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SENIOR THESIS APPROVAL

This Honors thesis entitled

**“The Healing Potential of Online, Art-DBT;
Developing a Program for Rumination and Non-suicidal Self-Injury
Reduction”**

written by

Lesley Howard

and submitted in partial fulfillment of
the requirements for completion of
the Carl Goodson Honors Program
meets the criteria for acceptance
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**The Healing Potential of Online, Art-DBT;
Developing a Program for Rumination and Non-suicidal Self-Injury Reduction**

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Abstract

Non-suicidal self-injury is one of the highest predictors of suicide completion aside from suicidal ideation. One factor identified that may contribute to the development and maintenance of both these behaviors, is rumination (when one puts a high focus on internal, negative feelings). The present study developed, implemented, and assessed the efficacy of a rumination-targeted, online, art-DBT skills training program—a treatment combining art therapy and Dialectical Behavioral Therapy (DBT), a leading therapy for treating self-harm behaviors. The program aimed to decrease NSSI through decreasing rumination. Prior to the art-DBT program, college students took a survey to both determine qualifying participants for the art-DBT program (individuals scoring 1 *SD* above normative rumination scores) and explore the prevalence of rumination and NSSI on campus. Rumination and NSSI were positively correlated in the initial sample. After implementing the 6-week art-DBT program, the treatment appeared to decrease rumination in participants, while no effects on NSSI occurred. Ultimately, the study provides direction and support for future online, art DBT studies targeting maladaptive behavior and encourages further exploration of the rumination and NSSI relationship using larger randomized control trials.

The Healing Potential of Online, Art-DBT;

Developing a Program for Rumination and Non-suicidal Self-Injury Reduction

Despite a great deal of emerging evidence pointing towards the effectiveness of art therapy across a vast range of mental illnesses, a divide remains between clinical psychology and the field of art therapy—even though the creation of art holds unique benefits traditional therapies cannot quite replicate (Lith, 2016; Malchiodi, 2011; Slayton et al., 2010). To demonstrate this divide, consider the nonexistence of accredited art therapy doctoral programs, the lack of clinical psychology programs including arts-based therapies in their curriculum, and the ongoing struggle for states to recognize art therapy as a separate therapeutic occupation (American Art Therapy Association, n.d.b). Even further, art therapy instruction occurs primarily in masters-level, counseling-focused programs—further separating the practice from the realm of clinical psychology (and, by extension, from clinical psychology’s rigorous, research-driven treatment development and testing). Thus, potentially life-saving art-based treatments do not receive attention, assessment, or exploration as existing non-art treatments do in the 150+ APA-accredited clinical psychology doctoral programs (American Psychological Association, 2019). One such unstudied art-based treatment with potential in treating life threatening behavior is art-DBT: an integration of art therapy and Dialectical Behavioral Therapy. Specifically, the treatment could reduce Non-Suicidal Self-Injury (NSSI; by harnessing existing strengths of DBT combined with the unique mindfulness and emotion-regulation benefits of art therapy) and underlying behaviors (namely, rumination) that might contribute to its development/maintenance. The current study aims to add to the body of literature examining this empirically grounded art therapy treatment, test its efficacy, and investigate rumination as a possible contributing factor to NSSI.

Non-suicidal Self-Injury

Non-suicidal Self-Injury (the process of injuring oneself without intent to cause one’s death; e.g. cutting, burning, hitting, etc.) remains—apart from suicidal ideation—the strongest predictor of suicide

and is suggested to have a lifetime prevalence rate among young adults of 13.4% (Jacobson & Gould, 2007; Klonsky et al., 2013; Nicolai et al., 2015; Swannell et al., 2014). Though often used interchangeably, the term “self-harm” differs from NSSI; self-harm encompasses a wide range of behaviors including suicide (successfully ending one’s own life via self-directed injury), suicide attempts (non-fatal, self-directed violence with an intent to die), and NSSI (which does not involve an explicit intent to die; Evans & Simms, 2019; Klonsky et al., 2016). Thus, NSSI is a form of self-harm, however, self-harm is not solely NSSI. For the duration of the paper, I utilize these terms based on the above definitions.

While NSSI does not always lead to suicide, addressing underlying factors of NSSI in treatment would significantly assist in suicide prevention (Nicolai et al., 2015)—especially considering the similar structures of all self-harm behaviors as identified by Evans and Simms (2019). Specifically, these researchers demonstrated that a bifactor model of self-harm best captured the underlying factors of NSSI and Suicidality (2019). By using a clinical-community sample to test the fit of different models for NSSI and Suicidality, they found significant overlap between most risk factors, however, NSSI and suicidality each contained enough unique features to exist as different dimensions on a larger “tendency to self-harm continuum.” Even further, researchers found that a general “low attraction to life” factor best accounted for the variance unique to suicidality. According to this model, an individual engaging in NSSI already has an increased capability to commit; yet, if they lose the will to live, they have a greater chance of attempting to end their life. This concept, notably, relates to another variable connecting NSSI and suicide completion: suicidal ideation (SI; Carter et al., 2019; Klonsky et al., 2013).

NSSI and Suicidal Ideation

One can define SI as planning, considering, or thinking about suicide (Klonsky et al., 2016). Regardless of NSSI presence, research consistently finds that SI strongly predicts suicide (Klonsky et al., 2013). For instance, Lindh et al. (2018) found that SI intensity and total score on the Columbia-Suicide

Severity Rating Scale (C-SSRS) predicted individuals' suicide attempts in a span of 18 months. This association similarly manifests in suicide theories such as the "ideation-to-action" framework that emphasizes the role SI plays in suicide (Klonsky & May, 2014; Klonsky et al., 2016). Thus, one can easily observe the interplay between SI and low attraction to life. However, they are not interchangeable constructs; though individuals who have a low attraction to life may not engage in SI (e.g. anorexic patients; Bachar et al., 2002), those who experience SI will generally have a low attraction to life (Li et al., 2017). While many of the studies presented may not explicitly examine individuals who engage in NSSI and are primarily correlational in nature (preventing definitive, causal conclusions), when considering Evans and Simms (2019)'s "propensity to self-harm" continuum, one can perceive the dangers of SI development among those who engage in NSSI; their resulting un-attraction to life puts them at particularly high risk for suicide. Thus, creating treatments that target underlying factors of these behaviors may help prevent their initial development among those who engage in NSSI—ultimately preventing suicide completion. First, however, one must unearth factors that can both prevent SI/low attraction to life while also reducing NSSI.

Rumination

One such factor is, as found by Nicolai et al. (2015), rumination. Rumination occurs when an individual puts a high focus on internal, negative feelings rather than external circumstances—keeping them from processing adaptive ways to deal with distress (Compas et al., 2004; Lyubomirsky & Nolen-Hoeksema, 1995; Nicolai et al., 2015). The response to their rumination-exacerbated, negative, emotional state is, for some individuals, engaging in NSSI (Nicolai et al., 2015). This action externalizes sufferers' affect and provides a "relief" or "escape" of sorts from the increased distress induced by rumination (Nicolai et al., 2015). Rumination encompasses two aspects: reflection (attempting to understand why one feels depressed) and brooding (dwelling on negative consequences of depression; Miranda & Nolen-Hoeksema, 2007; Nolen-Hoeksema & Morrow, 1991). Many consider brooding as the

factor most associated with depression and SI; however, both factors of rumination positively correlate with depression and anxiety symptoms (Fresco et al., 2002; Miranda & Nolen-Hoeksema, 2007; Treynor et al., 2003).

Rumination and NSSI

In terms of NSSI, Nicolai et al. (2015)'s study found a significant interaction between high negative affectivity and high rumination among participants assessed over a 7-week period (the study also demonstrated that high negative affectivity increased likelihood of NSSI behavior; Baetens et al., 2011; Nicolai et al., 2015). This combination predicted both NSSI engagement and frequency (rumination moderated the NA and NSSI relationship) while also suggesting that interventions that target rumination and other maladaptive thinking patterns have potential to decrease NSSI. However, one must remember that individuals who ruminate do not always resort to self-harm or have a mental illness—despite the high amount of rumination observed among internalizing disorders (e.g. depression, anxiety, etc.; Hankin & Abramson, 2001; Nicolai et al., 2015; Rood et al., 2010). Nevertheless, examining rumination as a treatment target for NSSI reduction as well as SI prevention ought to receive further research attention; rumination also appears frequently among disorders characterized by high rates of SI (most notably depression; Kessler et al. 1999; Klonsky et al., 2016).

Rumination and Suicidal Ideation

Notable connections between SI and rumination often emerge in research. For instance, Krajniak et al. (2013) found a significant correlation between SI and rumination while also discovering that rumination mediated between lifetime suicide attempts and SI increases over a 2-year span—supporting the idea that rumination may notably contribute to the development of SI. Yet, due to the correlational nature of the study, one must hesitate to infer causality or directionality. Studies such as Miranda and Nolen-Hoeksema's (2007), though, provide insight into the possible direction of the relationship. Specifically, these researchers assessed participants' rumination and SI, then conducted

follow-up assessments 1 year later. Using a hierarchical logistic regression, rumination significantly predicted SI from the first to second assessments (however, when adjusting for depression symptoms at follow-up, only the reflection factor of rumination significantly predicted SI). Such research further highlights the role rumination might play in the development/maintenance of SI—suggesting the utility of rumination-targeted treatments.

Thus, Nicolai et al. (2015)'s, Krajniak et al. (2013)'s, and Miranda and Nolen-Hoeksema (2007)'s research indicates that both NSSI and SI (and, by extension, low attraction to life) are influenced to some extent by rumination. While the content/quantity of rumination may differ between these variables, and one cannot study them in ideal experimental conditions, this research area warrants attention for those developing treatments that prevent suicide. For example, if one targets existing rumination in NSSI populations, one might reduce both maladaptive behaviors while simultaneously protecting against SI development. Thus, researchers ought to explore targeting rumination in the framework of other successful treatments developed for NSSI individuals. Dialectical Behavioral Therapy, specifically, contains significant potential for this task.

Dialectical Behavioral Therapy

Dialectical Behavioral Therapy (DBT) was developed by Marsha Linehan (1993) and remains a popular treatment for self-harming (both NSSI and suicidal) populations. The therapy expressly targets such maladaptive behaviors—beginning as a treatment for Borderline Personality Disorder (BPD; a population that commonly presents with NSSI and suicidal behavior; 1993). However, DBT is also successfully used among NSSI populations without a BPD diagnosis (Cristea, 2017; Broadsky, 2005; Miller & Smith, 2008)—as demonstrated by DeCou et al. (2019)'s meta-analysis examining DBT's treatment efficacy among such groups. After synthesizing data across 18 studies (including a total of 874 individuals), the overall effect of DBT, while described as modest, did point to the treatment's value; it significantly reduced self-directed violence across diverse populations.

In practice, DBT utilizes aspects of Cognitive Behavioral Therapy (CBT), psychodynamic theory, and various client-centered theories (Miller & Smith, 2008; Roerner et al., 1998). Linehan theorizes that pervasive emotion dysregulation largely contributes to maladaptive, self-harm behaviors (DeCou et al., 2019; Linehan, 1993; Linehan, 2014a; Linehan, 2014b), and as such, the underlying goal of DBT is to help individuals “build a life worth living” by targeting clients’ emotion dysregulation. In efforts to replace individuals’ typical maladaptive responses (e.g. NSSI), trained DBT therapists assist patients in developing helpful coping mechanisms and learning effective problem-solving strategies (Miller & Smith, 2008; Roerner et al., 1998). Four treatment modalities exist to accomplish this. DeCou et al. (2019)’s brief overview of Linehan’s DBT (Linehan, 1993; Linehan, 2014a; Linehan, 2014b) explains them well; modalities include individual sessions of psychotherapy, skills trainings (done in groups), coaching outside of treatment sessions (e.g. telephone coaching), and consultation teams of therapists providing treatment (DeCou et al., 2019). Within individual sessions, therapists first prioritize reducing self/other-harming behaviors, next focus on decreasing behaviors which interfere with therapy (e.g. skipping sessions), and then attend to behaviors affecting life-quality; later goals of treatment involve increasing patient’s DBT skills (Clark, 2017; Linehan, 2014a; Linehan, 2014b). In skills training sessions, therapists promote ideal, proactive behavior development by teaching DBT skills—separating them into four modules including mindfulness, emotion regulation, interpersonal effectiveness, and distress tolerance (Linehan, 2014a; Linehan, 2014b). Taking the structure of DBT into account—as well as its success in treating NSSI—including and emphasizing rumination as a maladaptive behavior to target in treatment is feasible (DeCou et al., 2019).

Though the treatment demonstrates success among patients, a concern among practitioners is the need to keep DBT clients involved and present both mentally and physically (Landes et al., 2016). Consider the nature of standard DBT; individuals take part in therapy/skills training for over 3.5 hours each week (with skills training alone taking 6 months) excluding telephone coaching (Linehan et al.,

2015; Linehan, 2014b)—this requires significant commitment and endurance on the patient’s part. As demonstrated in Landes et al.’s (2016) work, this intensive training often elicits patient dropout from the program. In this study, 51.8% of patients dropped out; inpatient rates of dropout documented in similar studies range from 10% to 46% (Bohus et al., 2004; Kröger et al., 2006; Landes et al., 2016). While Landes et al. (2016)’s work did not examine the specific aspects of treatment that led to attrition (e.g. length of time, distaste for skills training groups, etc.), it did examine individual characteristics which could have contributed. Specifically, the study found that both young participants and those with high levels of baseline “non-acceptance of emotional responses” were most likely to drop out. These results suggest that clinicians can implement treatment strategies that both conform to the standard DBT format, while simultaneously encouraging emotional acceptance among patients—ideally combating treatment-interfering behavior. When one recalls that many consider both NSSI and rumination maladaptive emotion regulation strategies (with NSSI in particular, an attempt to escape negative emotions), targeting rumination in a DBT context may assist with NSSI reduction as well as therapy adherence (Feldner et al., 2006; Mezulis et al., 2011; Nicolai et al., 2015; Nock & Cha, 2009). In addition to including rumination as a treatment target in DBT, when considering the factors which contribute to participant dropout, a treatment that holds promise for both engaging patients and safely promoting emotional exploration/acceptance is art therapy (Clark, 2017; Haeyen et al., 2015).

Art Therapy

Art therapy (AT) has tremendous flexibility as a treatment; a wide variety of AT approaches exist that emerged from many different schools of thought (e.g. humanistic, psychodynamic, and behavioral theories) to treat a vast range of mental illnesses including depression, anxiety, and schizophrenia—often demonstrating success (Lith, 2016; Malchiodi, 2011). Furthermore, many therapists have capitalized on AT’s natural integrative ability and developed theories combining its methods with existing therapy frameworks (e.g. Susan Clark’s art-DBT theory and practice; Clark, 2017). However,

before diving into this line of research, specifying what constitutes “art therapy” proves necessary. While a simple definition of AT can never capture the complexity and vastness of the field, the practice—at its core—involves using various artistic processes (e.g. painting, sculpture, collage) along with the guidance of a professional art therapist to assist in reaching treatment goals, reducing conflict, and fostering self-esteem (American Art Therapy Association, n.d.a).

