group that uses narrative and cognitive therapy as a way for inmates to work on any negative thoughts they might have about themselves because of their mental illness. If you think you would benefit from participating in a group like this, would you be interested in learning more about this opportunity?

Reading a script to viable NECT participants allowed for uniformity in the recruitment process and mitigated the chance of introducing bias into the process.

Patients who expressed interest were encouraged to notify their psychologist in written form by submitting an “Inmate Request to Staff” form addressed to the primary NECT treatment facilitator (i.e., this writer). Those who formally expressed interest were scheduled to meet with this writer one-on-one for informed consent and to discuss the nature and intent of the research, as well as any risks and benefits. The informed consent document outlined these details. Of note, individuals who elected to participate in the NECT group were not required to also participate in the study (i.e., have data collected from them). Only individuals who expressed understanding of, agreed to, and signed the informed consent form during the one-on-one meeting had data collected from them for the purposes of the study.

**Informed Consent**

Participants received an informed consent document (Appendix A) during the one-on-one meeting with this writer prior to the commencement of NECT treatment. This document was reviewed with the participants, and this writer addressed any questions that arose. Once participants made the decision to (or not to) participate in the study, they signed (or did not sign) the informed consent. Of note, all six individuals elected to participate in the study, and each received a copy of the informed consent for their personal records. Of note, participants were offered the option to have the informed consent kept securely with the data collected. Participants were informed about who they could contact (including this writer) should any
questions, comments, or concerns arose to have them appropriately addressed. This information was also outlined on the informed consent document.

Voluntary participation. Inmates were offered and informed of the right not to participate in the study. If they refused to participate in the study, they were still able to participate in NECT, and receive the same benefits from the program as the inmates who chose to participate in the research study. The informed consent clearly denoted if any psychological distress was experienced, participants had the right to stop participation in the study. Participants were also allowed to discontinue treatment under their own discretion, as participation in the study or in NECT treatment was not mandatory.

Addressing risks. This research study was designed to be minimally intrusive, but it was possible some questions on the assessments and self-report measures might have elicited some psychological distress. Because this research was conducted in collaboration with Psychology Services Department at FMC Devens, additional mental health services were coordinated with the full-time psychologists. Specifically, since each NECT participant was already assigned to a primary psychologist, if they experienced any distress, they were encouraged to reach out to this writer, to ask NECT facilitators to set up meetings on their behalf, or to reach out to their psychologists directly.

There was also the risk that a subpoena or court order might have required the disclosure of participants’ identities and testing results. If this had occurred, the participants’ confidentiality would have had to be broken. This limitation to confidentiality was included in the informed consent. Of note, this did not occur over the course of the study.

Confidentiality. All participants were assigned a Personal Identification Number (PIN). The PIN was utilized to de-identify all assessment, demographic, and study records. If stored
electronically, a key would be kept in a password-protected and encrypted file separate from records and aggregate data. Per HIPAA, the key would be kept for seven years starting from its last use. After the seven years has elapsed, or when the data is deemed no longer useful or viable, flash drive copies will be deleted, and hard copy files will be shredded and appropriately disposed of. Of note, no data was electronically stored, and all hard copy files were kept in a locked desk inside of a locked office at FMC Devens to maintain confidentiality and safety of participants’ information.

Inclusion and Exclusion Criteria

**Inclusion criteria.** Eligible participants were chosen if they were deemed by their clinical providers to be sufficiently capable of participating in talk and group therapy. This entailed participants’ functioning was not significantly impaired by their mental illness, medical needs, or behavioral issues. Participants also had to have adequate literacy skills in order to effectively grasp the routinely administered questionnaires and the informed consent – each of which have at least a Flesch-Kincaid score at the 7th grade level. NECT also requires that participants do a significant amount of in-session writing, so writing skills were also necessary. Though the study and treatment aimed to be minimally intrusive, some questions on the self-report measures have the risk of eliciting psychological distress. As such, embedded access to extra support from mental health providers was made mandatory (i.e., regular clinical contact with their clinical provider).

**Exclusion criteria.** Participants were excluded from participation if they presented with uncontrolled or unmanaged psychological symptoms (e.g., active psychosis), as this would have interfered with their ability to effectively participate in or benefit from the treatment. Participants were also required to be proficient in communicating in the English language because treatment,
measures, and informed consent were presented in the English language. Additionally, no interpreter could be made available to translate for participants who were not fluent in the English language.

Due to their inability to attend groups that took place outside of their units, inmates who resided on locked housing units were unable participate in NECT treatment. Inmates on semi-locked units were required to attain off-unit privileges before participating in treatment. In addition, if any two (or more) inmates were considered “separatee inmates,” (i.e., inmates who, for safety reasons, are not allowed to be near each other), they could not be part of the same treatment group. Plainly stated, if one separatee inmate was in the group, the other separatee inmate could not participate simultaneously without violating their separatee agreement.

**Institutional Review Board (IRB) Process**

As defined by the United States Food and Drug Administration (USFDA; 2019), inmates constitute a vulnerable population which means for the present study, this researcher had to complete the Institutional Review Board (IRB) process. IRBs exist across various administrative bodies (e.g., schools, prisons, states, etc.), and approval must be attained from each IRB group relevant to a given study (USFDA, 2019). As such, approval for this study was obtained from the university through which the study was being conducted (Antioch University New England; AUNE), at the local level through FMC Devens, and at the federal level through the BOP. Of note, the IRB equivalent in the BOP is referred to as the Bureau Research Review Board (BRRB), and it holds the same responsibility to protect the rights, safety, and privacy of the inmate population (University of Nevada, 2021). For this study, attaining IRB approval was a rigorous process that entailed detailing in written form how the rights, privacy, and welfare of participants would be protected. Detailed descriptions of the informed consent process,
protocols, and related material were required in order to sufficiently support this principal investigator’s procedures for protecting the participants.

The AUNE IRB had to approve the study before the FMC Devens IRB and the BOP BRRB applications could be completed and submitted because the latter entities would not allow research to be conducted in the prison unless it was first deemed acceptable by the university through which the research was being conducted. The AUNE IRB proposal was submitted in June 2019, and conditionally approved in July 2019. After appropriate revisions were submitted, the AUNE IRB was approved in August 2019. IRB approval was then required from FMC Devens before the BOP’s BRRB could provide its approval. However, the application processes could occur simultaneously. For both the FMC Devens IRB and the BOP BRRB, there were a few rounds of submissions before approval was received. The FMC Devens IRB application was approved in November 2019, and the BOP BRRB application was approved in February 2020.

Measures

**Basic demographics questionnaire.** Participants were asked to self-report demographic information. The demographic questionnaire elicited information regarding age, race/ethnicity, gender identity, marital status, and education level. Participants provided this information on a basic demographic questionnaire (Appendix B) created by the principal investigator of this study.

**Self-Stigma of Individuals with Criminal Records (SSICR).** The Self-Stigma of Individuals with Criminal Records (SSICR; Moore et al., 2016b; Appendix C) scale operationalizes and assesses the three components of the self-stigma process. Evidence of permission to reproduce this scale can be found in Appendix D. Distinct clauses capture the three components: perceived stigma (“The public thinks most people with a criminal record are…”),
stereotype agreement (“I think most people with a criminal record are…”), and internalized stigma (“Because I have a criminal record, I am…”). Each component is measured via a respective subscale comprised of nine items each (27 items total). Responses on subscale items range from 1 (strongly disagree) to 4 (strongly agree). Reliability for each of the subscales are as follows: perceived stigma, $\alpha = .92$, stereotype agreement, $\alpha = .84$, and internalized stigma, $\alpha = .73$ (Moore et al., 2016b).

**Internalized Stigma of Mental Illness (ISMI).** The Internalized Stigma of Mental Illness (ISMI; Ritsher et al., 2003) measures participants’ subjective experience of stigma. Of note, permission to reproduce this scale in the Appendix of this paper was requested, but not granted. The scale includes 29 Likert items rated on a 4-point scale that ranges from 1 (strongly disagree) to 4 (strongly agree). The ISMI contains the following five subscales: (a) Alienation, (b) Stereotype Endorsement, (c) Discrimination Experiences, (d) Social Withdrawal, and (e) Stigma Resistance.

The Alienation subscale contains six items (e.g., “I feel out of place in the world because I have a mental illness”) which assess respondent’s experience of possessing an attribute that is stigmatized. The Stereotype Endorsement subscale contains seven items (e.g., “Mentally ill people tend to be violent”) which assess whether stigmatized individuals endorse common stereotypes about people with mental illness. The Discrimination Experience subscale is comprised of five items (e.g., “People often patronize me, or treat me like a child, just because I have a mental illness”) assessing how stigmatized individuals with mental illness are treated by the general population. The Social Withdrawal subscale contains six items (e.g., “I stay away from social situations in order to protect my family or friends from embarrassment”) measuring a stigmatized individual’s use of withdrawal from others to cope with their mental illness. The
final subscale, Stigma Resistance, consists of five items (e.g., “People with mental illness make important contributions to society”) which explore the extent to which stigmatized individuals are (un)affected by self-stigmatizing beliefs.

To calculate an internalized stigma score, items are then averaged, with higher scores indicating higher levels of internalized stigma. Items within the Stigma Resistance subscale must be reverse coded before the scale is scored. The ISMI has demonstrated satisfactory internal consistency (α = .90), as well as test-retest reliability (r = .92; Ritsher et al., 2003).