Slayton et al. (2010)’s outcome review of AT types and treatment populations highlights the intervention’s aptitude despite the high-quality research lacking in the field; across 35 studies AT received discernable support for its treatment efficacy among multiple populations. Though Slayton and colleagues did not perform a formal meta-analysis on treatment success due to their usage of multiple, diverse populations/measures, their work demonstrates AT’s viability and flexibility. Though another, recent systematic review conducted by Abbing et al. (2018) provided inconclusive results as to efficacy of AT in treating anxiety (largely due to treatment quality and inclusion of only 3 studies), these and other researchers conclude that—given AT studies produce more high-quality research—the treatment, in general, remains a helpful intervention for a variety of mental illnesses.

Art Therapy Benefits to DBT

Though to my knowledge no studies exist that compare dropout rates of AT to other treatments, research into the unique benefits of AT (e.g. emotional awareness and mindfulness) and evidence of its versatility continually surface—allowing us to conceptualize how AT might integrate into a standard DBT framework to potentially increase therapy adherence and also treat NSSI and rumination (Douglas, 2019; Springham et al., 2012). One often-observed effect of AT is its impact on emotion regulation and accessing emotions in general (Haeyen et al., 2015). For example, in Haeyen et al. (2015)’s qualitative study of AT’s effect on cluster B/C personality disorders, researchers found that AT consistently offered patients a space to physically explore, organize, and portray emotions in ways that elicited the security/freedom to regulate them without art present. Patients also reported that AT provided a safer

method to explore their emotions and communicate over traditional, verbal therapies. Overall, the study emphasized AT's ability to assist those with personality disorders in developing emotional awareness. Given these results—along with consistent support of ATs ability to elicit emotional awareness among patients with BPD specifically (Springham et al., 2012)—combining this therapy with DBT may reduce patient drop-out while capitalizing on DBT's existing strengths.

Even further, art therapy could assist DBT in reducing NSSI and rumination. As highlighted above, AT uniquely helps individuals identify, understand, and regulate their emotions—a particular need of those who engage in NSSI and excessive rumination (emotion dysregulation is prevalent among these populations; Clark, 2017; Haeyen et al., 2015; Nicolai et al., 2015). Yet, another key benefit of AT lies in its utilization of art's natural relationship with mindfulness; creating an artwork involves immersing oneself with the present moment of creation, utilizing solid materials, and directing one's attention to aspects of "now" (e.g. touch, movement, thoughts; Clark, 2017; Rappaport, 2014). Douglas (2019)'s study demonstrates art's inherent mindfulness component in that, when compared to mindfulness enhancement training (MET), adding AT to MET increased the mindfulness scores of those who participated. Despite the study's usage of only 2 participants, its ABAB single-subject design, and its use of "percentage of non-overlapping pairs" data analysis, it remains one of the few studies that explicitly investigates whether adding art to mindfulness training increases mindfulness benefits. Its promising results support claims of AT's mindfulness effects and will likely encourage further research isolating art creation as a variable.

Mindfulness, Rumination, and NSSI

With these findings in mind (among others pointing to success of mindfulness-based AT in general; Beerse, 2020; Douglas, 2019; Peterson, 2014), utilizing art to develop mindfulness beyond verbal training appears particularly advantageous in the context of DBT—whose framework emphasizes mindfulness throughout it (even devoting one skills training module entirely to "Core Mindfulness"

skills; Clark, 2017; Linehan 2014a and 2014b). When examining mindfulness benefits for treating rumination, research such as Wolkin (2015)'s demonstrates the role mindfulness might play—identifying many studies that suggest practicing mindfulness significantly decreases rumination (Jain et al., 2007; Ramel et al., 2004; Teasdale et al, 1995; Wolkin, 2015). This review echoes formal meta-analyses such as Perestelo-Perez et al. (2017)'s on depressive rumination which found that mindfulness-based treatments produced significant, moderate reduction in rumination as compared to usual care. Though the meta-analysis reflected the low number of studies examining this relationship and found mindfulness interventions do not differ significantly from other interventions (e.g. CBT), its results point to the need of continued study of the mindfulness/rumination association and the potential of treatments (such as DBT) that strongly emphasize mindfulness. Integrating art in DBT, thus, may increase mindfulness skills that can, in turn, assist in decreasing rumination.

Benefits of mindfulness and—by extension—art, may similarly help treat NSSI (Heath et al., 2016). Namely, researchers Heath et al. (2016) found that mindfulness plays a protective roll against NSSI engagement for those with depressive symptoms; when comparing between NSSI and no-NSSI groups, the NSSI group reported significantly lower mindfulness—with mindfulness mediating the depressive symptom/NSSI relationship. Though the study utilized a youth sample and demonstrated only a partial mediation of the relationship, observed results support related works emphasizing the importance of mindfulness in treating NSSI (Gratz et al., 2007; Heath et al. 2016; Miller et al., 2000). Thus, the inherent mindfulness component of art therapy and its benefits in terms of emotion regulation may benefit treating both rumination and NSSI—especially when coupled with a successful therapeutic model such as DBT (Cho, 2016; Clark, 2017; Haeyen et al., 2015; Miller et al., 2000).

The Present Study

While art therapists such as Susan Clark (2017) actively utilize this combined art-DBT approach, no research specifically examines whether a rumination-targeted intervention would assist in treating high-

rumination and NSSI behavior. Similarly, few studies exist that document success (or lack thereof) of art-DBT and fewer still utilize high-quality research methods to document it (Huckvale & Learmonth, 2009; Sitzer & Stockwell, 2015). To address this gap in research, the present study aims to create and examine the potential benefits of an art-DBT intervention targeted at decreasing rumination. Because of research such as Nicolai et al.'s (2015) that demonstrate rumination's contribution to NSSI, targeting rumination in the context of DBT could significantly reduce NSSI engagement (if present; if not present, prevent it) while simultaneously protecting individuals against both suicidal ideation and suicide itself (DeCou et al., 2019; Krajniak et al., 2013). Even further, including AT in this intervention may also increase DBT participant engagement, reduce DBT's high dropout rate, and add AT's unique mindfulness and emotion-regulation benefits to the existing treatment (Clark, 2017; Douglas, 2019; Haeyen et al., 2015; Landes et al., 2016; Rappaport, 2014).

Considering prior research, I examined the effects of art-DBT (independent variable) on rumination (primary dependent variable) and NSSI (if present; second dependent variable). Even further, I also explored the relationship between NSSI and rumination. I hypothesized that art-DBT would significantly decrease rumination and self-harm (when present) in participants (Clark, 2017; Haeyen et al., 2015; Heath et al., 2016; Nicolai et al., 2015; Springham et al., 2012) and that a significant, positive relationship would exist between rumination and NSSI in accordance with Nicolai et al.'s findings (2015). Because I had no therapeutic training, I considered an online, skills-based intervention (modeled after Van Spijker et al.'s online self-help for suicidal thinking; 2018) that corresponded with DBT skills training handouts that individuals would complete by themselves in a classic DBT program (Linehan, 2014a; 2014b) as the safest option to test art-DBT efficacy. Along with Linehan's skills training manuals (Linehan, 2014a; Linehan, 2014b), I utilized Susan Clark's DBT-informed AT book (2017) and corresponding activities to develop the art-DBT program. Detailed information regarding the rationale behind/construction-of the art-DBT program is found in the Materials Section.

In terms of the online format, no known interventions utilize online AT. However, online DBT skills training programs exist and have been considered successful. For instance, Wilks et al. (2018) developed an internet-DBT treatment for suicidal, heavy drinkers. The study found participants in the online intervention had significantly faster reductions in SI, alcohol use, and emotion dysregulation than the control group. Similarly, when compared, the treatment group experienced significantly less SI compared to the control condition. These results indicate the feasibility, safety, and utility of implementing DBT skills training online. However, the high dropout rate of this and other online interventions exists as a significant limitation to the format (Melville et al. 2010; Wilks et al., 2018). Regardless, Wilks et al. (2018)'s encouraging conclusions point to online DBT's advantages such as increased access to treatment and, overall, serves as a promising direction for future study. With these findings in mind, as well as the general lack of research examining AT dropout rates, no specific hypotheses were made regarding treatment adherence to the online, art-DBT program.

To test my existing hypotheses, I developed a simple, between-groups experiment which sought to determine the effects of the online, art-DBT program on control and treatment groups' rumination levels and, if present, NSSI instances. I used multiple measures across time to address any notable within-group changes as well. The study consisted of first identifying high ruminators among a small, Southern-Baptist university population using a prevalence survey that assessed rumination and NSSI, then randomly assigning those who qualified and agreed to participate into treatment/control groups. Next, the treatment group participated in a 6-week online, art-DBT program developed by the principal researcher. The control group did not participate in the intervention, however, both groups were assessed bi-weekly on rumination and NSSI across the 6-week period once the treatment began. Upon completion of the program, I compared groups' overall reduction of rumination and, if present, NSSI scores; significant differences between groups as well as significant symptom reduction within groups indicated treatment efficacy.

Method

Measures

Non-suicidal Self-Injury

The Inventory of Statements about Self Injury (ISAS) measured lifetime NSSI prevalence among respondents in the initial prevalence survey ($\alpha = .84$; Klonsky & Glenn, 2009). The questionnaire contains 2 sections; the first determines existence of NSSI behaviors by asking 7 questions such as the number of times one intentionally engaged in NSSI (question one, specifically, presents a list of 13 NSSI behaviors such as cutting, carving, pinching, etc.), main form of self-harm, and age of first NSSI incident. Scoring on the ISAS was slightly modified (as appears in Nicolai et al., 2015); prevalence of behaviors in question 1 and was rated on a scale from 1 to 5. “One” indicated no experience of a particular NSSI behavior, while “5” indicated 45+ occurrences. Each scale item differed by increments of 15. Questions 2 through those in Section 2 applied only to individuals who indicated they have engaged in NSSI and assesses the functions of this behavior. Section 2 contains 39 statements that participants rate in reference to personal relevance a 3-point scale. Statements begin with “when I self-harm, I am...” and are followed by phrases such as “calming myself down,” “bonding with peers,” and “signifying the emotional distress I’m experiencing.” Responses ranged from 0 – 2 with 0 indicating “not relevant,” and 2 representing, “very relevant.” Statements corresponded with 13 functions of NSSI that were scored by researchers from 0 – 6. Function scales included “affect regulation,” “self-punishment,” and “revenge.” The last 2 questions in part 2 are optional and deal with accuracy of above function statements. Higher scores indicate higher relevancy of statements and, thus, function of NSSI.

The baseline and bi-weekly NSSI instances were measured by the modified ISAS utilized by Nicolai et al., 2015’s research that measured NSSI only in the past 2 weeks. The modified version contained only the first section of the unmodified ISAS—specifically the number of times (if any) one has engaged in NSSI. If participants indicated they did so in the past 2 weeks, they were then asked about

the time elapsed between urge and action, and whether the individual wishes to stop. All response scales and questions appeared as in the initial ISAS with the only difference being the specification of the time frame (“in the past 2 weeks”).

Rumination

The Response Styles Questionnaire’s Ruminative Response Scale (RRS, RSQ; $\alpha = .94$; Nolen-Hoeksema & Morrow, 1991) measured participant rumination in the initial prevalence survey. This measure served as the rumination baseline for those participating in the second part of the study. The RRS had participants respond to 22 rumination-related items (e.g. “think about how hard it is to concentrate,” “Think about how angry you are with yourself,” etc.) by indicating via frequency scale how much participants generally do the indicated actions. Responses could range from 1 (almost never) to 4 (almost always). Higher total scores signified higher rumination. While no current standardized score exists for rumination scores among American college students, Nolen-Hoeksema (1999) found that in a random sample of 1,317 individuals living in several large California communities, that the average rumination score for women was 42.01 ($SD = 10.64$) while men’s were 39.64 (10.03). For the purposes of this study, I used these numbers as the normative scores for future screening methods (described further in the Procedure section). For the bi-weekly rumination assessments in part- 2, the study utilized the RRS with a minor wording change asking participants to rate levels of rumination “in the last 2 weeks” (based on Nicolai et al.’s research).

Depression

To screen qualifying participants for the second part of the study, subjects took the Patient Health Questionnaire-9 (PHQ-9; $\alpha = .83$; Kroenke, Spitzer, & Williams, 2001) which presents individuals with 9 depression-related items such as “little interest or pleasure in doing things,” “feeling down, depressed, or hopeless,” and “feeling tired or having little energy.” Subjects then rated statements based on how often they were bothered by each over the past 2 weeks using a scale that ranged from 0

("not at all") to 3 ("nearly every day"). The last question constitutes asks individuals to rate how difficult the problems the indicated (if any) made it for them to function. Four response items ranged from "not difficult at all" to "extremely difficult." Depression scores range from 0 – 27 (Kroenke & Spitzer, 2002; Kroenke & Spitzer, 2010) with higher scores indicating higher levels of depression. Cutoff points for thresholds of depression severity constitute 5-point intervals; from low to high, severity levels are mild, moderate, moderately severe, and severe (with severe depression ranging from 20 – 27 rather than 20 - 25).

Weekly Participation Measure

Every week subjects in the treatment group were presented with a survey that asked participants how seriously they took each of the three activities they participated in during the corresponding week. For each activity they answered on a 1 ("I didn't take this seriously at all") to 5 ("I took it very seriously") scale.

Follow-up Questionnaire

Two days following the end of the art-DBT program, participants received a follow-up questionnaire that asked open-ended questions about their experience in the art-DBT program. The survey did not involve participant ID numbers and assured confidentiality. The survey encouraged participant honesty in answering the 14-question survey and included inquiries such as "What was your least favorite part of the weekly activities?," and "Do you feel you gained any benefits from doing the art-DBT program?" Responding to the survey was not required but encouraged among subjects. The follow-up questionnaire appears in Appendix A.