Rosenberg Self-Esteem Scale (RSE). The Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965) measures participants’ reported experience of self-esteem. Of note, permission to reproduce this scale in the Appendix of this paper was requested, but not granted. It is a 10-item Likert-type questionnaire with items answered on a four-point scale—strongly agree, agree, disagree, or strongly disagree. Response items are scored between 1 and 4, and these scores are added to produce the respondent’s final score. Final scores fall between 10 and 40; a higher score depicts a greater experience of self-esteem. There is evidence supporting the scale’s internal consistency (α = .84 to .91; Sinclair et al., 2010), and it has exhibited predicted relationships with perceptions of stigma among participants with schizophrenia (Razali, Hussein, Tg, & Tg, 2010).

General Self-Efficacy Scale (GSES). The General Self-Efficacy Scale (GSES; Schwarzer & Jerusalem, 1995) assesses participants’ experience of self-efficacy. Of note, permission to reproduce this scale in the Appendix of this paper was requested, but not granted. It is a 10-item questionnaire with responses ranging from 1 (not true at all) to 4 (exactly true). Responses are added together to depict respondents’ final scores, which range from 10 to 40.
Higher scores depict greater perceived self-efficacy. High reliability, stability, and construct validity of the GSES scale have been reported (Luszczynska et al., 2005).

**Procedure**

Narrative Enhancement Cognitive Therapy (NECT) is a weekly, 20-session group therapy model (Roe et al., 2013) in which sessions can take place once a week or twice a week. Each session lasts for one hour. For the purposes of this study, sessions took place twice a week, and the first and last sessions were an hour and a half long to allow study participants to complete the necessary measures and questionnaires. For this study, NECT was facilitated by the principal investigator and one of the licensed psychologists at FMC Devens; both of whom were formally trained in the facilitation of NECT.

Each inmate who chose to participate in the study received a demographic questionnaire at the beginning of the first session. Each participant also spent the first half-hour of the first session and the last half-hour of the final session filling out the following scales: The Self-Stigma of Individuals with Criminal Records (SSICR), the Internalized Stigma of Mental Illness (ISMI), the Rosenberg Self-Esteem Scale (RSE), and the General Self-Efficacy Scale (GSES). The data collected during these two timeframes were used for pre-post comparisons. The RSE and the GSES were also filled out at the beginning of the 4th, 8th, 12th, and 16th sessions. This data was used to inform analyses about the changes in self-efficacy and self-esteem over the course of treatment.

**Summary of Analyses**

Data was collected via self-report (i.e., pen and paper surveys). Survey responses were compiled and uploaded through the Statistical Package for the Social Sciences (SPSS) to produce descriptive statistics. The relationship between self-efficacy, self-esteem, and self-stigma was
investigated utilizing repeated measure correlation (rmcorr). Pre- and post-test differences were explored through paired samples t-tests. Changes in self-efficacy and self-esteem scores over the course of treatment were analyzed via a repeated measures ANOVA.
CHAPTER IV: RESULTS

Quantitative Data

RQ1: Will self-stigma scores decrease between the start and end of NECT treatment? A paired samples t-test was conducted to compare participants’ experience of self-stigma before and after the implementation of NECT. Pre- and post-treatment SSICR and ISMI scores were analyzed, and results are depicted in Table 2 and Table 3, respectively. These scores were analyzed separately as they measured two differing experiences of self-stigma (e.g., self-stigma related to having a criminal record and self-stigma related to having a mental illness).

**SSICR pre-/post-treatment.** Regarding criminality self-stigma, as measured by the SSICR, results illustrated SSICR scores were higher post-treatment (M = 1.67, SD = .390) than they were pre-treatment (M = 1.63, SD = .304). The paired samples t-test found this difference was not statistically significant (t(5) = -.83, p = .444). SSICR scores pre-treatment were strongly and positively correlated to SSICR scores post-treatment (r = .986, p < .000). There was a very small effect size (d = 0.1) associated with these results.

**ISMI pre-/post-treatment.** Regarding self-stigma related to having a mental illness, as measured by the ISMI, results demonstrated ISMI post-treatment scores were lower (M = 2.05, SD = .587) than ISMI pre-treatment scores (M = 2.13, SD = .431). The paired samples t-test found this difference was not statistically significant (t(5) = .32, p = .763) with a small effect size (d = 0.2). ISMI scores pre-treatment were weakly and positively correlated to ISMI scores post-treatment (r = .162, p = .76).

RQ2: Will NECT have a beneficial relationship with self-efficacy over the course of the treatment (i.e., will scores increase or remain stable over time)? A paired samples t-test was conducted to compare participants’ levels of self-efficacy before and after the
implementation of NECT (Table 4). A repeated measures analysis of variance (ANOVA) was also conducted to analyze self-efficacy scores over the course of treatment (Table 5). Self-efficacy was measured at six points throughout treatment; at the beginning of sessions 1, 4, 8, 12, and 16, and at the end of session 20.

**GSES pre-/post-treatment.** Results indicate self-efficacy scores, as measured by the GSES, increased by the end of treatment (M = 35.67, SD = 2.73), as compared to scores pre-treatment (M = 34.83, SD = 4.40). This difference was not statistically significant (t(5) = -.56, p = .601). GSES pre-treatment scores were moderately and positively correlated to GSES post-treatment scores (r = .56, p = .248) and results yielded a small effect size (d = 0.2).

**GSES over the course of treatment.** A repeated-measures ANOVA determined that mean GSES scores remained stable across six time points (F(5, 25) = .83, p = .54). A post hoc pairwise comparison using the Bonferroni correction showed decreased GSES scores between the initial assessment and second assessment (34.8 vs 33.8, respectively), but this was not statistically significant (p = 1.00). GSES scores steadily increased and eventually plateaued from the second (34.8) to the third (35.50), fourth (35.17), fifth (35.67), and sixth (35.67) assessments, but these changes also did not reach significance (p = 1.000 for each pairwise comparison). Of note, the Bonferroni correction was used to limit the possibility of getting a statistically significant result when testing multiple hypotheses (e.g., Type I error). Despite subtle score increases, results for the ANOVA indicated no statistically significant time effect on participants’ endorsement for general self-efficacy over the course of treatment.

**RQ3: Will NECT have a beneficial relationship with self-esteem over the course of the treatment (i.e., will scores increase or remain stable over time)?** A paired samples t-test was conducted to compare participants’ endorsed levels of self-esteem before and after the
implementation of NEC (Table 6). A repeated measures analysis of variance (ANOVA) was also conducted to analyze self-esteem scores over the course of treatment (Table 7). Self-esteem was measured at the same six points throughout treatment as self-efficacy.

**RSE pre/post-treatment.** Results indicate self-esteem scores, as measured by the RSE, increased by the end of treatment (M = 35.33, SD = 3.08), as compared to scores pre-treatment (M = 33.00, SD = 4.90). This difference was not statistically significant (t(5) = -1.47, p = .201). RSE pre-treatment scores were moderately and positively correlated to RSE post-treatment scores (r = .61, p = .198). Effect size was shown to be small (d = 0.4).

**RSE over the course of treatment.** Similar to GSES analyses, a repeated-measures ANOVA determined that mean RSE scores remained stable across six time points (F(5, 25) = 1.14, p = .38). A post hoc pairwise comparison using the Bonferroni correction showed increased RSE scores between the initial assessment and second assessment (33.00 vs 34.67, respectively), but this was not statistically significant (p = 1.00). RSE scores continued to steadily increase over the course of treatment, as illustrated in Table 7, but decreased from the fourth (36.17) to the fifth (34.50) assessments before increasing again at the sixth assessment time (35.33). Results show none of these changes in scores reached significance (p = 1.000 for each pairwise comparison). Despite changes in scores over time, outcomes for the ANOVA indicate no statistically significant time effect on participants’ endorsement for self-esteem over the course of treatment.

**RQ4: Will a within-individual relationship exist between variables (i.e., self-stigma, self-efficacy, and self-esteem)?** A repeated measures correlation (rmcorr) was conducted to determine if a within-subjects association exists between self-stigma, self-efficacy, and self-esteem. For the purposes of this study, since two measures were used to determine levels of
self-stigma relating to two different factors (i.e., having a criminal record and having a mental illness), a total of four variables were correlated. Of note, compared to other methods of correlations (e.g., Pearson r), rmcorr tends to have much greater statistical power because neither averaging nor aggregation is necessary to address the intra-individual relationship between variables when comparing a group of participants to itself.

**Rmcorr results.** Within individuals, there was evidence of a weak, negative relationship between SSICR scores and ISMI scores (rrm(5) = -0.36, 95% CI [-0.943, 0.763], p = 0.422; Figure 1). This suggests there was a common pattern among individuals to endorse greater experiences of self-stigma related to having a criminal record. These endorsements tended to be linked to a common slope in which participants endorsed a decrease in their experience of mental illness self-stigma. Results of the rmcorr found this association was not statistically significant, with uncertainty in the effect size.

SSICR and RSE scores were found to have a common linear within-individual association (rrm(5) = 0.82, 95% CI [-0.236, 0.987], p = 0.025; Figure 2). These scores had a strong, positive relationship which suggests participants’ scores on each measure had the tendency to increase together. Results of the rmcorr were found to be significant; however, due to the small sample size, effect size is uncertain.

Results from the rmcorr found a weak positive, within-individual relationship between scores on the SSICR and scores on the GSES (rrm(5) = 0.35, 95% CI [-0.769, 0.942], p = 0.439; Figure 3). The relationship between each variable was not found to be statistically significant. Additionally, since the confidence interval of the rmcorr covers most of the possible range of significance from -1 to +1, there is high uncertainty of the effect size, which suggests an adequate conclusion regarding practical significance would be difficult to ascertain.
Scores on the ISMI had a strong negative, within-individual association with scores on the RSE (rrm(5) = -0.65, 95% CI [-0.974, 0.541], p = 0.112; Figure 4). This relationship was not found to be statistically significant. Again, effect size remains uncertain due to low sample size. The rmcorr results indicate no common linear within-individual relationship exists between ISMI scores and GSES scores (Figure 5). Specifically, results found a weak and positive relationship between the two variables (rrm(5) = 0.02, 95% CI [-0.878, 0.887], p = 0.967). These results suggest the lack of a shared pattern across individuals in terms of their endorsement of mental illness self-stigma and their endorsement of self-efficacy.

Participants’ scores on the RSE and the GSES were found to have a weak, positive within-individual correlation (rrm(5) = 0.37, 95% CI [-0.763, 0.944], p = 0.42; Figure 6). Results of the rmcorr found this relationship was not statistically significant. These results suggest a common pattern across individuals who endorsed higher levels of self-esteem, which was linked with participants’ tendency to also endorse higher levels of self-efficacy.
CHAPTER V: DISCUSSION

Personal Biases

As a practicum student at FMC Devens in 2019, I was present on the Special Housing Unit (SHU) when the correctional officers (C.O.s) received a phone call from an executive staff member. For context, this was a phone call all C.O.s in the prison were expected to listen in on, so the phone was put on speaker for everyone, including myself, to hear. I distinctly recall the executive staff member concluding the call by instructing the C.O.s to “make sure they [the inmates] never forget they’re inmates!” Once my shock subsided, I began to realize people struggling with the stigma of having a criminal history might not be in the right place (i.e., federal prison) to personally challenge that stigma if this was a message staff was receiving on a regular basis. A few years later, I began the research process with the bias that efforts to alleviate symptoms of self-stigma associated with being a criminal offender would likely be in vain, especially within a system that perpetuated stigma and prejudice against inmates.

As I stepped out of the role of therapist and into the role of researcher, I appreciated my ability to maintain some semblance of my role as a facilitator of treatment while I also conducted this study. However, I recognized my investment in the outcome of this study was two-fold. First, I wanted to provide a treatment these inmates would likely not have access to without this study with the hopes they would benefit from my efforts. Second, I was also hoping the results of my study would be statistically and practically significant enough for NECT to be considered necessary and beneficial to use within the prison setting. I really wanted NECT to work, not only for the inmates I was treating in the present study, but also for all inmates.

Given these biases, I went into this study with two conflicting thoughts: “This will NEVER work” and “This HAS to work.” Throughout the study, I remained cognizant of my
thoughts, feelings, and behaviors while I also facilitated treatment sessions because there was the chance I was overcompensating for the perceived lack of compassion the inmates received daily. I questioned my level of compassion, among several other cares and concerns, as I co-facilitated the group sessions, hoping not to act in a way that might compromise members’ participation. I endeavored to put forth my best effort to remain presently focused without inadvertently influencing or interfering with the outcomes.

Summary of Findings

The primary goal for this study was to investigate whether NECT would influence correctional psychiatric patients’ reported experience of self-stigma, self-esteem, and self-efficacy. Scales were used to measure each study participant’s endorsement of these variables before and after the implementation of treatment, as well as whether and to what extent the intervention had an influence on participants’ self-esteem and self-efficacy across the 20 sessions. Lastly, the study sought to determine whether there were any within-individuals relationship between the variables measured.

The following section outlines the outcomes for each of the hypotheses that informed this exploratory study. It is worth noting that any significant results described in the upcoming section are likely attributable to chance due to the study’s small sample size, which directly limits the possibility of making clinical inferences, but does not preclude proposing possible clinical implications or areas for future research.

RQ1: Will self-stigma scores decrease between the start and end of NECT treatment? As previously mentioned, two forms of self-stigma were measured in this study. At face value (e.g., raw data) the findings of this study appear to support my hypothesis that correctional psychiatric patients would endorse less self-stigma related to having a mental illness
by the end of NECT treatment. However, overall, these results were not statistically significant, so their practical and clinical meaningfulness is lacking. As such, the aspect of my hypothesis pertaining to mental illness self-stigma was not supported by the results of this study.

Despite the increasing prevalence of SPMIs among incarcerated individuals, —two to four times higher than the general public (Vicens et al., 2011)— only a few studies have investigated the role of self-stigma among imprisoned populations (Lebel, 2021; Moore et al., 2018; West et al., 2014; Winnick & Bodkin, 2008). Several studies support the efficacy of NECT in diminishing the experiences of self-stigma secondary to mental illness status in individuals with SPMIs (Hansson & Yanos, 2016; Hansson et al., 2017; Roe, Hasson-Ohayon, Deri, Yanos, & Lysaker, 2010; Yanos et al., 2011; Yanos et al., 2012). However, due to the low sample and effect size, the present study cannot claim the same outcome.

Regarding self-stigma related to having a criminal record, scores did not decrease post-NCT treatment, as was hypothesized. On the contrary, review of raw data suggests participants seemed to endorse an increase in this type of internalized stigma by the end of treatment. Results, however, were not found to be significant, and thus, the aspect of my hypothesis related to this type of self-stigma was not supported.

At present, no research studies have been published that use NECT to treat internalized stigma in correctional populations, thus limiting the generalizability of this study’s findings. However, numerous studies speak to both the risk and protective factors associated with the development and maintenance of self-stigma within this population (Aksola et al., 2018; Hirschfield & Piquero, 2010; Lebel, 2012; Moore et al., 2018). These factors will be discussed further in the Clinical Implications section of this paper.
RQ2: Will NECT have a beneficial relationship with self-efficacy over the course of the treatment (i.e., will scores increase or remain stable over time)? According to the raw data, participants in the present study showed increased experiences of self-efficacy by the end of NECT treatment. Individual members of the study group tended to endorse feeling more confident in their ability to act successfully and competently in given situations due to an increase in their perceived sense of control. As hypothesized, these within-group increases occurred subtly over time; however, as the treatment sessions continued, the scores eventually plateaued. Overall, however, RQ2 results were not aligned with NECT effectiveness in diminishing the negative effects of internalized stigma on hope, self-esteem, self-efficacy, and quality of life (Yanos et al., 2011), as these results were also not found to be significant.

RQ3: Will NECT have a beneficial relationship with self-esteem over the course of the treatment (i.e., will scores increase or remain stable over time)? Much like their experience of self-efficacy, participants’ raw data scores endorsing greater self-esteem showed a slight increase with time. However, at the fifth assessment of self-esteem, scores dropped before increasing again at the sixth assessment. This result was likely attributable to one participant’s exceptionally low rating of self-esteem at the fifth measurement, skewing the group’s overall endorsement of increased self-esteem at that point of treatment. It is also worth noting that at least two participants’ scores moved from endorsing self-esteem “within normal limits” at the onset of treatment to endorsing “grandiose” self-esteem by the end of treatment. These results were found not to be significant, and as such, my hypothesis that RSE scores would decrease over the course of treatments was not supported.

RQ4: Will a within-individual relationship exist between variables (i.e., self-stigma, self-efficacy, and self-esteem)? Findings varied with regard to a relationship between the three
variables demonstrating a shared within-individual pattern across participants (i.e., scores would rise and/or fall in a pattern that suggested NECT had a positive influence on participants’ reported experience of each variable). The repeated measures correlation analysis demonstrated there was a shared pattern across participants’ reported experiences of lower levels of mental illness self-stigma, which tended to be linked to a common pattern among participants’ endorsement of higher levels of self-esteem. There was also evidence of a common pattern among participants endorsing an increase in self-esteem which was linked to an increase in their reported experience of self-efficacy.

Conversely, there was a shared pattern of responses in which participants were generally more likely to endorse higher self-efficacy and self-esteem when they experienced elevations in their internalized stigma (e.g., secondary to having a criminal record). Furthermore, when participants’ experiences of criminality-related internalized stigma increased, the data suggests a decrease in their experiences of self-stigma secondary to having a mental illness. Rmcorr results also showed within-individual endorsements of mental illness self-stigma had almost no association with participants’ reported experience of general self-efficacy. Of note, although the within-individual correlation between self-esteem and criminality self-stigma were found to be statistically significant, the difference between the means was not significant. With the small sample size, it is difficult to derive statistically relevant clinical or practical meaning from the results of this correlational analysis.

**Interpretation of Findings**

Upon review of the raw data, mental illness self-stigma appeared to diminish by the end of NECT treatment for sample participants. However, as previously stated, these results, overall, were not found to be significant, and as such, the present study outcomes were likely due to
chance and have limited clinical implications. NECT has been shown to be effective in improving reported experiences of self-stigma secondary to having a mental illness in individuals with SPMI (Hansson & Yanos, 2016; Hansson et al., 2017; Roe et al., 2010; Yanos et al., 2011; Yanos et al., 2012). Results of the present study likely differed from the overarching findings in the literature due to the very small sample size (n = 6). Although a larger sample size may have yielded similar results, it is worth considering the role impact factors, such as the kind(s) of population from which the treatment group is being drawn and the setting(s) in which the treatment will be conducted, have on mental illness self-stigma treatment outcomes.

**Population and setting.** With the current study, population and setting might have had an impact on participants’ reported experiences of self-stigma associated with having a criminal record. NECT was not developed to address or alleviate self-stigma related to having a criminal record, nor was it developed to treat multiple stigmas, in general. Despite attempts to incorporate questions intended to address criminality self-stigma during treatment facilitation, SSICR scores did not decrease and, instead, an increase in raw data scores was observed.