Materials

Rumination-Focused Art-DBT Skills Program

The structure of the skills training program was based closely on Van Spijker et al.'s (2018) web-based self-help program for suicidal thinking. The art-DBT program contained 6 online, weekly modules

which became accessible each Sunday. The study recommended participants spend approximately 1 hour completing activities and reading information. Activities themselves took this timeframe into consideration. Subjects were asked to spend at least 30 minutes total but were also encouraged to spend more time on the art activities if they desired. To receive compensation, subjects were required to submit/respond-to at least 2/3 of the art activities/measures in the program and submit them by 11:59 pm of the last day of the week (e.g. individuals needed to submit all of week 3's activities by 11:59 pm of the Saturday in week 3). However, I showed appropriate leniency for submission requirements due to the unexpected displacement of subjects which occurred due to the Coronavirus' increasing presence America in the third week of the study. The specific order of DBT skills modules for both information and art activities follow Linehan's (2014a) directives to begin DBT by teaching mindfulness skills (due to its constant presence throughout other modules), to include a chain analysis in the program (a process Linehan regards as critical to the DBT process; this entails examining the chain of events leading up to a maladaptive behavior, the behavior's consequences, and ways to change/repair/prevent the behavior and its consequences from occurring again), and to order/select the modules in a way that matches one's treatment population. Due to the lack of group sessions, a desire to avoid potentially distressing topics/activities, and the lack of a trained, therapy professional, the art-DBT program began by introducing mindfulness as a skill and focused on rumination-focused distress tolerance; the program omitted inter-personal effectiveness and emotion-regulation modules. The specific structure of weekly module/themes are as follows with all maintaining a focus on rumination as the target maladaptive behavior: Definitions/Introduction to Mindfulness, Behavior Chain Analysis, Distress Tolerance – Pushing Away, Distress Tolerance – Radical Acceptance, Mindfulness – Observing Thoughts and Nonjudgement, Distress Tolerance – Pros and Cons. All information and activities in the art-DBT program derive from accredited sources who have worked with clients extensively and encourage the use of their materials.

Art-DBT Weekly Information

Every week contained an information/theory-based introduction to activities and DBT concepts taken directly from Linehan's (2014a, 2014b) skills training manual's handouts and worksheets. The skills training manual and handouts alone were used in efforts to reduce any risk associated with not having a trained DBT clinician present to administer individual therapy; handouts and homework are already intended for solitary reference and completion. The only changes made to Linehan's wording involved grammar (to match the context of the art-DBT instructions), shifting the focus of certain activities to rumination rather than other specific behaviors, and adding a brief introduction/overview of the week's skills at the start of the information section. The entire art-DBT program—including weekly information—appears in Appendices B- G. Additionally, definitions/information specifically relating to rumination and NSSI was informed by researchers Jacobson and Gould (2007) and Nicolai et al., (2015) since these foci are not included in Linehan's training manual. Namely, week one's information section defined and explained terms that were frequently used throughout the program (e.g. rumination) and do not have a corresponding handout from Linehan—though it contains direct definitions/information regarding mindfulness and distress tolerance (2014a, 2014b). The rest of the weeks directly correspond to handouts.

Art-DBT Weekly Art Activities

The focus of the study remained participant engagement in art-DBT (not the information sections); each week contained 3 activities (1 was a recurring visual journal activity) that all came directly from Clark's (2016) DBT-informed art therapy book. Deviation from the book involved changing word aimed at therapists to instructive steps for participants, altering materials to more feasible resources (e.g. watercolor paper to copy-paper), and splitting longer activities into 2 parts. Alteration to directives also occurred by encouraging a focus on rumination and by providing a hypothetical situation (Appendix C) for subjects to perform a chain-analysis on. The hypothetical situation aimed to prevent

any distress that analyzing a personal behavior might elicit. The only activities not directly from Clark's book were the "Visual Rumination-Chain Analysis" activities (Appendix C) which instead came directly from Linehan's behavior chain analysis handout (2014a). Differences involved only directing participants to illustrate/visually depict steps (which would typically be discussed or described by other means) and having rumination serve as the focal behavior. Linehan (2014b) considers the behavior chain analysis as vital to DBT and it lends itself well to easy adaptation to visual form; thus, its inclusion in the art-DBT program in its final iteration was considered both feasible and beneficial. Every art activity corresponded to weekly information and modules described in the Art-DBT Weekly Information section (Clark, 2016). In her book, Clark classified art-DBT activities according to the primary skill module of focus; the present research utilized these divisions to correspond with the skills modules being taught (mindfulness and distress tolerance). The only activity falling under the emotion-regulation category was the visual journal, however, it relied heavily on mindfulness—focusing on "mindfulness of current emotions"—and was considered a non-depressing, ongoing activity encompassing many of the themes discussed throughout the program. This activity was included to provide a sense of continuity and structure in content (beyond the general structure described) that Linehan (2014b) recommends for classic skills training programs. All activities appear beneath information sections in Appendices B – G and titles appear below in chronological order:

- Smuggling watercolor (p. 270, Clark, 2017)
- Loops of containment (p. 2264, Clark, 2017)
- Emotional/visual journaling; creating the journal (p. 204, Clark, 2017; the journaling itself recurred weekly)
- Visual rumination-chain analysis: part 1 (adapted from Linehan, 2014a, 2014b)
- Visual rumination-chain analysis: part 2 (adapted from Linehan, 2014a, 2014b)
- Letting things be container; part 1 (material adaption from "letting things be" boxes; p.

257, Clark, 2017)

- Letting things be container; part 2 (material adaption from “letting things be” boxes; p. 257, Clark, 2017)
- Turning the mind (fork in the road) part 1 (p. 256, Clark, 2017)
- Turning the mind (fork in the road) part 1 (p. 256, Clark, 2017)
- Painting without brushes (p. 236, Clark, 2017)
- Scribbling with both hands (p. 265, Clark, 2017)
- Visual pros-and-cons: part 1 (material adaption from personal pros-and-cons placards; p. 251, Clark, 2017)
- Visual pros-and-cons: part 2 (material adaption from personal pros-and-cons placards; p. 251, Clark, 2017)

Art-DBT Weekly Examples

Each week, in to supplement and clarify steps/instructions for art-making, photos of certain steps of activities appeared in a separate file for participants to use as needed. Examples only contained minimal embellishment and the most basic level of completion in order to encourage participants to make the activities their own—without comparing their own work to examples in a self-deprecating way. Similarly, participants were reminded that examples only served as guides when they needed more clarity and did not need to make their works identical to examples. I created the examples by following the steps of the art-DBT activities and did not include material one might consider distressing or triggering.

Rcampus

The website Rcampus is a website that allows individuals to register as “faculty” or “students” and crate/participate-in an online classroom. The art-DBT program utilized this website for the distribution of activities as well as its convenience for participants to submit photos of completed

activities. I utilized a faculty account and participants registered as students. Those registered as faculty have the ability to attach custom coursework to specific “assignments” in their custom “class” that they create. Each assignment contains areas that students can submit their completed assignments in using a variety of formats (e.g. documents, images). Faculty can set dates for when students may view and have access to assignments, as well as assignment due dates. Only faculty have access to the individual class roster. Similarly, only faculty can message individual students through the website and individual students can message only faculty. I initially planned to utilize Rcampus for the entirety of the study due to the above features that did not cost either students or faculty money, however, after 2 weeks neither the participants nor principal researcher could access any of the created art-DBT content that was already uploaded to the website. The vast spreading of the Coronavirus across America at this time, and the sudden transfer of many institutions to online learning is likely to blame for Rcampus’ removal of its previously free content. Thus, from weeks 3 – 6 activity distribution and participant submissions were conducted over confidential emails.

Participants

I recruited subjects by sending a campus-wide “allstudents” email containing links to a survey created on the website “Survey Monkey.” Once clicking the link, participants viewed an informed consent detailing what the survey entailed. If individuals agreed to participate, they first completed a demographic questionnaire and were asked to provide their email for potential follow-up purposes. I assured all participants of confidentiality prior to taking surveys; the only individual with access to email addresses (unconnected to individual identities) was myself. After this, participants took the RRS (Nolen-Hoeksema & Morrow, 1991). Subjects then took the ISAS (Klonsky & Glenn, 2009) and, upon completion, were presented with a quick debriefing and asked to watch their emails for possible follow-up invitations.

Two-hundred students from a private southern Christian university completed the initial

prevalence survey that screened for the target population required in Part 2 of the study. I excluded participants who did not complete at least one of the measures in the survey. Two participants neglected to complete the ISAS (Klonsky & Glenn, 2009), however, they did complete the demographic information and RRS (Nolen-Hoeksema & Morrow, 1991) so I included their rumination data in the prevalence analysis. This initial screening included 171 participants' data. Ages ranged from 18 – 32 with the average age being 20.11 ($SD = 1.79$). Most participants were white (89.5%; $N = 153$; with 4 black, 5 Hispanic, 5 Bi-racial, 3 "other," and 1 Asian individuals participating) and primarily Female (77.2%; $N = 132$; 37 males and 2 gender-nonconforming individual participated). Participants largely identified as heterosexual (88.9%; $N = 152$) while 12 identified as bisexual, 1 as gay, 1 as lesbian, 3 as unsure, and 2 as "other." The prevalence survey compensated participants by giving them the chance to participate in Part 2 of the study where they would have the chance to win a \$25 visa gift card and receive a custom bookmark created by the principal researcher (a studio artist). By participating, students also brought awareness of self-harm and maladaptive rumination prevalence on their college campus and contributed to research which aimed to assist struggling individuals.

Seventy-eight participants who responded to the prevalence survey qualified for Part 2 of the study and were invited to participate. To qualify for Part 2 individuals needed an RRS score higher than 1 standard deviation above the mean established by Nolen-Hoeksema's research (1999; women's $M = 42.01$, $SD = 10.64$; men's $M = 39.64$, $SD = 10.03$). Thus, to qualify, females needed a score of at least 52 (rounded down from 52.65) and males needed a score of at least 49 (rounded down from 49.67). Qualifying scores were rounded down to allow for the largest number of participants due to the specificity of target population and the likelihood of a low response rate for participation in Part 2. Sixty-five females (83.3%), 11 males, and 2 gender nonconforming participants qualified as high ruminators. Ages ranged from 18 - 22 and most participants were 20 ($N = 21$). As with previous samples most participants were white ($N = 66$) and heterosexual ($N = 64$).

Participants received a confidential follow-up email if they qualified for part 2. Out of the 78 contacted, 29 indicated they would like to participate. A lack of response to the email invitation indicated individuals did not wish to participate. Of the 29 who agreed to participate, 18 dropped out/had their data excluded by failing to complete activities/surveys as described in the Materials Section. Thus, 11 individuals actively participated in the study according to the established criteria and their data was included in the results. Ages ranged from 18 – 21 (most were 19 or 20; both these ages had 4 participants each), 9 participants were white, 1 was Hispanic, and the last individual classified as bi-racial. Mainly females participated ($N = 9$; 2 males participated). Most individuals identified as heterosexual ($N = 6$) while 3 identified as bisexual and the last 2 classified as either “unsure” or “other.” Participants received compensation by having their participant ID numbers entered into a drawing to win a \$25 visa gift card. They also received a custom bookmark created by the principal researcher. Prior to beginning the study, I planned to further compensate the control group by giving them any art supplies unused by the treatment group, however, due to the final small sample size of participants in both treatment conditions, we divided supplies that remained post-study among both groups.

Attrition

At the end of week 3, only 7 participants in the treatment group submitted art on at least one of the weeks. Those who had not submitted anything were confidentially emailed inquiring about their participation status. I assured them they could freely stop participating, but if they wanted compensation, they would need to participate in the rest of the 4 weeks’ activities. I also asked that they inform me if any technical difficulties or extenuating circumstances prevented their submissions from the previous weeks. Participants’ lack of response or response that they no longer wanted to participate resulted in their exclusion from the final data. At the end of week 4, another 4 participants were excluded from the final data set by this method.

Procedure

Once determining the qualifying participants, I sent a group email using the “undisclosed recipients” and “bcc” features of Gmail to invite individuals to participate in the art-DBT program. I did not explain the qualifying criteria for participation or the method of selection to preserve confidentiality in case participants discussed the study with (or learned by any other method the identities of) other participants. The email contained a link to the informed consent of Part 2 that contained detailed information regarding the time, materials, process, risk, etc., of participation in the study; thus, participants received full disclosure of everything that would take place and why. Similarly, they were invited to email me any questions they had about the study. Participants also received a reminder that they did not have to participate, would not receive any penalty for not participating, and that their confidentiality was assured. A lack of response over a 4-day period indicated a lack of desire to participate. One confidential reminder email was sent the day before this participation window closed. If they responded by agreeing in the informed consent, they provided the email address they preferred to receive study-related information from (as before, I was the only person with access to email addresses), and took the and took the PHQ-9 (Kroenke, Spitzer, & Williams, 2001) depression questionnaire to determine any particularly high-risk individuals that may require professional therapeutic assistance as opposed study participation. If individuals scored in the high range of the “severe” category, I planned to direct them to professional mental health care to assure the safety of both participants and researcher. Two individuals who responded fell in the “severe” range, however, both scored on the low end of the threshold (21) and, after deliberation with my thesis director, I included them in the study.

Following the 4-day window, those who agreed to participate received a participant ID ranging from 1 – 29. Participant ID numbers were then entered into a random number generator to create 2 randomly selected groups to serve as the “waitlist” control group and the treatment group (art-DBT condition). One individual who initially agreed to participate could not be contacted due to email

address they provided not existing. The randomization procedure occurred prior to this discovery and, once discovered, I did not use their data. Once removing them, the treatment and control group both had 14 individuals each. Those in the control group received a confidential confirmation email informing them of their status as “control group” and were reminded that they would have access to both the art-DBT course and necessary materials in a period of 6 weeks. Control group members did not have access to the art-DBT program until that time. However, the control group received the same bi-weekly rumination and self-harm assessments as the treatment group. The confirmation email also contained individuals’ participant ID numbers to enter in each bi-weekly survey they would receive, as well as a link to the modified “past-2-weeks” ISAS ((Nicolai et al., 2015, Klonsky & Glenn, 2009) that served as a baseline for self-injury. Participants received the confidential bi-weekly emails with links to the short “past 2 weeks” rumination (Nicolai et al., 2015; Nolen-Hoeksema & Morrow, 1991) and ISAS measures (Nicolai et al., 2015, Klonsky & Glenn, 2009) at weeks 2, 4, and 6 along with the art-DBT group.

Individuals in the treatment group, after agreeing to participate, received a similar confidential confirmation email as the control group. This email contained their participant ID numbers and instructions on how to sign-up/log-into Rcampus. Participants were asked to fill in their ID numbers for their user, first, and last names that the site required for individuals to create an account. After feedback regarding requirements for usernames, I sent another confidential email to the treatment group specifying the need for their ID numbers to begin with the letter “O” (usernames had to start with a letter) followed by however many zeroes their original numbers needed to reach the minimum 6-character username requirement with their original numbers at the end (e.g. O00007). Once participants could login, a welcome page reminded participants of the structure, submission requirements, and location of art materials for the study. The treatment conditions’ modified baseline ISAS (Nicolai et al., 2015, Klonsky & Glenn, 2009) additionally appeared in their activity list for week 1. Participants had access to both supplies and space to work on activities. They were not required to use

the provided materials or the work area but were encouraged to do so.