In their study, Meehan, McIntosh, and Bergen (2006) found the restrictive nature of the prison environment, the confined physical spaces, and the overall characteristics of staff and other inmates created an atmosphere of tension which negatively impacted the climate of the units within which the forensic psychiatric patients they studied resided. This, in turn, negatively impacted patients’ perceptions of their surroundings, and their perceptions of themselves (Meehan et al., 2006). It stands to reason that a prison setting might exacerbate participants’ experience of criminality self-stigma (de Carvalho, dos Santos, & Santos 2020; Meehan et al., 2006).
At FMC Devens, there were constant reminders of the participants’ status as inmates (e.g., their clothing, the correctional officers, the strict routines, being housed on locked units, etc.). NECT treatment was facilitated only two hours a week for 10 weeks, and it is unlikely that amount of treatment would negate the influence of the environment the inmates were in the other 166 hours of each week. Once the COVID-19 pandemic became a part of the life of prison, inmates experienced an increase in isolation due to quarantine protocols which caused inmates to have to be kept in locked cells or locked units more often. They also had little to no access to support persons from outside of the prison due to a lack of phone calls and visits, and limited access to off-unit activities (e.g., jobs, recreational activities, religious services, etc.). According to de Carvalho et al. (2020), a lack of exposure to people outside of the prison environment coupled with limited opportunities to engage in activities that serve as coping mechanisms exacerbate inmates’ feelings of isolation and increases their exposure to elements of prison life that remind them of their criminal status. This reality might have served as one reason why an increase in raw data endorsements of criminality self-stigma were observed in the present study.

**Self-concurrence of criminality self-stigma.** Despite the above findings, the observed increase in raw data self-stigma secondary to being a criminal offender did not appear to have a negative impact on participants’ reported experience of self-esteem. It is possible participants were not attributing stigmas about criminal offenders to themselves during the course of treatment. This outcome (i.e., post-treatment increase in criminality self-stigma and increase in self-esteem) might be attributable to the measure utilized to assess for criminality self-stigma—the SSICR.

The first ten questions on the SSICR explore what society thinks about criminal offenders, followed with ten questions assessing what respondents think of criminal offenders, in
general, and the remaining ten questions asking respondents to rate their beliefs about themselves as criminal offenders. Review of raw data demonstrates participants’ responses to the first ten questions remained consistently high (i.e., high equates to increased agreement with the item), their responses to the next ten questions were typically intermediately ranked, and their responses to the final ten questions were consistently low. In other words, participants’ responses suggest they were experiencing both stereotype awareness and stereotype agreement (i.e., the first two stages in the process of internalizing stigma), but they were not attributing these stigmas to themselves (i.e., little to no self-concurrence).

This finding stirs questions about whether the sample treated in this study actually struggled with criminality self-stigma, or whether instead the high SSICR scores were due to the participants’ knowledge of stereotypes and perceived stigmas about criminal offenders, as well as the public’s tendency to attribute stereotypes to criminal offenders. Winnick and Bodkin (2008) report on an over-reliance on labeling of inmates to maintain social control in correctional settings. It is possible that by nature of being in the prison environment, participants experienced increased exposure to people (e.g., correctional officers) and environments that endorsed and perpetuated negative stereotypes about criminal offenders. This prolonged exposure may, in turn, have solidified participants’ views on how other people view and treat criminal offenders, in general.

The environment, self-esteem, and self-efficacy. The prison environment also may have impacted participants’ reports on their experiences of self-esteem and self-efficacy. According to the raw data, both variables showed slight increases over the course of NECT treatment. Prior studies support the finding of positive impact from NECT on self-esteem and
self-efficacy (Roe et al., 2014; Yanos et al., 2010), however, this study found over the course of
treatment scores for each variable remained stable.

This suggests that NECT does not appear to specifically target or influence either
variable, in the same way it targets mental illness self-stigma. However, the magnitude of
NECT’s relationship with self-esteem was greater than its relationship with self-efficacy. This
may have been due to participants’ inherent experience of a lack of control or competence in
their ability to cope or be resilient within the correctional environment (Aksola et al., 2018),
especially with the COVID-19 protocols in place. Inmates are generally limited in the decisions
they make in a prison setting which impacts their sense of personal control in a given situation
(Aksola et al., 2018; Hirschfield & Piquero, 2010; Hochstetler, Murphy, & Simons, 2004).

**Self-efficacy trends.** Raw data of self-efficacy scores demonstrate an initial decrease in
participants’ scores. Though it is difficult to say for certain why this decrease was observed,
there is a possibility that COVID-19 protocols became stricter at the second collection time.
Luszczynska et al. (2005) found when individuals must adjust their lives to accommodate for
various demands, their self-efficacy tends to diminish. In the case of this sample, it is also
possible participants were still adjusting to treatment and were unsure what to expect or how
they were meant to interact with the materials, with the facilitators, or with each other.

Another reason this decrease in raw data GSES scores might have occurred is due to the
psychoeducation that participants received about stigmas and views that the public hold about
individuals with mental illnesses. Hearing how society views mentally ill individuals could have
fostered a sense that participants neither had control nor could change the narratives others have
about mental illness. Luszczynska et al. (2005) report when individuals experience self-doubt
and negative emotions, their self-efficacy is often negatively impacted.
**Self-esteem trends.** Despite the observed decrease in self-efficacy raw data scores at the second data collection time, an increase in self-esteem scores was observed. This might be attributable to the fact that participants were recommended by their primary clinicians to engage in NECT treatment. Literature on this construct suggests when individuals feel special or included, many experience a positive impact on their self-concept and self-esteem (Corrigan et al., 2006; Leary, Tambor, Terdal, & Downs, 1995; Madsen, 2014). Exposure to treatment, in general, may have also increased participants’ reported experience of self-esteem due to being part of a group with shared experiences. This could have helped foster a sense of belongingness which, in turn, may have contributed to participants feeling validated and empathized with—factors that may also have a positive influence on self-esteem (Leary et al., 1995; Madsen, 2014).

**Participant 4.** Despite these initial increases, a dip in RSE raw data scores was observed by the fifth collection time. This fall in scores was attributable to one participant’s (Participant 4) exceptionally low report of his self-esteem during this collection of data. While other participants’ scores generally increased or remained stable, Participant 4’s RSE raw data scores fluctuated throughout treatment. At times his scores were within normal limits, while at other times they were associated with grandiosity. By the fifth collection period, other participants’ raw data scores continued to peak while Participant 4’s scores dipped before increasing again, which caused a skew in the overall results. One hypothesis for Participant 4’s low score could include a host of occurrences specific to prison life, feeling sick or unwell, or feeling particularly depressed on the day the questionnaire was completed. Since this decrease was observed during the narrative portion of treatment, there is also a possibility that hearing other participants’ stories of success and triumph might have had a negative impact on Participant 4’s self-concept.
As previously mentioned, when individuals feel distinct in some way or a sense of belongingness, they are more likely to report having higher self-esteem (Leary et al., 1995; Madsen, 2014). However, Madsen (2014) reports when individuals feel isolated or that their experiences and lives lack relevance, one’s self-esteem tends to diminish. As other participants’ self-esteem scores rose into the grandiose category, the narratives that participants shared about themselves began to convey their feelings of self-pride. Consequently, it could be hypothesized that since Participant 4’s reported self-esteem raw data scores were often inconsistent, he may have been more easily influenced by his environment during any given moment.

Additionally, Participant 4 is the only individual whose mental-illness-self-stigma scores increased post-treatment. Of note, this increase was significant based on face value (i.e., 1.88 pre-treatment, 3.028 post-treatment). It is unclear whether NECT was beneficial overall for Participant 4, especially given that his scores on the ISMI subscales also increased. Most notably, increases were observed on the Alienation and Social Withdrawal subscales. Lysaker et al. (2007) showed that individuals who have high insight into their mental illness and endorse self-stigmatizing beliefs had lower self-esteem, less hope, and fewer interpersonal relationships. It is also possible that Participant 4’s increase in mental illness self-stigma, coupled with an increased insight about his mental illness through psychoeducation, might have had a negative impact on his endorsement of self-esteem by the end of NECT treatment.

Clinical Implications

Though most of the results from this study were found not to be statistically significant, changes in raw data scores suggest that NECT could be beneficial in treating self-stigma within individuals in the correctional psychiatric population. As such, this section includes hypotheses on the clinical implications of these raw data results within the context of the literature on
self-stigma. Additionally, factors have been highlighted to give proper consideration to the implementation of this particular treatment with this specific population. These factors include: the environment in which treatment is implemented (e.g., federal prison), the impact having multiple stigmatized identities has on the individual, and the prompts participants respond to and reflect about in NECT treatment.

**The environment.** As outlined earlier in this paper, the prison environment presents specific barriers to mitigating forensic psychiatric patients’ experience of self-stigma (de Carvalho et al., 2020; Meehan et al., 2006). These barriers include an inherent perpetuation of stigmatized views and beliefs about this population, the physical environment and atmosphere, and negative relationships and interactions with others (Aksola et al., 2018; Mezey et al., 2010; Roe et al., 2014; Yanos et al., 2010). Within the prison setting, treatment providers have the unique responsibility of balancing both custody and care when working with the forensic psychiatric population. Typically, when treating individuals with mental illness, there is an emphasis on recovery and, as such, providing care and promoting wellness is prioritized (Austin et al., 2009). However, within the prison setting most people, including treatment providers, believe inmates require control, and there is an emphasis on prioritizing order and promoting restitution (Aksola et al., 2018; Austin et al., 2009; Brooker & Ullmann, 2008). These dual commitments must be balanced by treatment professionals in prisons due to their obligations under both the criminal justice and healthcare systems.

Due to these conditions, forensic psychiatric patients are often subjected to conflicting treatment priorities, by which they are treated as individuals deserving of care and, simultaneously, as individuals deserving of isolation and punishment. This reality may be why NECT was did not result in decreasing criminality self-stigma within this population. Though
improvements in mental illness self-stigma, self-efficacy, and self-esteem scores were observed, criminality self-stigma seemed to worsen within individuals over the course of treatment, based on the face value of raw data. With environmental factors possibly having a salient role in negating the benefits of treatment, there is a possibility that providing anti-stigma treatment, whether it be NECT or some other treatment, might prove beneficial with individuals within this population when they are not in a prison setting.

Research suggests offenders with mental illness believe personal recovery means feeling better about themselves, feeling accepted by the community, finding a home, settling down with a partner, and ultimately, leading an “ordinary” life (Aksola et al., 2018; Mezey et al., 2010). Mezey et al. (2010) also found forensic psychiatric patients were less likely to cite symptom reduction as a priority when considering the road to recovery. Within the correctional setting, it is more difficult for forensic psychiatric patients to envision and feel hopeful about attaining recovery because the environment does not consistently foster a sense of belongingness or worthiness (Aksola et al., 2018; Austin et al., 2009; Mezey et al., 2010). Some studies suggest outpatient treatment is more likely to foster a sense of hope in recovery due to participants’ choice of engaging in treatment and due to the emphasis on recovery (Casper & Clark, 2004; Winnick & Bodkin, 2008). Thus, it is possible that implementing NECT in an outpatient setting (e.g., post-release), without the barriers inherent to the prison environment, might yield more positive results within the forensic psychiatric population.

The impact of multiple stigmatized identities. Unfortunately, many of the negative stereotypes associated with individuals with mental illness (e.g., unpredictable, dangerous, bad, etc.) overlap with stereotypes associated with criminal offenders and racial minorities alike (West et al., 2018; West, Vayshenker, Rotter, & Yanos, 2015). Various studies illustrate how
individuals with mental illness, as well as racial minorities, are disproportionately represented in the criminal justice system (Pettit & Western, 2004; Schlesinger, 2011). Though the present study did not assess the impact of racial self-stigma on correctional psychiatric patients, it is evident that this type of self-stigma, in conjunction with mental illness self-stigma and criminality self-stigma, has a negative impact on an individual’s sense of self, rehabilitation efforts, ability to make meaningful social connections, and avoidance of re-arrest (West et al., 2014; West et al., 2015).

Within the sample of the present study, participants’ endorsement of mental illness and criminality self-stigma was evident pre-NECT treatment. With more than half of the participants who identified as Black or African American, it would have been interesting to measure the differences in self-concept, self-esteem, and self-efficacy as it related to the participants’ racial identities. Through observation of the interactions between the racial minorities within the NECT group, a sense of comradery and supportiveness was observed among the Black members that was not also observed with the White participants. In reviewing the raw data, it was also evident the Black and African American participants consistently endorsed greater self-esteem and self-efficacy throughout treatment.

These trends may speak to the impact being part of an “in-group” can have on one’s overall sense of self, and it could possibly inform factors to consider when developing anti-stigma treatment models in the future. This is especially true when taking the research literature and its overwhelming reports on the negative implications associated with being part of the “out group” into account (Corrigan et al., 2006; Fung et al., 2007; Luszczynska et al.; 2005; West et al., 2015; West et al., 2018). In their study on reports of self-stigma, Kidd, Veltman, Gately, Chan, and Cohen (2011) found that lesbian, gay, and transgender participants with
mental illness reported stigma across contexts with consequences that included feelings of alienation, limited social acceptance, and diminished self-concept. In general, it is important to consider risk and protective factors when treating forensic psychiatric patients who present with intersectional identities; especially when those identities are more likely to be marginalized or stigmatized (e.g., race, gender, sexuality).

**NECT prompts.** To reiterate, NECT was originally developed to treat self-stigma among individuals who present with severe and persistent mental illnesses (Roe et al., 2013; Yanos et al., 2011). As such, the questions and prompts within the treatment materials target specific elements of mental illness self-stigma. Though results of the present study showed that NECT did not have a significant relationship with participants’ reported experience of criminality self-stigma, this finding might be due to the lack of questions aimed at alleviating various types of self-stigma—barring the role of the low sample size.

The NECT group facilitators made efforts to have participants respond to prompts as they were stated (i.e., in relation to their mental illness), but then later the items were presented as related to their criminality. Raw data results indicate these alterations did not diminish participants’ reported experience of criminality self-stigma, as depicted in the raw data. Though SSICR raw data scores increased (rather than decreased) within individuals post-NECT treatment, possibly due to factors like the influence of the prison environment, there is also a possibility the prompts participants are tasked to respond to in NECT do not influence self-stigma associated with having a criminal record.

As previously depicted, individuals with mental illness who simultaneously struggle with multiple stigmatizing labels often experience diminished self-esteem, reduced treatment adherence, and a weakened desire to take risks that could improve quality of life (e.g., pursuing
job opportunities or independent living; West et al., 2014). Because of this, it is important that anti-stigma treatments take into consideration risk and protective factors globally associated with self-stigma. Moore et al., (2018) assert that identification of these factors could inform targeted anti-stigma interventions to prevent maladjustment associated with self-stigma.

**Risk factors for self-stigma.** It is pertinent to remain cognizant of global risk factors for self-stigma because this can help treatment providers better identify individuals who may benefit from anti-stigma treatment. Moore et al. (2018) reported strong identification with one’s stigmatized group, participating in higher education, being a racial minority, having a mental illness, and using substances were global risk factors for internalizing stigma. When considering primarily offender-related self-stigma, a specific risk factor includes possessing antisocial characteristics like criminogenic cognitions (Moore et al., 2018).

**Protective factors for self-stigma.** Once appropriate participants are identified through the consideration of risk factors, protective factors are important to consider and include in anti-stigma interventions. Moore et al. (2018) identified high self-esteem, satisfaction with life, spirituality, connectedness to community, and age as protective factors that can mitigate one’s risk of internalizing stigma. Interestingly, these researchers found having a mental illness or engaging in severe substance use can serve as protective factors against criminality self-stigma (Moore et al., 2018). This may be due to individuals attributing their criminal behaviors to their diagnoses or their substance use, which subsequently allows them to not self-identify as criminals.

**Proposed anti-stigma prompts for NECT.** Taking into consideration the risk and protective factors outlined above and the fact that NECT does not currently influence multiple stigmas, what follows are a few, proposed questions that could be included to address various
labeled identities. These questions specifically target self-stigmas associated with being a racial minority and mental illness because within the population studied, these marginalized identities are disproportionately represented. Some questions also speak to criminality self-stigma as, by default, correctional psychiatric patients are susceptible to developing this kind of self-stigma.

The following section is divided into the four parts that NECT is separated into to guide treatment facilitation.

**Psychoeducation.** In this section of NECT, facilitators can ask participants to answer the following: “*Can you describe an experience when someone discriminated against you due to your race?*” This question aims to help participants reflect on their personal experience as individuals who may feel marginalized due to certain aspects of their identity. Though NECT is not specifically geared toward racial minorities, asking this question might help individuals who feel marginalized within the group due to their racial identity to feel seen. This can possibly foster connection within the group which, in turn, embeds one of the protective factors identified above into the group dynamics.

**Cognitive Restructuring.** The cognitive restructuring section of NECT aims to help participants become aware of the maladaptive thought patterns they engage in that perpetuate the internalization of stigmas (Roe et al., 2013; Yanos et al., 2011). The main goal of this section is to aid participants in adopting healthier thinking patterns. In this section, facilitators can encourage participants to reflect and comment on a situation in which they felt negatively about themselves around other people due to their criminal offense history. A prompt of this nature may help facilitators evaluate levels of self-esteem, as well as the degree to which participants feel connected to others.
Narrative Enhancement. The heart of NECT is helping participants to develop healthier narratives about themselves which can foster self-esteem, self-efficacy, increased quality of life, and hope (Roe et al., 2013; Yanos et al., 2011). In this section, participants can be encouraged to reflect on aspect of their lives that have remained positive, stable, or healthy despite their criminal history. This prompt can help participants think about aspects of their life that they find satisfying which can possibly help them to feel more connected to their achievements, their personal connections, and their prosocial capabilities.

Limitations and Future Research

The most evident limitation in the present study was the low sample size. Because the study only included data from six people, the outcomes observed to be statistically significant might have been due to chance. As such, the results have little clinical and practical meaning. Future research should recreate the premise of this preliminary study with a greater sample size and introduce the use of a control group. The aim would be to investigate whether NECT has a clinically significant and beneficial impact within the correctional psychiatric population, while also comparing outcomes of NECT treatment to the outcomes of individuals who engage in treatment as usual.

In the present study, there may have been opportunity to gather a larger sample size if COVID-19 had not been a factor while conducting this study. Due to COVID-19’s impact on life within the prison, the pool of participants was limited to individuals who lived on the same housing unit. To limit the spread of the virus, inmates were not allowed to be in a treatment group together unless they lived on the same housing unit. Typically, there would have been recruitment of participants from at least two housing units, increasing the viability of selecting participants who fit the inclusion criteria. However, due to COVID-19 protocols, only general
treatment groups at specific (and separate) times were allowed, and those units’ treatment group
meeting days and times posed other scheduling conflicts for this research study, limiting the
overall number of participants available to recruit, treat, and observe.

According to de Carvalho et al. (2020), the most effective known measure to curb the
spread of a disease in a prison setting is social isolation. They stated, “in penal institutions …
social isolation becomes difficult to carry out and, when it happens, it takes the enclosed
population to over-isolation, with consequences to their mental health” (de Carvalho et al., 2020,
p. 3493). Due to the unpredictable nature of COVID-19 within the institution, the risk of
lockdowns (i.e., the cease of movement from one unit to another part of the prison) increased my
apprehension about starting a new group just to ultimately interrupt treatment or end it
prematurely. As a researcher and treatment provider, my fundamental hope was to provide
adequate care for the patients I worked with at the prison, but COVID-19 played an inevitable
role in my ability to do so, especially with a medically-vulnerable inmate population at FMC
Devens. Moreover, my duties as an intern conflicted with the effective execution and
maintenance of more than one therapy group at a time, leading me to question whether my role
served as a further limitation to my study.