Weeks 1 – 2

The treatment group's first week of art-DBT formally began on a Tuesday—rather than that Sunday—due to time constraints, however, leniency in submission times was provided. Due to mailing limitations, materials did not arrive until that Thursday. Despite this, I encouraged participants to complete activities with materials they had access to and informed them as soon as materials arrived. Early in the study, some participants expressed issues when attempting to enter the art department past operating hours. To alleviate this, I provided student ID numbers to campus security so that they could gain complete access to the art department at all hours of the day by swiping their student ID cards. ID numbers and individual participant information were not connected to one another during this process to preserve confidentiality. Other than the deviations noted, weeks 1 and 2 proceeded as described in the Materials Section. Participants gained access to the bi-weekly rumination and self-harm measures each Thursday of the corresponding week to encourage a somewhat standard time to complete their assessments.

Weeks 3 – 6

Due to the American outbreak of the Coronavirus, Ouachita Baptist University administration informed students on the Thursday of week 2 that they must leave campus by the upcoming Sunday and to return to their homes for the next 3 weeks (a date later extended to the end of the semester). That day, due to the high likelihood of many individuals leaving in less than 24 hours, I informed participants in the treatment condition that they could take home supplies they would need for the duration of the study. Participants were encouraged to continue in the art-DBT study, but I also reminded them that they could opt out at any time. I sent a similar confidential email to the control group that encouraged their continued participation in the bi-weekly assessments and clarified that their absence from campus would not affect their control group experience. I continued to send the control group bi-weekly

assessments and the follow-up survey once the study ended.

For the treatment group, towards the end of week 2, a policy change occurred at Rcampus which prevented subjects from accessing/submitting activities and surveys without a paid subscription. Because of the late-week timing, 2 individuals could not submit their activities and treatment group members could not take the bi-weekly surveys. Thus, the treatment group's data points for week 2 do not appear in the final analysis of their data. To accommodate for the policy change, I informed participants of a new method for distribution and submission of weekly activities/surveys; this entailed me sending each week's activities, information, examples, and survey links in a weekly confidential email. Participants then submitted their work by replying with activity photos by the end of the week.

me completed activities along with their participant ID numbers by Saturday at midnight.

Submission of surveys took place entirely on Survey Monkey, and the issue did not affect this domain of the study. If participants were unable to extensively email at their current locations or did not feel comfortable emailing their art, I provided my phone number for sending submissions to and asked that they identified themselves by participant ID number. I continued to encourage participation, however, I let subjects know they had the freedom to stop participating if they chose. I gave individuals appropriate leniency for submitting materials due to the complexity of the situation.

At the conclusion of the 6-week art-DBT program, I examined participation among control group members. I excluded individuals' data if they did not complete all 3 bi-weekly assessments and the initial baseline self-harm measure. After this process, 8 participants remained in the control group. I also assessed the remaining treatment group's participation in accordance with the inclusion criteria set in the Materials Section. Following this, 3 treatment group members remained. After the final day of the 6-week art-DBT program, I confidentially emailed both groups thanking them for their participation and providing a link to the follow-up survey. I also informed them that in the next week, I would email them about their compensation opportunities/whether they qualified for it. I sent those who qualified a

package containing the remaining art supplies as well as a \$25 visa gift card. I also asked participants to inform me what design they desired on their custom bookmark and, after responding, I emailed each participant their respective designs. At the beginning of the following month after the conclusion of the study, every qualifying member of the control group, if they desired, received access to a private file on dropbox (shared only with me and the participant) that contained each of the weekly activities, information, assessments, etc. I encouraged them to participate at their leisure. Lastly, I asked participants if they desired access to a virtual presentation of the study's results—which I sent them prior to the date it would take place. After the study concluded, I compiled both the treatment and control group's bi-weekly assessment data, baseline rumination, and baseline ISAS scores. I then used SPSS to perform statistical tests described in the results section.

Results

Rumination and NSSI Prescreening Survey

The prevalence of rumination and NSSI were explored among the general population of students at a small private Baptist university. Individuals' could potentially score from 13 – 65 on the ISAS (measures NSSI) and from 22 – 88 on the RRS (measures rumination). Average rumination scores among college students were 49.46 (median = 48; $SD = 14.45$; scores ranged from 23 to 86). According to Nolen-Hoeksema's research (1999), 78 of the 171 participants (45.61% of all respondents) scored 1 SD above the standardized mean.

Average lifetime NSSI scores were 17.23 (median = 15; $SD = 6.13$; scores ranged from 13 to 44). Ninety-two out of the 169 respondents (53.8%; 2 participants did not complete the ISAS), indicated they had engaged in NSSI at some point in their life. In part 2 of the ISAS, the most common form of NSSI was scratching ($N = 26$) followed by interfering with wound healing ($N = 23$) and cutting ($N = 20$). After analyzing data, 62 of the 92 individuals who engaged in NSSI did so within the last year (67.39%) and 23 in the last month from taking the survey. However, nine of the respondents who indicated they engaged

in NSSI did not complete this question and 1 who indicated they did not engage in NSSI responded to this question.

Qualifying High Rumination (HR) Participants

Among those qualifying for the HR group and were invited to participate in the second part of the study ($N = 78$), 64 had a history of self-harm (82.1%). The average NSSI score for this group was 20.01 with scores ranging from 13 - 44 (median = 17; $SD = 7.21$; one participant did not complete the ISAS) and the average rumination score was 62.44 (median = 59.5; $SD = 9.62$; scores ranged from 49 - 86). Out of the 60 individuals who both indicated they had engaged in NSSI and entered a date their last NSSI instance, 49 engaged in NSSI within the last year, and 16 in the past month of responding. One participant did not answer this question. When comparing the high rumination (HR) group with all participants, the HR group had a slightly higher average NSSI score (20.01 vs 17.23) and identical ranges. However, a higher percentage of HR individuals had engaged in NSSI at some point in their lives than all initial survey respondents (82.1% vs 53.8%).

Final Participants

Eleven participants completed the study and had an average rumination score of 63.91. Their scores ranged from 55 - 84 (median = 59; $SD = 10.00$). Thus, their rumination scores were representative of the HR group ($M = 62.44$; median = 59.5) from which they were pooled. Participants had an average NSSI score of 25.64 among scores that ranged from 14 - 44 (median = 24; $SD = 10.41$)—slightly higher than the HR group's scores ($M = 20.01$; median = 17). All individuals had engaged in NSSI within the last year and 3 did so in the past month from taking the survey. Initial control group average lifetime NSSI score was 24 (median = 22.5; $SD = 9.29$) and their rumination average was 62.13 (median = 58.5; $SD = 8.84$), while the treatment group's average NSSI was 30 (median = 35; $SD = 14.18$) and rumination average was 68.67 (median = 63; $SD = 13.43$). Average participant baseline NSSI scores (measuring NSSI occurrences from the past 2 weeks before taking the survey) was 16 (median = 15; SD

= 3.22; control group $M = 16.13$; median = 14.5; $SD = 3.83$; treatment group $M = 15.67$; median = 16; $SD = .58$).

NSSI/Rumination Relationships

When examining the NSSI/Rumination relationship among the initial survey respondents using a bi-variate Pearson correlation test, the hypothesis that a significant positive correlation would exist was supported ($r = .42, p < .01$). A significant positive correlation of these variables also existed among the final 11 participants' week 4 measures ($r = .707, p < .05$) and week 6 measures ($r = .682, p < .05$). Interestingly, this relationship did not occur in week 2 measures ($r = .533, p > .05$; 3 individuals were not able to participate), their lifetime rumination/NSSI scores ($r = .096, p > .05$), or their baseline measures ($r = .418, p > .05$). Similarly, no correlations existed between rumination/NSSI in the qualifying HR group ($r = .163, p > .05$).

Treatment and Control Group NSSI

The hypothesis that the treatment group would have lower NSSI rates post art-DBT compared to the control group was not supported. Due to the small sample size, I calculated each group's average rumination at baseline and week 6 and compared the differences to one another. The treatment group averages at baseline and 6 weeks were 15.67 and 16, while the control group averages at baseline and 6 weeks were 16.13 and 16.5. The flatness of the plotted scores likewise reflects the lack of effect in terms of NSSI (Appendix I, Figures I1 and I2).

Treatment and Control Group Rumination

As with the previous analysis, I calculated each group's average rumination at baseline and week 6 and compared the differences to one another. The results--though based on small sample size and multiple case-study analysis--support the hypothesis that art-DBT would lower participant rumination scores; the treatment group's baseline and week 6 average rumination scores were 68.67 and 44.33 respectively while the control group's averages were 62.13 and 50.38 respectively. Thus, the treatment

group experienced decreased rumination just over twice the amount that the control group did; the treatment group had scores on average of 24.34 points lower than before art-DBT, while the control group decreased by 11.75 without any treatment. Visual analysis of graphs similarly demonstrates this effect (Appendix J, Figures J1 and J2).

Discussion

NSSI/Rumination Correlations

The hypothesis that rumination and NSSI would significantly positively was partially supported; these variables significantly correlated in the prevalence survey, final participants' week 4 surveys, and their week 6 surveys. The results of the prevalence survey complement research such as Nicolai et. al. (2015)'s which found that rumination moderated between negative affectivity and NSSI; both this and the current study indicate that individuals who engage in frequent NSSI also tend to experience high levels of rumination. However, contrary to the hypothesis, no correlations reached significance in the HR group, among final participants or final participants' baseline and week 2 surveys. One could reasonably attribute this interesting occurrence to restriction of range among NSSI and rumination scores in the HR group and final participants. Specifically, the HR group's NSSI scores ranged from 13 to 44 (median = 17; most scores fell at the lower end) and their rumination scores ranged from 49 to 86 (rumination scores in the prevalence survey ranged from 23 to 86 and NSSI scores fell between 13 and 44 across this wider range). Thus, after separating the HR group from the larger, diverse, participant pool, correlations did not readily surface. This reasoning holds for the final group of 11 participants as well—especially considering their small sample size. However, the significant correlations that emerged in final participants' week 4 and 6 assessments may have surfaced due to the reductions in both group's rumination scores; perhaps the reduced numbers corresponded with the already-low NSSI scores in a way that statistical analyses detected as a correlation.

Effects of art-DBT

NSSI

The hypothesis that art-DBT would lower NSSI scores was not supported; little change occurred from baseline to week 6 in both treatment and control groups. Given the lack of correlation between rumination and NSSI at baseline, the rumination-targeted treatment may not have affected NSSI due to this initial lack of relationship. Yet, because of the strong correlation observed among the larger, diverse prevalence survey respondents, alternate explanations may better account for the observed data. Prior to explaining results further, I must remind readers of how I analyzed data (reminiscent of case-studies rather than large-scale controlled experiments) and the small sample (most notably, the 3-person treatment group) involved in the study. Thus, I hesitate to make any firm interpretations of results as to treatment effects. I will, however, provide suggestions regarding what results possibly indicate and reiterate the need for further study in order to come to any conclusions. The lack of effect on NSSI may reside in the initially low NSSI baselines among art-DBT participants. Recall the minimum ISAS score of 13; the treatment group's average score of 16—coupled with weekly assessments in which individuals did not report any NSSI occurrences—indicate little potential for lowering NSSI existed among this already low-scoring group. Even further, participants may not have considered certain behaviors listed on the ISAS as problematic acts of NSSI (e.g. interfering with wound healing, banging or hitting self, etc.) and, thus, were not influenced by art-DBT. If participants initially had high NSSI scores, perhaps an effect may have emerged.

Furthermore, the rumination-focused art-DBT program might have failed to influence NSSI due to its treatment target; the focus was rumination throughout the program and little reference to NSSI occurred in all the six weeks. Given the success of DBT for treating NSSI and its strong emphasis on decreasing self-harm behaviors in general, perhaps the present art-DBT program did not emphasize NSSI reduction enough to influence this variable (DeCou et al., 2019; Linehan, 2014a; Linehan, 2014b). The platform, treatment method, and timeframe of brief, online, skills-training program, similarly, may not

have promoted significant NSSI reduction. However, in terms of treatment method, studies such as Linehan et al. (2015)'s DBT component analysis, point to the efficacy of DBT skills training in the absence of individual therapy. The study found that, though standard DBT generally elicited the most favorable treatment outcomes, skills training alone (accompanied by case management to reduce risk) as well as standard DBT demonstrated significantly greater reductions in NSSI frequency than individual therapy alone. Notably, though, these results occurred after 1 year of in-person treatment (approximately 50 total hours in each condition) that targeted self-harm behaviors. Likewise, the internet DBT skills training intervention enacted by Wilks et al. (2018) indicated by its significant reduction of SI, alcohol use severity, and emotion dysregulation in participants that an online format can successfully treat problematic behavior. Yet, this treatment was 8 weeks long, included video components, and specific skills instruction. Thus, in both Linehan et al. (2015) and Wilks et al. (2018)'s research, outcomes suggest that skills training and online skills training programs can decrease maladaptive behaviors—highlighting the strong likelihood that length of intervention and rumination treatment target contributed to the present study's lack of NSSI reduction.

Rumination

Results supported the hypothesis that art-DBT would reduce rumination among the treatment group; however, due to the small sample size and resulting multiple case-study analysis, I again hesitate to make definite conclusions as to treatment efficacy. While results suggest a notable decrease in the treatment group's rumination when compared to the control group (as well as its own baseline), one needs large samples to undergo proper hypothesis testing (e.g. t-tests) prior to claiming treatment success. Despite the small sample, decreases in the treatment group's rumination scores were twice the amount of reductions in the control group, suggesting that the art-DBT program elicited rumination reduction surpassing natural decreases. Interestingly, the control group's decrease in rumination far exceeds what might be expected in a typical community sample such as Nolen-Hoeksema et al. (1999)'s;

both the small sample and the change to a home environment (see COVID-19 section in Limitations) likely provided such favorable outcomes to the control group. This in itself proves quite unexpected, since COVID-19 resulted in stay-at-home orders, avoidance behaviors, and fear in general among most individuals, one would expect rumination to increase rather than decrease (Manfredi et al., 2010). Researchers such as Manfredi et al. (2010) support this idea in their findings that, when examining rumination, temperament, and parental styles, parental over-protection and harm-avoidance significantly predicted rumination and worry respectively (with rumination and worry having a high correlation). One explanation for the results in my study could lie in the possibility that participants' online coursework increased and/or they spent more time consuming media; thus, attempts to escape reality (e.g. Netflix) and a heavier, time-consuming workload may have decreased rumination via distraction (Nolen-Hoeksema & Morrow, 1991). Nolen-Hoeksema and Morrow (1991)'s research reinforces this idea in that, after assigning mild-to-moderately depressed subjects to either ruminate or focus on geographic locations, distracted individuals experienced significantly reduced depressed moods. Given the strong correlation between depression and rumination (Fresco et al., 2002; Miranda & Nolen-Hoeksema, 2007; Treynor et al., 2003), the possibility that the change in environment/activities may have provided more distraction and, thus, lowered rumination (though still considered high) in these individuals may explain the unusual decrease seen in the control group.