If I were a contractor at the prison, it is possible I would have had more opportunities to
run multiple groups at the same time without the need to balance other, competing
responsibilities. Additionally, if I were an outsider to the prison, it might have decreased the
potential for transference or countertransference with the group, as opposed to being someone
who treatment group members saw and could interact with outside of the treatment group setting.
Who can say whether my interactions with the inmates outside of the group did not further
facilitate the minute improvements in their reported experience of self-esteem or self-efficacy?
Optimistically, I believe I was able to balance the participants’ recovery and their restitution to society, but one cannot know for sure.

As outlined in the Clinical Implications section of this paper, it is important to note the impact that prioritizing custody over care can have on the self-concept of the inmate population. Aksola et al. (2018) suggest during treatment, it would be beneficial to process the identity of a forensic psychiatric patient more extensively because these individuals are particularly severely stigmatized. These researchers further state treatment should be patient-centered and “decrease bureaucratic procedures” (Aksola et al., 2018, p. 72). With that said, in addition to studying other facets of treatment that can be updated or prioritized, future research should investigate which factors can be addressed within the correctional setting to decrease the perpetuation of stigma, and the subsequent development of self-stigma within the correctional psychiatric population.

Stigma and self-stigma research have routinely investigated the impact one stigma has on individuals without taking into consideration the potential effects of multiple stigmatizing labels. Unfortunately, in many ways, this study which only investigated the impact of two stigmas did the same. Research conducted by West et al. (2014, 2015) supports correctional psychiatric patients can struggle with multiple stigmas, which are typically associated with their race, gender, and sexual orientation. Often, these stigmas overlap, causing an exacerbation of thoughts and beliefs that, among other preconceptions, an individual is considered dangerous and unpredictable because they are, for instance, a queer Black incarcerated male with a diagnosis of schizophrenia (Pavkov, Lewis, & Lyons, 1989).

Limited research on the matter has supported that people with multiple stigmatized identities, who simultaneously struggle with self-stigma, exhibit signs of depression, treatment non-adherence, and diminished self-esteem (West et al., 2015). Future research should
investigate the course of internalized stigma among those individuals with more than one stigmatized identity. Additionally, intervention research should inspect how treatment can be tailored to either interrupt the development of or to treat self-stigma among these individuals.

For instance, NECT treatment might benefit from researching and incorporating questions that address other stigmatized identities. Research and intervention of this nature may stimulate awareness of a subsequent need to identify strategies that can help interrupt or eliminate the effects of the self-stigma process in correctional psychiatric populations. It could also illustrate the impact NECT can have on the overall quality of life of these individuals.
CHAPTER VI: CONCLUSION

This study aimed to investigate not only the impact self-stigma has on correctional psychiatric patients, but also to ascertain whether anti-stigma treatment efforts would be beneficial in diminishing participants’ reported experiences of self-stigma while increasing their reported experience of self-esteem and self-efficacy. NECT was developed to treat self-stigma among individuals with SPMIs (Roe et al., 2013), but as expected, it does not sufficiently address or treat multiple stigmas—as it was not designed to do so. Imprisoned individuals with mental illness often experience self-stigma due to the labels associated with their status as forensic psychiatric patients (West et al., 2014; West et al., 2015), but there is a lack of anti-stigma treatment that aims to alleviate self-stigma secondary to multiple labeled identities.

Identifying ways to reduce self-stigma and mental health concerns among this population is important to increase treatment engagement, symptom recovery, and successful community reintegration (Aksola et al., 2018; Pettit & Western, 2004; Schlesinger, 2011). A disproportionate number of incarcerated individuals belong to populations that experience discrimination due to factors beyond their control (e.g., race, gender, sexual orientation, mental illness; Pavkov et al., 1989; West et al., 2014; West et al., 2015). It is pertinent that future studies examine interventions that could alleviate self-stigma and its negative impact.

The present study aimed to provide a previously established treatment to alleviate some of the negative implications associated with having multiple stigmatized identities. Despite the limited statistical significance of these results, I feel fulfilled in my ability to at least provide treatment to, and hopefully change the self-concept of, the six men we treated in our group. My hope is that this study can inspire other researchers to investigate how treatment providers can offer effective anti-stigma treatment across various stigmatized populations.
References


APPENDIX A: INFORMED CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Informed Consent to Participate in a Research Study

Federal Medical Center Devens (FMC Devens)
Department of Psychology Services
42 Patton Road, Devens, MA 01434

Narrative Enhancement and Cognitive Therapy (NECT)’s Impact on Self-Efficacy and Self-Esteem in Forensic Psychiatric Patients

Researcher – Miss R. Cesar, M.S.
Contact Information – Submit a Cop Out to Psychology Services

A. PURPOSE AND BACKGROUND

Stigma is the negative beliefs that society has about certain people. For example, society might believe that clowns are scary. Self-stigma happens when those certain people believe that these negative beliefs are true about themselves. For example, clowns start to believe that they are scary. This might make them feel bad about themselves. Narrative Enhancement and Cognitive Therapy (NECT) is a kind of group therapy that helps people who are dealing with negative beliefs about themselves.

Miss R. Cesar, a Doctoral student at Antioch University New England, is doing research on how NECT works. By having people participate in the group, Miss R. Cesar hopes that they will experience less self-stigma, have better feelings about themselves, and start to believe that they are capable of achieving their goals or handling difficult situations.

B. PROCEDURES

NECT is a group therapy model. Each session is one hour long. For this study, the first and last sessions will be an hour and a half long, so participants can fill out assessments and questionnaires. These assessments and questionnaires include:

- A questionnaire that asks about age, race, education level
- The Self-Stigma of Individuals with Criminal Records (SSICR)
- The Internalized Stigma of Mental Illness (ISMI)
- The Rosenberg Self-Esteem Scale (RSE)
- The General Self-Efficacy Scale (GSES)

Participants will be asked to fill out the last two assessments on the list at the beginning of the 4th, 8th, 12th, and 16th sessions of the group. These sessions may change depending on attendance. For example, if a participant is not here for the 4th session, he will fill out the assessments and questionnaires during the 5th session.

C. RISKS

This research is not designed to be harmful. However, it is possible that some questions or discussions might make you feel uncomfortable, embarrassed, angry, etc. If you experience any discomfort, you have the right to stop being part of the study or group at any time. If you feel any discomfort but choose to continue being part of the study or
group, we can offer you extra support in the group, and/or we can help you get support in private with someone in Psychology Services.

D. CONFIDENTIALITY
To protect the information that you put on the assessments, you will be assigned a Participant Identification Number (PIN). This helps keep your information anonymous. Any personal information you share verbally or in written form in the group will be kept private. However, the FMC Devens limits of confidentiality apply. We are required to share the information you share if we believe you are a danger to yourself, staff, other inmates, or the general public. We must also share information if we believe you may be a threat to the security of FMC Devens. There is also the risk that a court order may require us to reveal your identity and/or testing results.

If you would like extra privacy, you do not have to take this Informed Consent Form with you after you sign it. We can keep a copy of it in your records, so you do not have to leave it in your room or somewhere else where others might find it.

E. BENEFITS OF PARTICIPATION
Self-stigma can cause people to feel badly about themselves. They might also experience symptoms of depression or feel hopeless about themselves and their futures. NECT has been supported by research to lessen these symptoms and more. Participation in this treatment group can likely benefit you by lowering your experience of self-stigma and the negative effects that come with it.

F. VOLUNTARY PARTICIPATION
You have the right to not participate in the study. If you choose not to, you can still participate in the group. That way you can still receive the same benefits from the group as the inmates who choose to participate in the research study.

G. WITHDRAWAL FROM STUDY
If at any time you feel you no longer want to participate in the study, you have the right to withdraw whenever you want. Withdrawal from the study does not necessarily mean that you have to stop coming to the group. However, you can choose to withdraw from the treatment group, as well. There are no negative consequences if you decide to stop participating.

H. QUESTIONS
If you have any questions, comments, or concerns about the study or your rights as research participant, please contact Miss R. Cesar by sending a copy out to Psychology Services. These questions, comments, or concerns will be sent to the Chair of the Human Research Committee, and/or the Antioch University New England Provost.
CONSENT STATEMENT:
You are making a decision about whether or not to participate in a research study. Your signature below means that you have decided to participate in the study after reading and understanding all of the information on this form. Your signature also means that any questions you had were answered. Your signature also means that you received a copy of this form for your keeping, or that a copy of this form is being kept in your records.

Signature _______________________________ Date ________________
Research Participant

Signature _______________________________ Date ________________
Researcher
APPENDIX B: BASIC DEMOGRAPHIC QUESTIONNAIRE

Basic Demographic Questionnaire

1. How old are you? ____________________

2. What is your gender identity?
   a. Male
   b. Female
   c. Transgendered
   d. Non-binary
   e. Other (please specify) ________________________________
   f. Prefer not to say

3. What is your race/ethnicity? (Circle the ones that apply)
   a. White
   b. Black or African American
   c. Hispanic or Latinx
   d. Native American or American Indian
   e. Asian/Pacific Islander
   f. Other

4. What is your highest level of education?
   a. Some high school, no diploma
   b. High school graduate or GED
   c. Some college credits, no degree
   d. Trade/technical/vocational training
   e. Bachelor’s Degree
f. Master’s Degree

g. Doctorate Degree

5. What is your marital status?

a. Single (never married)

b. Married

c. Separated

d. Divorced

e. Widowed
APPENDIX C: THE SELF-STIGMA OF INDIVIDUALS WITH CRIMINAL RECORDS (SSICR)

The Self-Stigma of Individuals with Criminal Records (SSICR)
Moore, Tangney, & Stuewig, 2016

There are many attitudes about having a criminal record. We would like to know what you think most of the public as a whole (or most people) believe about these attitudes. Please answer the following items using the 4-point scale below.

1 = False, Not at all True
2 = Slightly True
3 = Mainly True
4 = Very True

I think the public believes…

1. ______ most people with a criminal record cannot be trusted.
   1  2  3  4

2. ______ most people with a criminal record are disgusting.
   1  2  3  4

3. ______ most people with a criminal record are unwilling to get or keep a regular job.
   1  2  3  4

4. ______ most people with a criminal record are dirty and unkempt.
   1  2  3  4

5. ______ most people with a criminal record are to blame for their problems.
   1  2  3  4

6. ______ most people with a criminal record are below average in intelligence.
   1  2  3  4

7. ______ most people with a criminal record are unpredictable.
   1  2  3  4

8. ______ most people with a criminal record cannot be rehabilitated.
   1  2  3  4

9. ______ most people with a criminal record are dangerous.
   1  2  3  4

10. ______ most people with a criminal record are bad people.
    1  2  3  4
The following questions ask about what you think. Please answer according to the 4-point scale.

1 = False, Not at all True
2 = Slightly True
3 = Mainly True
4 = Very True

I think...

1. ______ most people with a criminal record are to blame for their problems.
   1 2 3 4

2. ______ most people with a criminal record are unpredictable.
   1 2 3 4

3. ______ most people with a criminal record are below average in intelligence.
   1 2 3 4

4. ______ most people with a criminal record are dirty and unkempt.
   1 2 3 4

5. ______ most people with a criminal record cannot be trusted.
   1 2 3 4

6. ______ most people with a criminal record are dangerous.
   1 2 3 4

7. ______ most people with a criminal record are disgusting.
   1 2 3 4

8. ______ most people with a criminal record are bad people.
   1 2 3 4

9. ______ most people with a criminal record are unwilling to get or keep a regular job.
   1 2 3 4

10. ______ most people with a criminal record cannot be rehabilitated.
    1 2 3 4
1 = False, Not at all True
2 = Slightly True
3 = Mainly True
4 = Very True

Because I have a criminal record…

<table>
<thead>
<tr>
<th></th>
<th>False, Not at all True</th>
<th>Slightly True</th>
<th>Mainly True</th>
<th>Very True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I cannot be trusted.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>I am a bad person.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>I am dirty and unkempt.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>I am unwilling to get or keep a regular job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>I cannot be rehabilitated.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>I am below average in intelligence.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>I am disgusting.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>I am to blame for my problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>I am dangerous.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>I am unpredictable.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
APPENDIX D: PERMISSION TO REPRODUCE SSICR

Copyright © 2016 by American Psychological Association. Reproduced with permission. 
Table 1 – Sample Characteristics of Participants (n = 6)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N</th>
<th>Frequency %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>6</td>
<td>100%</td>
</tr>
<tr>
<td>Female</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 to 30 years old</td>
<td>3</td>
<td>50%</td>
</tr>
<tr>
<td>31 to 60 years old</td>
<td>3</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>4</td>
<td>66.7%</td>
</tr>
<tr>
<td>White</td>
<td>2</td>
<td>33.3%</td>
</tr>
<tr>
<td><strong>Education Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>2</td>
<td>33.3%</td>
</tr>
<tr>
<td>Some College</td>
<td>4</td>
<td>66.7%</td>
</tr>
<tr>
<td><strong>Relationship Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>5</td>
<td>83.3%</td>
</tr>
<tr>
<td>Married</td>
<td>1</td>
<td>16.7%</td>
</tr>
</tbody>
</table>
### Table 2 – Paired Samples T-test for SSICR

#### 2a) Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSICR1</td>
<td>1.6300</td>
<td>6</td>
<td>.30371</td>
<td>.12399</td>
</tr>
<tr>
<td>SSICR2</td>
<td>1.6650</td>
<td>6</td>
<td>.38996</td>
<td>.15920</td>
</tr>
</tbody>
</table>

#### 2b) Correlations

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Correlations</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSICR1 &amp; SSICR2</td>
<td>6</td>
<td>.986</td>
<td>.000</td>
</tr>
</tbody>
</table>

#### 2c) T-test Results

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSICR1 - SSICR2</td>
<td>-.03500</td>
<td>.10330</td>
<td>.04217</td>
<td>-.830</td>
<td>5</td>
<td>.444</td>
</tr>
</tbody>
</table>
Table 3 – Paired Samples T-test for ISMI

3a) Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISMI1</td>
<td>2.13367</td>
<td>6</td>
<td>.430563</td>
<td>.175777</td>
</tr>
<tr>
<td>ISMI2</td>
<td>2.04667</td>
<td>6</td>
<td>.587248</td>
<td>.239743</td>
</tr>
</tbody>
</table>

3b) Correlations

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Correlations</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMSI1 &amp; ISMI2</td>
<td>6</td>
<td>.162</td>
<td>.758</td>
</tr>
</tbody>
</table>

3c) T-test Results

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISMI1 - ISMI2</td>
<td>.087000</td>
<td>.669386</td>
<td>.273276</td>
<td>.318</td>
<td>5</td>
<td>.763</td>
</tr>
</tbody>
</table>
Table 4 – Paired Samples T-test for RSE

4a) Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSE1</td>
<td>33.00</td>
<td>6</td>
<td>4.899</td>
<td>2.000</td>
</tr>
<tr>
<td>RSE6</td>
<td>35.33</td>
<td>6</td>
<td>3.077</td>
<td>1.256</td>
</tr>
</tbody>
</table>

4b) Correlations

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Correlations</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSE1 &amp; RSE6</td>
<td>6</td>
<td>.610</td>
<td>.198</td>
</tr>
</tbody>
</table>

4c) T-test Results

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSE1 – RSE6</td>
<td>-2.333</td>
<td>3.882</td>
<td>1.585</td>
<td>-1.472</td>
<td>5</td>
<td>.201</td>
</tr>
</tbody>
</table>
Table 5 – Repeated Measures ANOVA for RSE

### 5a) Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSE1</td>
<td>33</td>
<td>4.899</td>
<td>6</td>
</tr>
<tr>
<td>RSE2</td>
<td>34.67</td>
<td>3.445</td>
<td>6</td>
</tr>
<tr>
<td>RSE3</td>
<td>35</td>
<td>3.633</td>
<td>6</td>
</tr>
<tr>
<td>RSE4</td>
<td>36.17</td>
<td>3.251</td>
<td>6</td>
</tr>
<tr>
<td>RSE5</td>
<td>34.5</td>
<td>3.834</td>
<td>6</td>
</tr>
<tr>
<td>RSE6</td>
<td>35.33</td>
<td>3.077</td>
<td>6</td>
</tr>
</tbody>
</table>

### 5b) Mauchly’s Test of Sphericity

<table>
<thead>
<tr>
<th>Measure: RSE</th>
<th>Mauchly’s W</th>
<th>Approx. Chi-Square</th>
<th>df</th>
<th>Sig.</th>
<th>Greenhouse-Geisser</th>
<th>Epsilon&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Huynh-Feldt</th>
<th>Lower-bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>time</td>
<td>0.095</td>
<td>16.357</td>
<td>14</td>
<td>0.432</td>
<td>0.475</td>
<td>0.925</td>
<td>0.2</td>
<td></td>
</tr>
</tbody>
</table>

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept
   Within Subjects Design: time

b. May be used to adjust the degrees of freedom for the averaged tests of significance
   Corrected tests are displayed in the Tests of Within-Subjects Effects table.