The treatment group, however, experienced notable rumination reductions even considering the control group's decrease—suggesting the occurrence of treatment effects. Specifically, the treatment group's week 6 average fell below both the prevalence survey's average and 1 *SD* above the normative mean (for both genders; Nolen-Hoeksema, 1999; the control group's week-6 average fell within 1 *SD* for females, but not males). Such reduction supports literature demonstrating the success of tailoring DBT to specific populations/treatment targets (e.g. depression, suicidal behavior, eating disorders, etc.; Courbasson et al., 2010; Linehan, 2014a; van den Bosch et al., 2002). Thus, targeting

rumination appears viable in the art-DBT context. Results also point to the utility of mindfulness training in both the DBT and art therapy context for reducing rumination (Wolkin, 2015). This complements Perestelo-Perez et al. (2017)'s research that identifies mindfulness-based therapies as beneficial treatments for decreasing rumination (in conjunction with other research examining this connection; Jain et al., 2007; Ramel et al., 2004; Teasdale et al., 1995; Wolkin, 2015), as well as studies demonstrating art therapy's unique mindfulness benefits beyond general mindfulness training (Douglas, 2019).

Participant responses in an open-ended exit survey further support the benefits of art-DBT and the discussion surrounding it. For instance, one participant noted that they did not know art therapy existed prior to this study and felt it would not benefit them. However, after starting the program, they began creating art when they felt overwhelmed, stressed, and even bored (despite how they did not consider themselves an "artsy" person). Similarly, all respondents to the exit survey ($N = 2$) felt they gained some benefit from art-DBT and enjoyed it—one specifically mentioned they were sad it ended. The individual responses detailing their feelings toward the program, thus, provide further insight into the specific effects of art-DBT. See Appendix H for examples of participant art.

Conclusion of Findings

Ultimately, both my initial hypotheses were partially supported; rumination and NSSI were significantly, positively correlated in the prevalence survey and the online, rumination-focused art-DBT program reduced rumination in the multiple case-analyses conducted. These results suggest that rumination ought to receive attention when treating individuals who engage in NSSI—perhaps by including rumination measures among those typical for assessing symptoms in this population. Such efforts would allow for a deeper understanding of this relationship and whether targeting rumination in NSSI treatment has any significant benefits. Even further, the study points to the potential of rumination-focused art-DBT's utilization for rumination-reduction and its potential to successfully target maladaptive behavior.

While NSSI did not decrease in the observed population (likely as a result of the restriction of NSSI score range), correlational results indicate that an art-DBT program focused on NSSI may assist in reducing the behavior. Effects of the present study's program also demonstrate that practitioners can conduct art-DBT—and perhaps other variations of art therapy—successfully with an online format. This holds promise for developing widely accessible, affordable treatment options for those who could not otherwise receive it. For instance, insurance typically does not cover art therapists, so many cannot participate in art therapy despite their desires to (American Art Therapy Association, n.d.c). The online format of art-DBT, then, can provide such access and encourage those who may not be comfortable with traditional therapy to seek out and receive mental health treatment. In support of this possibility, both respondents to the exit survey indicated they preferred the online format over the prospect of in-person, group sessions due to its anonymity; one participant stated that, because they did not consider themselves artistic, they would have felt very uncomfortable in a face-to-face session—leaving them less inclined to participate. Despite the high dropout rate observed in the current study, the online, art-DBT program, may be uniquely suited for reaching populations who prefer non-standard, anonymous treatment. Ultimately, considering all study outcomes, art-DBT—in both online and in-person formats—holds promise. Of course, further, large-scale research is needed before we can draw any definite conclusions as to its efficacy.

Limitations

COVID-19

Several limitations of the study exist—most notably, effects that the COVID-19 pandemic likely elicited. For instance, at the end week 2, students at the college where participants attended received the sudden directive to leave campus and return to their homes. The potential stress created by this sudden action, the uncertainty regarding the future, and countless other related stressors may have influenced effects of the art-DBT program. Similarly, the abrupt change in environments (e.g. moving to

stressful homes, areas with no internet connection, environments with better support than campus, etc.), the transition to online classes, and moving out of on-campus housing (as one would when ending the semester) likely impacted participant outcomes in terms of both results and attrition. For instance, one participant informed me they dropped out of the art-DBT program when they moved back in with their family due to the time-constraints from new part-time job. Thus, because of the probable stress/time-related attrition, selection bias may exist in the final sample of participants—especially given the control group’s surprising decrease in rumination. While the control group’s presence still allowed a comparison between groups, the final participants may not appropriately represent all high ruminators.

Similarly, the change in material distribution/submission methods from Rcampus to email was not ideal and remains the most likely factor causing the high attrition rate. Recall that Rcampus had organized activity folders, allowed for easy submission, and resided in one convenient online location. Emails, however, move around inboxes and easily get lost. Thus, due to the possible inaccessibility of the art-DBT emails/activities (e.g. difficulties locating them), study-related messages may have become too tedious for participants to periodically search for and address. To illustrate, in the exit survey one participant explicitly mentioned that their least favorite part of the art-DBT process was trying to find their assignments and that such tedium would, at times, discourage them from beginning their art. All respondents expressed distaste for this distribution method.

Yet another limitation related to COVID-19 involved an instance of neglect in terms of making a group email not confidential in the rush of attempting to quickly distribute supplies to the treatment group prior to leaving campus. Specifically, if participants expanded the “recipients” list, they could see the email addresses of fellow participants. Upon realization, I immediately contacted my thesis director and they, in turn, notified the IRB. Because participants did not know the criteria individuals were selected by in the study, which experimental conditions they corresponded to, or the specific role each email recipient played, both the IRB and thesis director felt—though not ideal—that the breach of

confidentiality did not warrant a termination of the study. This occurrence likely did not impact participant dropout or results, however.

Attrition and Extraneous Variables

A significant limitation to the study also involved the high attrition rates and, thus, a small sample size of final participants. Because of this, I could not adequately compare between or within group results using traditional hypothesis testing methods; only 3 individuals remained in the treatment group and 8 in the control group. Though trends appear with visual analyses, this cannot reasonably extend to other individuals without using larger samples. Thus, the resulting case-study format of the score comparisons could not adequately assess treatment efficacy as I initially hoped. Even further, I had little control of extraneous variables due to the self-directed, online, nature of the experiment. Variables such as whether participants consumed other media while artmaking (e.g. music, television, etc.; all respondents on the exit survey indicated they used some sort of media when completing art-DBT activities) may have influenced the observed effects and drew participants' focus away from solely art. Similarly, the information sections of art-DBT might have most attributed to rumination decreases observed—rather than the art-making itself. However, due to the focus and reference to art throughout the program's entirety (information was only 1 of 4 activities), as well as the nature of the program (AT combined with DBT; the latter involves a large amount of information distribution), one could reasonably attribute benefits to art-DBT as a whole rather than one facet. Lastly, I could not control for timing of art-DBT activity completion (e.g. completing all activities at once, starting art-DBT at the end of the week, rushing through information, etc.), and this could have impacted results in that participants did not adequately process/reflect on information and/or lost mindfulness benefits of non-rushed art-making.

Future Directions

Despite limitations, art-DBT does hold promise and warrants further exploration. One possible

avenue of research could involve examining the effect of art-DBT among high NSSI groups rather than high ruminators; this may provide useful data regarding the relationship between rumination and NSSI. Similarly, including NSSI as a treatment target would assist in determining whether rumination influences NSSI development/maintenance and, if so, how much. For example, one could conduct a study similar to the present one that focused on individuals with NSSI scores 1 *SD* above the ISAS mean—comparing rumination-focused, rumination and NSSI-focused, and NSSI-focused art-DBT treatment groups to one another to determine the most effective treatment target for NSSI reduction. Even further, comparing art-DBT skills training to standard DBT skills training would also prove quite informative.

Investigating the effects of online vs in-person art-DBT programs could also yield interesting results. Perhaps different formats benefit only certain populations. Determining what types of personalities (e.g. introversion, openness to experience) respond best to certain methods of art-DBT treatment delivery may allow researchers to learn how to better tailor treatment to individuals—ultimately encouraging adherence to whichever treatment best suits patients. Given self-proclaimed “non-artsy” individuals’ potential reluctance to engage in art-DBT, diving into these variables could also allow exposure to this treatment to occur in the most comfortable environment possible. Yet, regardless of the specific directions that research takes, future study of art-DBT as a viable treatment option ought to continue; treatment professionals cannot disregard the potential art has in conjunction with empirically supported treatment methods such as DBT. However, all research in this area must strive to provide high-quality, replicable research so that we can identify and target factors underlying NSSI—ideally developing interventions (irrespective of the presence of art) that maximize benefits of treatment and promote effective healing among those who struggle with NSSI and high rumination.

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Appendix A

Treatment Group Follow-Up/Exit Survey

The following questions are about your experience with the art-DBT program. Please be honest—criticism is welcome and encouraged! Your feedback will be used to inform future research/programs of art-DBT. Your feedback will in no way influence your chance for compensation; your answers are completely confidential cannot be connected with your art-DBT data in any way.

1. Did you have any art experience prior to the art-DBT program? If so, please explain.
2. Did you listen to music when doing the art-DBT activities?
3. How did you first feel about the idea of doing art therapy?
4. About how long did you spend each week doing the activities?
5. What are your thoughts on the length of the program?
6. What was your least favorite part of the weekly activities?
7. What was your favorite part of the weekly activities?
8. If you could change one thing about the program, what would you change?
9. What would you keep the same in a future art-DBT program?
10. What were your thoughts regarding the online format?
11. Would you have preferred in-person, group sessions?
12. Do you feel you gained any benefits from doing the art-DBT program?
13. If you are comfortable, please share what—if anything—you learned from the art-DBT program.
14. Do you have any other thoughts, comments, recommendations you would like to share about the program?
15. Would you be comfortable allowing your work to anonymously appear in the final write-up of the study?

Appendix B

Week 1 Information and Activities

Week 1

Welcome to the first week of this art-DBT study! Each week we will provide you with some helpful information that will inform your art therapy experience. This week we will introduce you to some definitions you will frequently encounter throughout the study, so feel free to return here if you need a refresher on any of these concepts!

Rumination:

Rumination is when individuals put a high focus on internal, negative feelings/ideas. This essentially keeps them from processing adaptive ways to deal with distress and keeps their focus on the past or future (instead of the present moment). Unfortunately, rumination tends to increase one's negative state rather than alleviate it. You can see how, when rumination becomes your default response to problems, it becomes a downward spiral into further distress.

Consequences of Rumination:

Because of the rumination/negativity spiral, those who ruminate a lot tend to experience more negative feelings (e.g. fear, anger, etc.) than they would in the absence of rumination. This abundance of negative feelings may contribute to the development/sustainment of mental illnesses such as depression or anxiety. Similarly, it may lead to self-harm.

Self-harm:

Self-harm, or non-suicidal self-injury (NSSI), is when someone injures themselves without the intent to cause death. Interestingly, self-harm has been identified as a possible maladaptive response to rumination; when one ruminates and experiences an exacerbated negative emotional state, individuals may attempt to seek "relief" from their internal distress by self-injuring—shifting their focus to external pain instead.

Mindfulness:

Practicing mindfulness involves intentionally living with an awareness of the present moment **without judging or rejecting it**. This skill can directly combat rumination. When being mindful, our focus is not on noticing consequences or discerning helpfulness/harmfulness of a situation—but letting go thoughts that block the present moment (e.g. evaluations of whether something is "good" or "bad," avoidance of what is currently happening, etc.). **Also, mindfulness involves detaching from the moment.** In other words, it means attending to the experience of each new moment, rather than ignoring the present by clinging to the past or grabbing for the future.

Distress Tolerance:

Distress tolerance is a skill with 3 primary goals: to survive crisis situations without making them worse, to accept reality (by replacing suffering/being "stuck" with ordinary pain and the possibility of moving

forward) and becoming free of having to satisfy the demands of your own desires, urges, and intense emotions. This can be applied to rumination by specifically focusing on rumination as the “crisis situation” or desire/urge.

The Big Idea:

The goal of this study is to utilize art as a helpful coping mechanism to use in response to distress rather than ruminating on it. If we can decrease rumination, perhaps we can see a decrease in self-harm as well. Whether or not you engage in self-harm, decreasing rumination will be the focus of our activities. Also, every activity will involve/be grounded in mindfulness and distress tolerance skills that specifically target rumination. Keep these skills in mind when completing all your activities!

Activity 1

You may or may not be familiar with working with art supplies. Regardless of your experience, this activity aims to help you get more comfortable with the idea of “doing art.” It’s important to remember, though, that it is not about the quality of the product you make (whether it’s aesthetically pleasing or not), but about the process of creating. In this activity, try to act opposite of any urges you have to make a “perfect” art piece; instead, be willing to go outside of your comfort zone and be flexible with whatever happens on your paper. You’ll likely be pleasantly surprised with the outcome!

Estimated time: 10 – 20 minutes

Materials (all available in art room):

- watercolors (please keep watercolors in art room)
- brushes
- containers for water
- watercolor paper
- paper towels

****PLEASE DO NOT REMOVE ART MATERIALS (markers, watercolors, etc.) FROM ROOM AFTER USING****

Smuggling Watercolor:

Use this activity as a distraction from rumination. Let yourself focus on the creative process above all else and practice mindfulness of the present moment.

1. Gather all of the above materials and make sure you’re in a space that is able get a bit messy (don’t worry—watercolor comes out of clothes!)
2. Wet your paper and feel free to pool the water in different spots (see example A)...it’s watercolor paper, so don’t worry about the wetness!
3. Wet your brush and get ready to paint. Resolve to **let the paint do what it wants**. Relinquish as much control to the paint as you can; your goal is to **refrain from attempting to create anything in particular**
4. Pick a color and begin to see what happens when you apply pigment to various water-filled places on the paper. Use as many colors as you wish—let the colors bleed together and

intermingle. Feel free to tilt the paper some, or even add drops of water...be spontaneous and just let the paint do its thing (see example B)

5. **Take a photo of your piece and upload it to your week's folder**
6. Pick a spot and let your piece dry. Enjoy your lovely abstract watercolor!

*Adapted from Susan Clark's "Smuggling Watercolor" activity (2017; Clark, 2015)

Activity 2

Estimated time: 5 – 10 minutes

Materials (all available in art room):

- Paper (any will do!)
- Markers
- Any additional desired materials

****PLEASE DO NOT REMOVE ART MATERIALS (markers, watercolors, etc.) FROM ROOM AFTER USING****

Loops of Containment:

Use this activity as a distraction from rumination. Let yourself focus on the creative process above all else and practice mindfulness of the present moment.