### 5c) Tests of Within-Subjects Effects

<table>
<thead>
<tr>
<th>Measure: RSE</th>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>time</td>
<td>Sphericity Assumed</td>
<td>33.222</td>
<td>5</td>
<td>6.644</td>
<td>1.137</td>
<td>0.367</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Greenhouse-Geisser</td>
<td>33.222</td>
<td>2.377</td>
<td>13.977</td>
<td>1.137</td>
<td>0.363</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Huynh-Feldt</td>
<td>33.222</td>
<td>4.674</td>
<td>7.108</td>
<td>1.137</td>
<td>0.367</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lower-bound</td>
<td>33.222</td>
<td>1</td>
<td>33.222</td>
<td>1.137</td>
<td>0.335</td>
</tr>
<tr>
<td></td>
<td>Error(time)</td>
<td>Sphericity Assumed</td>
<td>146.111</td>
<td>25</td>
<td>5.844</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Greenhouse-Geisser</td>
<td>146.111</td>
<td>11.884</td>
<td>12.294</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Huynh-Feldt</td>
<td>146.111</td>
<td>23.371</td>
<td>6.252</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lower-bound</td>
<td>146.111</td>
<td>5</td>
<td>29.222</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(I) time</td>
<td>(J) time</td>
<td>Mean Difference (I-J)</td>
<td>Std. Error</td>
<td>Sig.</td>
<td>95% Confidence Interval for Difference&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
<td>----------------------</td>
<td>------------</td>
<td>------</td>
<td>------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>-1.667</td>
<td>1.542</td>
<td>1</td>
<td>-9.758</td>
<td>6.425</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>-2</td>
<td>1.693</td>
<td>1</td>
<td>-10.885</td>
<td>6.885</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>-3.167</td>
<td>1.537</td>
<td>1</td>
<td>-11.23</td>
<td>4.896</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>-1.5</td>
<td>1.765</td>
<td>1</td>
<td>-10.764</td>
<td>7.764</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>-2.333</td>
<td>1.585</td>
<td>1</td>
<td>-10.649</td>
<td>5.982</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1.667</td>
<td>1.542</td>
<td>1</td>
<td>-6.425</td>
<td>9.758</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>-0.333</td>
<td>0.615</td>
<td>1</td>
<td>-3.559</td>
<td>2.892</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>-1.5</td>
<td>1.408</td>
<td>1</td>
<td>-8.89</td>
<td>5.89</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>0.167</td>
<td>1.302</td>
<td>1</td>
<td>-6.664</td>
<td>6.997</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>-0.667</td>
<td>0.803</td>
<td>1</td>
<td>-4.879</td>
<td>3.546</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1.693</td>
<td>1</td>
<td>-6.885</td>
<td>10.885</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>0.333</td>
<td>0.615</td>
<td>1</td>
<td>-2.892</td>
<td>3.559</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>-1.167</td>
<td>1.621</td>
<td>1</td>
<td>-9.673</td>
<td>7.34</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>0.5</td>
<td>0.992</td>
<td>1</td>
<td>-4.704</td>
<td>5.704</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>-0.333</td>
<td>0.615</td>
<td>1</td>
<td>-3.559</td>
<td>2.892</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>3.167</td>
<td>1.537</td>
<td>1</td>
<td>-4.896</td>
<td>11.23</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>1.5</td>
<td>1.408</td>
<td>1</td>
<td>-5.89</td>
<td>8.89</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>1.167</td>
<td>1.621</td>
<td>1</td>
<td>-7.34</td>
<td>9.673</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>1.667</td>
<td>2.028</td>
<td>1</td>
<td>-8.973</td>
<td>12.306</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>0.833</td>
<td>1.701</td>
<td>1</td>
<td>-8.094</td>
<td>9.761</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>1.5</td>
<td>1.765</td>
<td>1</td>
<td>-7.764</td>
<td>10.764</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>-0.167</td>
<td>1.302</td>
<td>1</td>
<td>-6.997</td>
<td>6.664</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>-0.5</td>
<td>0.992</td>
<td>1</td>
<td>-5.704</td>
<td>4.704</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>-1.667</td>
<td>2.028</td>
<td>1</td>
<td>-12.306</td>
<td>8.973</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>-0.833</td>
<td>0.543</td>
<td>1</td>
<td>-3.681</td>
<td>2.014</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>2.333</td>
<td>1.585</td>
<td>1</td>
<td>-5.982</td>
<td>10.649</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>0.667</td>
<td>0.803</td>
<td>1</td>
<td>-3.546</td>
<td>4.879</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>0.333</td>
<td>0.615</td>
<td>1</td>
<td>-2.892</td>
<td>3.559</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>-0.833</td>
<td>1.701</td>
<td>1</td>
<td>-9.761</td>
<td>8.094</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>0.833</td>
<td>0.543</td>
<td>1</td>
<td>-2.014</td>
<td>3.681</td>
<td></td>
</tr>
</tbody>
</table>

Based on estimated marginal means

<sup>a</sup> Adjustment for multiple comparisons: Bonferroni.
### Table 6 – Paired Samples T-test for GSES

**6a) Statistics**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSES1</td>
<td>34.83</td>
<td>6</td>
<td>4.401</td>
<td>1.797</td>
</tr>
<tr>
<td>GSES6</td>
<td>35.67</td>
<td>6</td>
<td>2.733</td>
<td>1.116</td>
</tr>
</tbody>
</table>

**6b) Correlations**

<table>
<thead>
<tr>
<th>N</th>
<th>Correlations</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSES1 &amp; GSES6</td>
<td>.560</td>
<td>.248</td>
</tr>
</tbody>
</table>

**6c) T-test Results**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSES1-GSES6</td>
<td>-.833</td>
<td>3.656</td>
<td>1.493</td>
<td>-.558</td>
<td>5</td>
<td>.601</td>
</tr>
</tbody>
</table>
Table 7 – Repeated Measures ANOVA for GSES

7a) Descriptive Statistics

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSES1</td>
<td>34.83</td>
<td>4.401</td>
<td>6</td>
</tr>
<tr>
<td>GSES2</td>
<td>33.83</td>
<td>2.317</td>
<td>6</td>
</tr>
<tr>
<td>GSES3</td>
<td>35.5</td>
<td>4.324</td>
<td>6</td>
</tr>
<tr>
<td>GSES4</td>
<td>35.17</td>
<td>3.312</td>
<td>6</td>
</tr>
<tr>
<td>GSES5</td>
<td>35.67</td>
<td>2.733</td>
<td>6</td>
</tr>
<tr>
<td>GSES6</td>
<td>35.67</td>
<td>2.733</td>
<td>6</td>
</tr>
</tbody>
</table>

7b) Mauchly's Test of Sphericity

<table>
<thead>
<tr>
<th>Within Subjects Effect</th>
<th>Mauchly's W</th>
<th>Approx. Chi-Square</th>
<th>df</th>
<th>Sig.</th>
<th>Greenhouse-Geisser</th>
<th>Epsilon&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>time</td>
<td>0.004</td>
<td>17.349</td>
<td>14</td>
<td>0.37</td>
<td>0.516</td>
<td>1</td>
</tr>
</tbody>
</table>

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

- **a** Design: Intercept
- **b** Within Subjects Design: time

7c) Tests of Within-Subjects Effects

<table>
<thead>
<tr>
<th>Measure</th>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSES</td>
<td>Time</td>
<td>14.889</td>
<td>5</td>
<td>2.978</td>
<td>0.826</td>
<td>0.543</td>
<td>0.142</td>
</tr>
<tr>
<td></td>
<td>Sphericity Assumed</td>
<td>98.111</td>
<td>25</td>
<td>3.604</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Greenhouse-Geisser</td>
<td>90.111</td>
<td>12.888</td>
<td>6.992</td>
<td>0.142</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Huynh-Feldt</td>
<td>90.111</td>
<td>25</td>
<td>3.604</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lower-bound</td>
<td>90.111</td>
<td>5</td>
<td>18.022</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## 7d) Pairwise Comparisons

**Measure:** GSES  

<table>
<thead>
<tr>
<th>(I) time</th>
<th>(J) time</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.*</th>
<th>95% Confidence Interval for Difference*</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Lower Bound</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>1.033</td>
<td>1</td>
<td>-4.42</td>
<td>6.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>-0.667</td>
<td>1.256</td>
<td>-7.258</td>
<td>5.925</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>-0.333</td>
<td>0.919</td>
<td>-5.155</td>
<td>4.489</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>-0.833</td>
<td>1.078</td>
<td>-6.488</td>
<td>4.821</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>-0.833</td>
<td>1.493</td>
<td>-8.665</td>
<td>6.999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>-1</td>
<td>1.033</td>
<td>-6.42</td>
<td>4.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>-1.667</td>
<td>1.282</td>
<td>-8.396</td>
<td>5.062</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>-1.333</td>
<td>0.955</td>
<td>-6.342</td>
<td>3.675</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>-1.833</td>
<td>0.946</td>
<td>-6.796</td>
<td>3.129</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>-1.833</td>
<td>1.138</td>
<td>-7.804</td>
<td>4.137</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>0.667</td>
<td>1.256</td>
<td>-5.925</td>
<td>7.258</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1.667</td>
<td>1.282</td>
<td>-5.062</td>
<td>8.396</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>0.333</td>
<td>0.803</td>
<td>-3.879</td>
<td>4.546</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>-0.167</td>
<td>1.327</td>
<td>-7.13</td>
<td>6.797</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>-0.167</td>
<td>1.6</td>
<td>-8.564</td>
<td>8.231</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>0.333</td>
<td>0.919</td>
<td>-4.489</td>
<td>5.155</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1.333</td>
<td>0.955</td>
<td>-3.675</td>
<td>6.342</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>-0.333</td>
<td>0.803</td>
<td>-4.546</td>
<td>3.879</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>-0.5</td>
<td>0.563</td>
<td>-3.453</td>
<td>2.453</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>-0.5</td>
<td>0.922</td>
<td>-5.338</td>
<td>4.338</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>0.833</td>
<td>1.078</td>
<td>-4.821</td>
<td>6.488</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1.833</td>
<td>0.946</td>
<td>-3.129</td>
<td>6.796</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>0.167</td>
<td>1.327</td>
<td>-6.797</td>
<td>7.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>0.5</td>
<td>0.563</td>
<td>-2.453</td>
<td>3.453</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>0</td>
<td>0.516</td>
<td>-2.71</td>
<td>2.71</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on estimated marginal means  
a. Adjustment for multiple comparisons: Bonferroni.
Figure 1 – Repeated Measures for SSICR and ISMI

**Main Plot Title**

$r_{rm} = -0.36$

$p = 0.42$
Figure 2 – Repeated Measures for SSICR and RSE

Main Plot Title

$r_{rm} = 0.82$
$p = 0.03$
Figure 3 – Repeated Measures for SSICR and GSES

Main Plot Title

$r_{rm} = 0.35$
$p = 0.44$
Figure 4 – Repeated Measures for ISMI and RSE

Main Plot Title

$r_{rm} = -0.65$
$p = 0.11$

RSE

ISM

Pair
- 1
- 2
- 3
- 4
- 5
- 6
Figure 5 – Repeated Measures for ISMI and GSES

Main Plot Title

$r_{rm} = 0.02$
$p = 0.97$
Figure 6 – Repeated Measures for RSE and GSES

Main Plot Title

$r_{rm} = 0.37$
$p = 0.42$