- 1) Gather all your materials together in any space you can make art (this does not have to be in the materials room!)
- 2) Pick a marker to serve as your "outline" color
- 3) Begin drawing loopy scribbles all over your paper
- 4) Make sure to create many closed shapes when you are scribbling (see example C)
*** this activity is meant to be soothing, so do not worry about creating the "perfect design"**
- 5) Once you have completed your initial scribble, use any colors you desire to color the closed shapes within your scribble created (see example D)
- 6) Feel free to utilize any other materials to embellish and fill your loops (e.g. watercolor, glitter, colored pencils, crayon, etc.). Enjoy yourself and let the process of creating distract you from the troubles of your day and exist in the present moment.
- 7) **Take a photo of your piece and upload it to your week's folder**
- 8) Enjoy your creation and feel free to utilize this activity in daily life whenever/wherever you need to distract yourself from rumination or negative thoughts

*Adapted from Susan Clark's "Loops of Containment" activity (2017; Clark, 2015)

Activity 3: Ongoing activity

Materials:

- 13 pages of plain copy paper (or any journal/notebook you might have lying around)
- Stapler

- Any art supplies you desire to use for journaling

Creating the Journal

For this activity we are going to create a visual journal that you will use for the rest of the 6-week study. Each week, we ask that you complete 4 pages and document them as you do with the rest of the activities via photograph and dropbox. The first task will be to create the journal itself.

- 1) Get 13 pages of paper and fold them in half (see example E)
- 2) Use the stapler to bind your book in 3 places along the fold (see example F)
*** if you have your own journal, or another method you would like to use to make it, feel free to do so!**

*Adapted from Susan Clark's "Emotional/Visual Journaling" activity (2017; Clark, 2015)

Visual Journaling

This part of the activity will be done every week. Follow this 3-step method each time you visually journal; **we recommend visual journal entries take place on different days of the week**. Remember, this process is for *you* and not meant to be distressing! Entries do not have to look perfect!

Step 1: Pause at some point during your day and focus on your current experience of self and your environment. Ask yourself "what is happening in my life right now?" and "what am I thinking and feeling in response to these events?" Make sure not to ruminate about these things, but acknowledge them and move on to the next step.

Step 2: Create an image in response to the present moment. Let it symbolically express the feelings and thoughts you observed in step 1.

Step 3: Immediately put your journal away once you have completed your image and do not look at/think about your image until at least 1 hour later.

Step 4: Later in the day, return to your entry and mindfully observe it. Think about the piece and describe it non-judgmentally in your mind in response (e.g. "there is a lot of red colors, it is very angular," etc.). The overall goal of visual journaling is to develop greater awareness and understanding of your emotions.

Step 5: Take a photo of your piece and upload it to your week's folder

***complete this process 4 times per week. Each time, take a photo of your piece and upload it to your week's folder**

Appendix C

Week 2 Information and Activities

Week 2

This week we will be examining rumination by using a behavior chain analysis. You will learn more about the steps of the behavior chain analysis in the activities you will complete. In short, a chain analysis helps you understand and analyze problem behavior. Since the focus of the present study is rumination, we will specifically be analyzing rumination behavior, figuring out its cause, and planning for problem solving.

By definition, a chain analysis examines the chain of events that leads to ineffective behaviors, as well as the consequences of those behaviors that may be making it hard to change them. It also helps you figure out how to repair the damage and how to problem solve for the future. Keep this information in mind as you proceed with your activities this week.

Activity 1

Estimated Time: 10 – 20 minutes

Materials (all available in art room):

- Paper (any will do; you may need 2 or 3 sheets if you would like more room)
- Markers
- Collage materials (magazines, newspapers, scissors, glue)
- Any additional/desired materials

****PLEASE DO NOT REMOVE ART MATERIALS (markers, watercolors, etc.) FROM ROOM AFTER USING****

Visual Rumination-Chain Analysis: Part 1:

The following activity aims to help participants understand what might lead to rumination in their life, the consequences of rumination, and also how to repair the damage rumination causes. This first activity will involve creating the first part of the chain.

In every step, choose whatever method of image making you are most comfortable with. This could be creating literal depictions of events/thoughts/etc., symbolic representations, collaging (cutting out figures from magazines and pasting them on the paper), or simply using swatches of color.

For this activity, we will present a hypothetical situation and you will depict a possible “rumination-response” to the situation. Examples will be provided along the way. Feel free to personalize the example to what you would do (or have done) in this situation. The situation is as follows:

After taking a difficult test, you find that the grade you earn ends up making your overall class grade 1 point less than what you were aiming for.

- 1) **In the center of your paper(s), illustrate your rumination** using whatever method your desire. Be specific and identify what you thought or felt in the midst of ruminating (see example 2a).

- 2) In the center off the left half of your paper, illustrate the specific prompting event that started the whole chain of rumination.** Again, this does not have to be perfect, literal depictions! Always begin the chain with some event in your **environment**, even if it doesn't seem to you that the environmental event "caused" the rumination (see example 2b).

*Possible questions to help you get at this are:

What exact event precipitated the start of the chain reaction? When did the problem start? What was going on right before the thought of or impulse to ruminate occurred? What were you doing/thinking/feeling/imagining at that time? Why did the rumination happen on that day instead of the day before?

- 3) In the far-left side of the paper, illustrative specific vulnerability factors happening before the prompting event.** What factors or events made you more vulnerable to reacting to the prompting event with a problematic chain? (See example 2c)

*Areas to examine are:

Physical illness; unbalanced eating or sleeping; injury; use of drugs or alcohol; misuse of prescription drugs; stressful events in the environment (either positive or negative); intense emotions, such as sadness, anger, fear, loneliness; previous behaviors of your own that you found stressful coming into your mind, etc...

- 4) Between the "prompting event" (left, center) and "rumination" (center), illustrate in detail the chain of events that led to rumination.** Imagine that rumination is chained to the precipitating event in the environment. What are the links? What exact thought (or belief), feeling, or action followed the prompting event? What thought, feeling, or action followed that? What next? What next? And so forth. Depict all links in the chain of events, no matter how small. (See example 2d)

**Examples of links in the chain include:

Actions or things you do, body sensations or feelings, cognitions (i.e., beliefs, expectations, or thoughts), events in the environment or things others do, feelings and emotions that you experience

- 5) Extending from the rumination event towards the middle right side of the paper, illustrate the consequences of rumination.** Be specific! (e.g. How did you feel immediately after ruminating? Later? What effect did the behavior have on you and your environment? See example 2e).
- 6) Take a photo of your piece and upload it to your week's folder.**
- 7) Keep your art for the next half of the activity to be done next time.**

*Adapted from Marsha Lineham's "Chain Analysis" from *DBT Skills Training Handouts and Worksheets, Second Edition* (Linehan, 2014a)

Activity 2

Visual Rumination-Chain Analysis: Part 2:

Estimated Time: 10 – 20 minutes

Materials:

- The rumination-chain created from the previous session
- Markers
- Collage materials (magazines, newspapers, scissors, glue)
- Any additional/desired materials

1) Review your behavior chain so far. Review the previous steps/prompt if you need more of a refresher,

2) Go back to the chain of behaviors following the “prompting event” (center left) and circle each link where, if you had done something different, you could have avoided ruminating. Ask “what could have been done differently at each link in the chain of events to avoid ruminating?” and “what coping behaviors or skillful behaviors could have been used?” Illustrate what could have been done at these points (see example 2f).

*Pay special attention to what key links were most important in leading to rumination (In other words, if you had eliminated these behaviors, the problem behavior probably would not have happened).

3) In the far left of the page, illustrate a prevention strategy for how to keep the chain from starting by reducing your vulnerability to the chain (see example 2g)

*Prevention strategies can also be referred to as coping strategies. Some coping strategies and opposite actions you can do include:

- Taking a time-out to breathe in and out deeply and slowly
- Be aware of your body and unclench tense muscles
- Exercise
- Go for a walk
- Engage in an activity you enjoy and that is beneficial (e.g. painting)
- Practice mindfulness activities
- Validate yourself

**feel free to utilize the internet for other ideas of positive coping mechanisms

4) Extending outwards from “consequences” (middle right), illustrate what you are going to do to repair important or significant consequences of rumination (e.g. self-care, spending time with those who you have isolated, etc.; see example 2h). What did you really harm? (e.g. isolated self, became stressed and snapped at roommate, etc.) What can be repaired?

5) Take a photo of your piece and upload it to your week’s folder

*Adapted from Marsha Lineham’s “Chain Analysis” from *DBT Skills Training Handouts and Worksheets, Second Edition* (Linehan, 2014a)

Appendix D

Week 3 Information and Activities

Week 3

This week, we will be focusing on rumination-distress tolerance—specifically the “pushing away” skill. Pushing away can be used as a temporary physical or mental leaving of a difficult or painful situation. It is important to note that this is a “crisis survival skill.” One is in a “crisis” when the situation is:

- Highly stressful
- Short-term (that is, it won’t last a long time)
- Creates intense pressure to resolve the crisis now

One would use the pushing away skill when:

- You have intense pain that cannot be helped quickly
- You want to act on your emotions, but it will only make things worse
- Emotions threaten to overwhelm you, and you need to stay rational
- You are overwhelmed, yet demands must be met
- Arousal is extreme, but problems can’t be solved immediately

We will be focusing, specifically, on pushing away rumination in crisis situations. Blocking cognitions and urges related to negative emotions can be a very helpful emergency technique; however, it is important to remember that **this is a temporary leaving**. In other words, this is not a skill to be overused/utilized constantly (not for everyday problems or solving all life’s problems). The primary goal of pushing away is to allow high emotions to subside so that, once calmer, one can examine the problem again in a more rational manner—essentially preventing any “heat of the moment” decisions. With this in mind, pushing away can involve visualizing a wall between you and the problem situation or even putting off destructive actions (e.g. self-harm) for a few minutes and repeating this several times until urges subside. In terms of rumination, this could look like noticing your ruminating thoughts and verbally interrupting them by saying “no.” Another example commonly utilized is pretending to put one’s troubling emotions in an imaginary box, then putting the “box” on an imaginary shelf. The activity for this week will involve creating a physical representation of this technique.

To distance from these thoughts, it is helpful to practice distress tolerance through use of distractions following the acronym ACCEPTS. One can distract with:

Activities – e.g. drawing, painting, listening to music, going to an event, watching tv, etc.

Contributing – e.g. volunteer work, helping a friend, surprising someone with a nice gift, sending encouraging text to someone, etc.

Comparisons – e.g. compare your feelings now with a time you felt different, read about others’ suffering, compare to those less fortunate

Emotions – read emotional books, watch emotional movies, watch a comedy, etc.

Pushing away – leaving the room for a while, build imaginary wall, deny the problem for a moment, etc.

Thoughts – count to 10, repeat song lyrics to yourself, work puzzles, read, etc.

Sensations – squeeze a rubber ball very hard, listen to loud music, hold ice on your hand, take a hot shower, etc.

The activities we will do focus on using “pushing away” and “activities” as distractions through the use/creation of art.

Activity 1

Estimated Time: at least 15 minutes

Materials (all available in art room):

- Blank cups (in supply room) or other container you own (e.g. empty Kleenex box)
- Markers
- Collage materials (magazines, newspapers, scissors, glue)
- Any additional/desired materials

****PLEASE DO NOT REMOVE ART MATERIALS (markers, watercolors, etc.) FROM ROOM AFTER USING****

Letting Things Be Container; Part 1:

The first part of the activity this week involves making the container you will use as your “let it be box.” We have cups provided, however, feel free to use any box-like container you can easily decorate (e.g. an empty Kleenex box, a small shipping box, a mason jar, etc.). For this activity, we will focus on the “A” distraction skill (activities) by using art to make/decorate the container (see example 3a)

- 1) Obtain a large, blank, cup from the supply room (or use a box/container of your own)
- 2) Use any supplies you desire to decorate the outside of your container

**note: choose a design/pattern that will keep your attention and distract you from anything but the present—in other words, be mindful and enjoy the creation process. If you need design ideas, feel free to use the “loops of containment” technique or even look up designs online. Attempt to engage with this activity for at least 15 minutes.

- 3) **Take a photo of your piece and upload it to your week’s folder**

*Adapted from Susan Clark’s “Letting Things Be Box” activity (2017; Clark, 2015)

Activity 2

Estimated Time: around 20 minutes total

Materials (all available in art room):

- The decorated “let it be box” from part one of the activity
- Any sized slips of paper

- Collage materials (magazines, newspapers, scissors, glue)
- Any additional/desired materials

****PLEASE DO NOT REMOVE ART MATERIALS (markers, watercolors, etc.) FROM ROOM AFTER USING****

Letting Things Be Container; Part 2:

During this part of the activity we will focus on the “P” distraction skill (pushing away) by using art to physically depict the situations we desire to block out for the moment. Specifically, try to focus on rumination you want to block out.

****Attempt to complete this activity when you are actually in the midst of ruminating if possible. If not, use a relevant event so long as it does not cause you extreme distress**

- 1) Grab a piece of paper/paper scrap to draw on
- 2) Use any supplies you desire to depict rumination you would like to block out at that particular moment. You do not have to represent this perfectly; it can be a literal depiction, a symbol, a color, etc.
- 3) Try to spend at least 5 minutes on your drawing and be mindful when completing it
- 4) Once finished, fold your paper and place it in your decorated “let it be box.” Resolve to let your rumination reside with your depiction of it—staying in the box and out of your mind
- 5) **Take a photo of your decorated paper and upload it to your week’s folder**
- 6) Repeat this process at least 4 times total over the course of the week—each time taking a photo and uploading into the week’s folder

****If you do not feel you have experienced a situation that would classify as “crisis” (see examples from the information page), find a situation in a movie, book, play, etc. that would qualify and imagine yourself in their place. Then, proceed with the activities.**

*Adapted from Susan Clark’s “Letting things be box” activity (2017; Clark, 2015)

Activity 3 Visual Journaling

This part of the activity will be done every week. Follow this 3-step method each time you visually journal; **we recommend visual journal entries take place on different days of the week**. Remember, this process is for *you* and not meant to be distressing! Entries do not have to look perfect!

Step 1: Pause at some point during your day and focus on your current experience of self and your environment. Ask yourself “what is happening in my life right now?” and “what am I thinking and feeling in response to these events?” Make sure not to ruminate about these things, but acknowledge them and move on to the next step.

Step 2: Create an image in response to the present moment. Let it symbolically express the feelings and thoughts you observed in step 1.

Step 3: Immediately put your journal away once you have completed your image and do not look at/think about your image until at least 1 hour later.

Step 4: Later in the day, return to your entry and mindfully observe it. Think about the piece and describe it non-judgmentally in your mind in response (e.g. “there is a lot of red colors, it is very angular,” etc.). The overall goal of visual journaling is to develop greater awareness and understanding of your emotions and rumination.

Step 5: Take a photo of your piece and upload it to your week’s folder

***complete this process 4 times per week. Each time, take a photo of your piece and upload it to your week’s folder**

Appendix E

Week 4 Information and Activities

Week 4

Now that we have learned the “pushing away” skill, let’s look at another distress tolerance skill that, at first, may seem to contrast what we learned before: reality acceptance—specifically using “radical acceptance.” These skills actually go hand-in-hand. While “pushing away” is primarily used for crisis situations, radical acceptance is an everyday-life skill that applies to painful events/emotions that you cannot prevent from coming your way. Rumination directly interferes with the beneficial process of radical acceptance. This week we will practice radical acceptance in our art activities targeted at reducing ruminative thoughts. Keep this in mind as we look at some concepts and definitions surrounding radical acceptance.

Radical acceptance:

1. Radical means all the way, complete and total.
2. It is accepting in your mind, your heart, and your body.
3. It’s when you stop fighting reality, stop ruminating because reality is not the way you want it, and let go of bitterness.

What has to be accepted?

1. Reality is as it is (the facts about the past and the present are the facts, even if you don’t like them)
2. There are limitations on the future for everyone (but only realistic limitations need to be accepted)
3. Everything has a cause (including events and situations that cause you pain and suffering)
4. Life can be worth living even with painful events in it

Why accept reality?

1. Rejecting reality does not change reality
2. Changing reality requires first accepting reality
3. Pain can’t be avoided; it is nature’s way of signaling that something is wrong.
4. Rejecting reality turns pain into suffering
5. Refusing to accept reality can keep you stuck in unhappiness, bitterness, anger, sadness, shame, or other painful emotions
6. Acceptance may lead to sadness, but deep calmness usually follows
7. The path out of difficult situations is often through other difficulties. By refusing to accept the difficulties, you fall back into previous difficulties

Radical acceptance is not:

Approval, compassion, love, passivity, or against change

Factors that interfere with radical acceptance:

Believing that if you accept a painful event, you are making light of it or are approving of the facts, and that nothing will be done to change or prevent future painful events.

Emotions, also, can interfere with acceptance such as anger at the person or group that caused the painful event, rage at the injustice of the world, or overwhelming shame about who you are.

Activity 1

Estimated Time: 10-20 minutes

Materials (all available in art room):

- Blank paper
- Pencil + eraser
- Markers
- Collage materials (magazines, newspapers, scissors, glue)
- Any additional/desired materials

****PLEASE DO NOT REMOVE ART MATERIALS (markers, watercolors, etc.) FROM ROOM AFTER USING****

Turning the Mind (fork in the road) Part 1:

A method of reality acceptance is the process of “turning the mind.” This is a conscious decision one makes to move towards acceptance as if facing a fork in the road of “rejection” vs “acceptance.” We will be illustrating this concept—specifically in reference to turning from rumination—in this week’s activities. Part 1 of the activity will consist of creating the “base” of the “road to acceptance” by physically depicting the “road.”

- 4) Obtain a blank piece of paper
- 5) Lightly draw (using a pencil; you will erase this later) a large “Y” on your page with the top points touching each top corner of the page. Let the bottom of the “Y” reach the middle-bottom of the page with its length spanning roughly $\frac{1}{4}$ of the page until it begins to “fork” (see example 4a).
- 6) Let each line of your “Y” serve as the middle reference point of the wider road you will draw. Depending on the size of your page, mirror the “Y” lines on each side of the midpoints a few inches. This should create the edges of the larger, forked road (see example 4b).

****Note:** you don’t have to construct your road this way! You can free hand it, use rulers/straight edges, make it a bumpy road, etc. The main goal is to create a forked “Y” shape. It does not have to be perfect!

- 7) Erase the mid-point lines
- 8) Choose any colors/materials you want to color your road. It can be a city road, country road, old-town road—whatever you wish! Use this time to mindfully color and self-soothe. Don’t get distracted by ruminations about the day ahead or behind you (see example 4c)
- 9) **Take a photo of your piece and upload it to your week’s folder**
- 10) Make sure to save your fork in the road for the next activity

****Note:** you will be drawing other elements on and around this road, so don’t worry about filling up the page with road-related details. For this part of the activity, merely create a background and enjoy the creative process!

*Adapted from Susan Clark’s “Turning the Mind (fork in the road)” activity (Clark, 2015)

Activity 2

Estimated Time: 15-30 minutes

Materials (all available in art room):

- Your fork in the road from the previous activity

- Markers
- Collage materials (magazines, newspapers, scissors, glue)
- Any additional/desired materials

****PLEASE DO NOT REMOVE ART MATERIALS (markers, watercolors, etc.) FROM ROOM AFTER USING****

Turning the Mind (fork in the road); Part 2:

During this part of the activity we will focus on the process of making an inner commitment to accept reality as it is, practice turning the mind every time you come to a fork into the road to accept or reject reality/ruminate, and to develop a plan to catch yourself in the future when you drift from acceptance and into rumination/rejection.

- 1) Obtain your fork in the road from part 1
- 2) Decorate the base of the fork to represent where you currently stand in life. What are your current challenges that you ruminate on and struggle to accept/move towards/move away from? (see example 4d). Use any types of media to represent this literally or abstractly as possible. Use symbolism, colors, etc. It doesn't have to be perfect.

** The first step of turning the mind is observing that you are not accepting reality by choosing to ruminate. Signs of non-acceptance include bitterness, anger, annoyance, avoidance of emotions, questions such as "why me?", "It shouldn't be this way", "why is this happening?" This may help you identify when you are ruminating as well.

- 3) Choose one fork to serve as your "rejecting/ruminating road." On this side, visually depict your present reality of ruminating and rejecting reality and the possible long-term results of continuing down this road. Elements one could depict includes what it feels like to ruminate, consequences so far, etc. (see example 4e)
- 4) The other road will serve as the "accepting" road. On this side, visually depict what accepting reality will likely entail. Symbolize these aspects along and around the road in a non-judgmental manner. Elements could include feelings, thoughts, actions, etc. (see example 4f)
- 5) At the intersection of the two roads, visually represent yourself choosing the road of acceptance.
- 6) **Take a photo of your piece and upload it to your week's folder**

*Adapted from Susan Clark's "Turning the Mind (fork in the road)" activity (Clark, 2015)

Activity 3 Visual Journaling

This part of the activity will be done every week. Follow this 3-step method each time you visually journal; **we recommend visual journal entries take place on different days of the week.** Remember, this process is for *you* and not meant to be distressing! Entries do not have to look perfect!

Step 1: Pause at some point during your day and focus on your current experience of self and your environment. Ask yourself “what is happening in my life right now?” and “what am I thinking and feeling in response to these events?” Make sure not to ruminate about these things, but acknowledge them and move on to the next step.

Step 2: Create an image in response to the present moment. Let it symbolically express the feelings and thoughts you observed in step 1.

Step 3: Immediately put your journal away once you have completed your image and do not look at/think about your image until at least 1 hour later.

Step 4: Later in the day, return to your entry and mindfully observe it. Think about the piece and describe it non-judgmentally in your mind in response (e.g. “there is a lot of red colors, it is very angular,” etc.). The overall goal of visual journaling is to develop greater awareness and understanding of your emotions and rumination.

Step 5: Take a photo of your piece and upload it to your week’s folder

***complete this process 4 times per week. Each time, take a photo of your piece and upload it to your week’s folder**

Appendix F

Week 5 Information and Activities

Week 5

This week, we will practice more mindfulness skills. Mindfulness is very important for recognizing rumination, and, eventually, eradicating it. Through the next activities, be very intentional about being mindful and living in the present. Below you will find some helpful instructions about mindfully observing thoughts and practicing non-judgment (note: a judgmental thought involves evaluating something as “good” or “bad;” for example, making a grade on a test you aren’t pleased with and thinking “I did so bad on that!”). Try to practice these skills while engaging in your activities this week!

Observing thoughts:

We are well aware that rumination involves problematic thoughts. The following tips can apply to all thoughts, however, try to specifically target ruminative thoughts with these strategies.

Observe ruminative thoughts coming in and out of your mind by using these individual techniques, or use a combination of them:

- 1) Notice thoughts as they come into your mind; imagine them as objects on different conveyor belts.
 - Ask, “Where do thoughts come from?”
 - Then “watch” them to see if you can see where they come into your mind (imagine a location)
- 2) As you notice thoughts in your mind, notice the pauses between each thought.
- 3) Imagine that your mind is the sky and that thoughts are clouds.
 - Notice each thought-cloud as it drifts by, letting it drift in and out of your mind.
 - Imagine thoughts as leaves on water flowing down a stream, as boats drifting by on the lake, or as train cars rolling by you.
- 4) When ruminations go round and round in your mind, move your attention to the sensations in your body (those most intense right now). Then, keeping your attention on your body sensations, notice how long it takes for the worries to ooze away.
- 5) Step back from your mind, as if you are on top of a mountain and your mind is just a boulder down below.
 - Gaze at your mind, watching what thoughts come up when you are watching it.
 - Come “back into” your mind before you stop being intentionally mindful of your thoughts
- 6) Watch for the first two thoughts that come into your mind when you start intentionally observing them (e.g. when you set a side time to “begin observing” what first comes to mind?). Take note of them but watch them pass along your “mind’s conveyor belt”

Now, let's learn different strategies of non-judgment. Practicing non-judgement on your thoughts will be key in noticing when you begin to ruminate and choosing not to do so

Non-judgement (leaving out comparisons, judgements, and assumptions)

- 1) Practice observing judgmental thoughts and statements, saying in your mind, “A judgmental thought arose in my mind.”

2) Count judgmental thoughts and statements (e.g. by keeping pieces of paper in your pocket and moving them from one pocket to another when a judgmental thought/statement occurs, by clicking a sports counter, or by marking a piece of paper).

3) Replace judgmental thoughts and statements with nonjudgmental thoughts and statements.

- Tips for replacing judgment by stating the facts:

1. Describe the facts of the event or situation—only what is observed with your senses.

2. Describe the consequences of the event. Keep to the facts.

3. Describe your own feelings in response to the facts (remember, emotions are not judgments).

4) Observe your judgmental facial expressions, postures, and voice tones (including voice tones in your head).

5) Change judgmental expressions, postures, and voice tones.

6) Tell someone what you did today nonjudgmentally, or about an event that occurred. Stay very concrete; only relate what you observed directly.

7) Write out a nonjudgmental description of an event that prompted an emotion.

8) Write out a nonjudgmental blow-by-blow account of a particularly important episode in your day. Describe both what happened in your environment and what your thoughts, feelings, and actions were. Leave out any analysis of why something happened, or why you thought, felt, or acted as you did. Stick to the facts that you observed.

9) Imagine a person you are angry with. Bring to mind what the person has done that has caused so much anger. Try to become that person, seeing life from that person's point of view. Imagine that person's feelings, thoughts, fears, hopes, and wishes. Imagine that person's history and what has happened in his or her history. Imagine understanding that person.

Practice these skills specifically when doing your art activities this week and return to them as needed. These are important to moving out of rumination and towards a life worth living.

Activity 1

Estimated Time: 10-20 minutes

Materials (all available in art room):

- Watercolor paper
- Creative alternatives to brushes (e.g. sticks, sponge squares, cotton balls, leaves, etc...think about interesting textures! Use anything!)
- Watercolor (in art room...please keep paints in this room!)

****PLEASE DO NOT REMOVE ART MATERIALS (markers, watercolors, etc.) FROM ROOM AFTER USING****

Painting without Brushes:

During this part of the activity we will focus practicing mindfulness via “observing thoughts” and practicing “non-judgment” towards them—specifically in terms of potentially ruminative thoughts. Feel free to review the ideas described in the information page this week to practice them while completing your art activity. It is easy for your mind to wander and begin to ruminate but allow worrisome thoughts to come and observe them non-judgmentally as you attempt to stay in the present moment.

11) Obtain a piece of watercolor paper

12) Choose some of your collected materials (or even your fingers!)

- 13) Begin painting with these materials and experimenting with them
- 14) Don't try to make anything at first—experiment with the textures of your makeshift brushes as well as how much water/pigment you are using. Explore! (see example 5a)
- 15) Act against your impulse to make something perfect or “good.” Practice non-judgement in terms of both thoughts and art!
- 16) Once you have explored some materials, if an image/idea of what to paint emerges, go with it and begin to work on it (example 5b)

*This activity is supposed to be fun and NOT stressful! If you feel yourself frustrated, remember to observe your thoughts, and non-judgmentally acknowledge them! It is all part of the process.

17) Take a photo of your piece and upload it to your week's folder

*Adapted from Susan Clark's “Painting Without Brushes” activity (Clark, 2015)

Activity 2

Estimated Time: at least 15 minutes

Materials (all available in art room):

- Any paper you desire
- Tape
- Markers
- Any additional/desired materials

****PLEASE DO NOT REMOVE ART MATERIALS (markers, watercolors, etc.) FROM ROOM AFTER USING****

Scribbling with Both Hands:

During this part of the activity we will focus practicing mindfulness via “observing thoughts” and practicing “non-judgment” towards them—specifically in terms of potentially ruminative thoughts. Feel free to review the ideas described in the information page this week to practice them while completing your art activity. It is easy for your mind to wander and begin to ruminate, but allow worrisome thoughts to come and observe them non-judgmentally as you attempt to stay in the present moment.

- 1) Tape your paper to your drawing surface (e.g. a table). The size of the paper does not matter too much; generally bigger paper is recommended
- 2) Choose a drawing utensil (markers, pencils, etc.) and hold one in each hand (see example 5c)
- 3) Begin making scribbles simultaneously with both hands all over your paper. Don't try to draw anything in particular...just scribble!

*The process seems to be more effective when done standing but do whatever seems comfortable to you!

- 4) Try to scribble rhythmically using large, strong, gestures

- 5) Continue the scribbling process until you feel like stopping. Grab some more paper and create another!
- 6) Use different colors, materials, etc. Remember to practice mindfulness the entire time and to spend at least 15 minutes on your scribbles (example 5d)
- 7) **Take a photo of your piece and upload it to your week's folder**

*Adapted from Susan Clark's "Scribbling with Both Hands" activity (Clark, 2015)

Activity 3 **Visual Journaling**

This part of the activity will be done every week. Follow this 3-step method each time you visually journal; **we recommend visual journal entries take place on different days of the week**. Remember, this process is for *you* and not meant to be distressing! Entries do not have to look perfect!

Step 1: Pause at some point during your day and focus on your current experience of self and your environment. Ask yourself "what is happening in my life right now?" and "what am I thinking and feeling in response to these events?" Make sure not to ruminate about these things, but acknowledge them and move on to the next step.

Step 2: Create an image in response to the present moment. Let it symbolically express the feelings and thoughts you observed in step 1.

Step 3: Immediately put your journal away once you have completed your image and do not look at/think about your image until at least 1 hour later.

Step 4: Later in the day, return to your entry and mindfully observe it. Think about the piece and describe it non-judgmentally in your mind in response (e.g. "there is a lot of red colors, it is very angular," etc.). The overall goal of visual journaling is to develop greater awareness and understanding of your emotions and rumination.

Step 5: **Take a photo of your piece and upload it to your week's folder**

***complete this process 4 times per week. Each time, take a photo of your piece and upload it to your week's folder**

Appendix G

Week 6 Information and Activities

Week 6

For our final week, we will be revisiting rumination-distress tolerance skills. Specifically, we will practice the skill of using “Pros and Cons” in rumination-urge situations. While this skill can prove beneficial in any crisis/urge situation (e.g. urge to self-harm, urge to engage in eating disordered behaviors, etc.), we will focus on the urge to ruminate. Use pros and cons any time you must decide between 2 courses of action; acting on your urge to ruminate or resisting your urge to ruminate.

**A rumination-urge is a crisis situation when it is very strong and when acting on the urge will make things worse in the long term

- 1) Think about and list the pros and cons of acting on your rumination urges in general. These might be to engage in harmful behaviors in addition to rumination, or they might be to give in, give up, or avoid doing what is necessary to build a life you want to live (e.g., if you get in a fight with a loved one, a rumination urge would involve replaying the event over and over, and asking “Why didn’t I say this or that?”)
- 2) Make another list of the pros and cons of resisting rumination urges—that is, tolerating the distress and not giving in to the urges (e.g., choosing to use distractions to help the extreme emotions of the aforementioned fight subside before thinking about the situation again)
- 3) Evaluate both sets of pros and cons. Save these pros and cons and rehearse them for when a rumination-urge may hit again.

Examples of some rumination pros and cons:

Pros: ruminating is an easy, instinctive response, makes you feel like you are addressing a situation, etc.

Cons: ruminating isolates you, increases your negative emotions, lowers self-esteem, etc. (revisit the first week’s information for more!)

Pros/cons of resisting rumination could include:

Pros: It can break the cycle of negativity, resisting can help you rationally solve problems, it can help you move forward in life, increases self-esteem, etc.

Cons: resisting is not your natural response and is difficult, may seem like you are ignoring your problems at first, could feel unproductive, etc.

We will further explore these concepts in our activities for this week! Keep this in mind as you begin.

Activity 1

Estimated Time: 10-20 minutes

Materials (all available in art room):

- A sheet of copy paper (or any other desired paper that is roughly the same size)
- Markers
- Pencils

- Collage materials
- Any other desired materials

****PLEASE DO NOT REMOVE ART MATERIALS (markers, watercolors, etc.) FROM ROOM AFTER USING****

Visual Pros-and-Cons Part 1

During this activity, we will be visually depicting pros and cons of rumination that we discussed in the information section this week. Feel free to revisit it at any point during the activities (reading it beforehand is highly recommended!). Considering in advance the benefits and consequences of rumination (and any behavior for that matter) is a key strategy to increase both motivation and commitment to positive change. In the heat of an emotional moment in which we feel the urge to ruminate, having a list in mind of already-identified pros and cons regarding ruminating is incredibly beneficial and reminds us why we are choosing not to ruminate. Remember to be mindful as you produce art and that you don't have to make it perfect!

**For this activity you may focus on pros/cons of rumination in general, or you can think of a specific instance. Sometimes having specificity can help you think of more examples. If thinking of specific personal examples is too distressing for you, feel free to utilize the following situation:

“You make an unsatisfying grade on a test and feel the urge to ruminate”

*this activity is supposed to be fun and NOT stressful! If you feel yourself frustrated, remember to observe your thoughts, and non-judgmentally acknowledge them! It is all part of the process.

- 18) Obtain a sheet of paper
- 19) Decide whether to address rumination in general or a specific example of an instance one would ruminate in
- 20) Draw a large plus sign on your paper—dividing it in 4 equal sections (see example 6a)
- 21) Create a symbol to place at the top 2 sections to identify one as “pros” and the other as “cons.” Draw a line beneath them to help identify them as labels (see example 6b) This may be simple or as complex as you wish (e.g., pros: a green circle, cons: a red “X”)
- 22) Create a symbol to place on the **top and bottom left boxes** to represent “acting on rumination urges” and “resisting rumination urges,” respectively. Draw a line separating them from the rest of the boxes to help identify them as labels (see example 6c). Again, this may be simple or complex as you wish (e.g. acting on: an exclamation point, resisting: a stop sign).

*Don't forget, if you don't feel comfortable drawing, you can use collage materials!

- 23) For the top sections, think of at least 2 pros/cons of **acting on rumination** urges and on the bottom sections, 2 pros/cons of **resisting them**. More examples are more helpful! Really think about these things and how they are personal to you.
- 24) Visually depict the examples you thought of for each of the 4-box combinations. Keep it simple or go all-out. Use whatever materials you wish and don't let art stress you out! Be

mindful and non-judgmental of your own work. In other words, practice the skills you have learned so far! (see example 6d)

**If you can't think of any examples for certain sections, feel free to revisit the information section this week and information from week 1. Even use the internet if you wish. However, examples tend to be more memorable and meaningful when you generate them yourself, so try your best to do so!

25) **Take a photo of your piece and upload it to your week's folder**

26) Make sure you save your work for the next activity!

*Adapted from Susan Clark's "Personal Pros-and-Cons placards" activity (Clark, 2015)

Activity 2

Estimated Time: at least 10 - 20 minutes

Materials (all available in art room):

- Your pros/cons from the previous activity
- Half of a sheet of paper or a roughly equal size of cardboard
- Markers
- Pencils
- Collage materials
- Any other desired materials

****PLEASE DO NOT REMOVE ART MATERIALS (markers, watercolors, etc.) FROM ROOM AFTER USING****

Visual Pros-and-Cons: Part 2:

During this activity, we will revisit your depictions of rumination pros/cons that you created in the first activity. In this specific activity, you will be identifying your top pro for not acting on your rumination-urge, and your top con for acting on rumination-urges. Having these #1s at the forefront of your minds will be very helpful for assisting in your move away from rumination. Remember that considering in advance the benefits and consequences of rumination is a key strategy to increase both motivation and commitment to positive change. In the heat of an emotional moment in which we feel the urge to ruminate, having a list in mind of already-identified pros and cons of ruminating is incredibly beneficial to remind us why we are choosing not to ruminate.

- 1) Take out your visual pros and cons sheet you created during the last activity
- 2) Go over each square to refresh your memory.
- 3) Pick out your **#1 Pro for resisting your urge to ruminate**. In other words, what most encourages you to not engage in rumination? Put a star by it.
- 4) Pick out your **#1 Con for acting on rumination urges**. What most discourages you from ruminating? Put a star by it as well.
- 5) Cut a blank sheet of copy paper in half, or find a piece of cardboard roughly the same size

- 6) Use whatever materials you wish to re-depict each of your starred items. Add more detail in terms of “explaining” via imagery, or embellish your designs more (enough for at least 10 minutes of art-making). This could involve making a small comic on the paper, showing a “snapshot” of the event, or showing different examples of the same event (e.g., representing having higher self-esteem by drawing a smiling figure and many designs emerging from the head to symbolize positivity; see example 6e)
- 7) **Take a photo of your piece and upload it to your week’s folder**

**Keeping these pros and cons around can be very helpful in the midst of rumination! We encourage you to keep these and reflect on them every now and then to encourage your positive change!

*Adapted from Susan Clark’s “Personal Pros-and-Cons placards” activity (Clark, 2015)

Activity 3 Visual Journaling

This part of the activity will be done every week. Follow this 3-step method each time you visually journal; **we recommend visual journal entries take place on different days of the week**. Remember, this process is for *you* and not meant to be distressing! Entries do not have to look perfect!

Step 1: Pause at some point during your day and focus on your current experience of self and your environment. Ask yourself “what is happening in my life right now?” and “what am I thinking and feeling in response to these events?” Make sure not to ruminate about these things, but acknowledge them and move on to the next step.

Step 2: Create an image in response to the present moment. Let it symbolically express the feelings and thoughts you observed in step 1.

Step 3: Immediately put your journal away once you have completed your image and do not look at/think about your image until at least 1 hour later.

Step 4: Later in the day, return to your entry and mindfully observe it. Think about the piece and describe it non-judgmentally in your mind in response (e.g. “there is a lot of red colors, it is very angular,” etc.). The overall goal of visual journaling is to develop greater awareness and understanding of your emotions and rumination.

Step 5: Take a photo of your piece and upload it to your week’s folder

***complete this process 4 times per week. Each time, take a photo of your piece and upload it to your week’s folder**

Appendix H

Figure H1

Participant Example: Painting Without Brushes



Figure H2

Participant Example: Visual Journal Entry

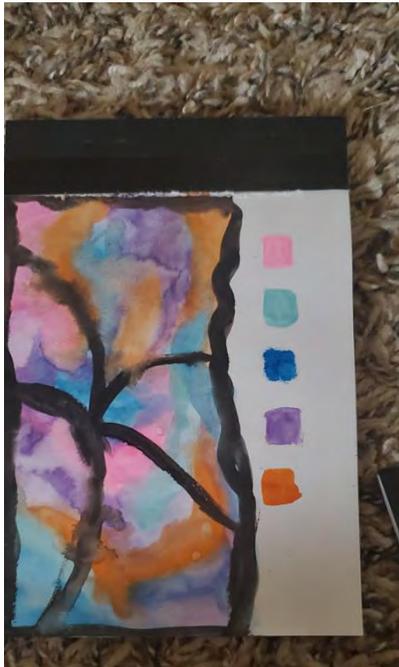


Figure H3

Participant Example: Scribbling with Both Hands



Appendix I

Figure I1

Treatment Group NSSI Averages Across 6 Weeks

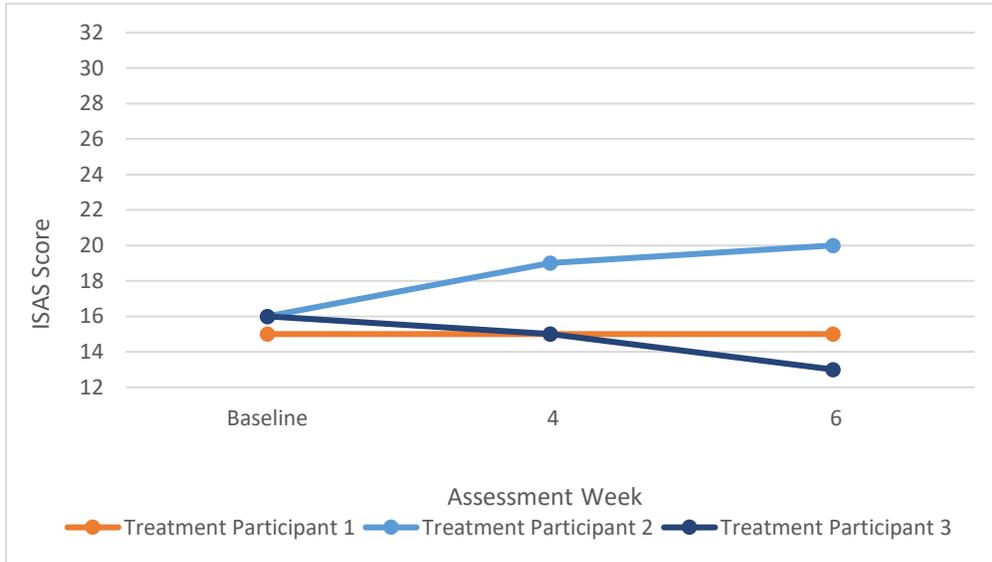
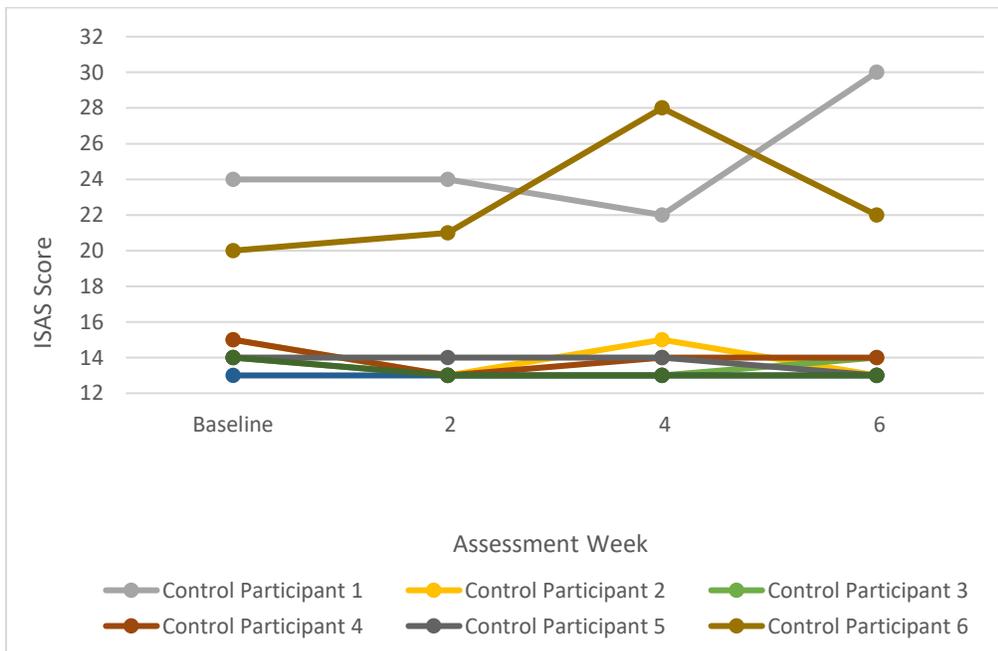


Figure I2

Control Group NSSI Averages Across 6 Weeks



Appendix J

Figure J1

Treatment Group Rumination Averages Across 6 Weeks

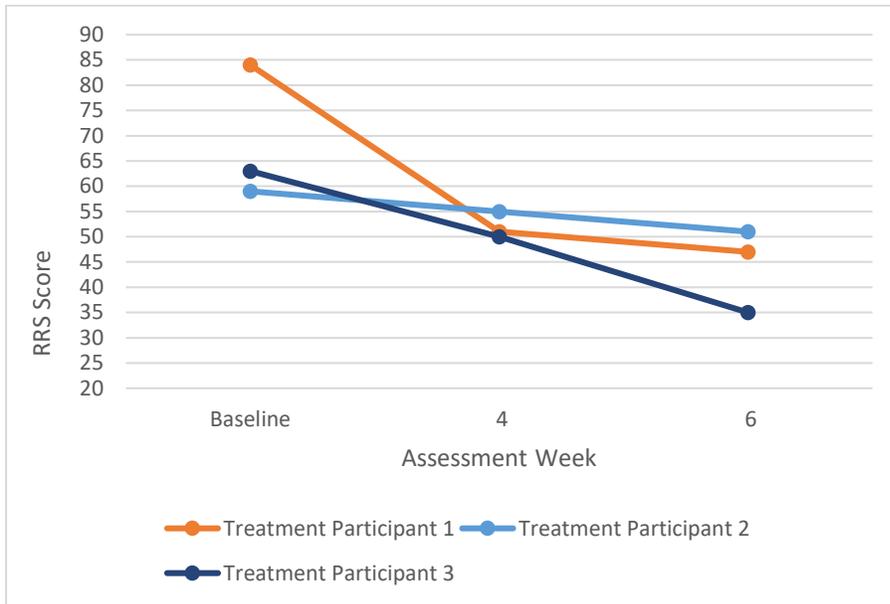


Figure J2

Control Group Averages Across 6 Weeks

