

# The Worse Are Well, and the Well Are Worse: Emotion Regulation Difficulties and Their Relationship with Psychological Functioning During COVID-19

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## Abstract

The COVID-19 pandemic introduced a myriad of mental health consequences; however, it remains largely unknown why specific individuals may be more vulnerable to increases in psychological distress than others. Individuals' capacity for emotion regulation may indicate how one experiences distress during COVID-19. The present study aims to understand which specific emotion regulation skills most impact the psychological functioning of psychotherapy clients during COVID-19. Psychotherapy clients ( $N = 33$ ) completed the Brief Difficulty in Emotion Regulation Scale (DERS-18), to measure six domains of emotion dysregulation, and the Outcome Questionnaire 30 (OQ-30.2) to measure psychological functioning during treatment. Multilevel Modeling (MLM) was conducted in R to measure the incremental effect of each DERS sub-scale on pre-and post-COVID-19 psychological functioning. As expected, clients with difficulties in emotional awareness and goal-directed behavior experienced worse psychological functioning during COVID-19. However, clients with difficulties in emotional self-efficacy, impulse control, and acceptance of negative emotions surprisingly reported deterioration of psychological functioning to a *lesser* degree than their counterparts with better regulation skills. Coping during a crisis is not uniform. Clinicians must understand how different emotion regulation skills play a role in navigating distress. Further, this evidence sheds light on how those who appear to be "doing worse" may have more tools to cope with circumstances out of their control.

*Keywords:* Emotion regulation, COVID-19, psychological distress, psychotherapy, telehealth

The COVID-19 global pandemic socially, economically, and psychologically altered many facets of our society. These changes led to global reports of higher levels of loneliness, depression, anxiety, suicide ideation, substance abuse, and overall deteriorating psychological wellness (Cao et al., 2020; Cucinotta & Vanelli, 2020; Czeisler et al., 2020; Hamm et al., 2020; Inchausti et al., 2020; Odriozola-González et al., 2020; Sood, 2020). Emerging studies showed that the continued support of psychotherapy via telehealth played a positive role in mitigating such psychological deterioration when in-person therapy was unavailable (Inchausti et al., 2020; Silver et al., 2020; Zhou et al., 2020). Similarly, individuals' strong emotion regulation skills, the process of

maintaining and modifying one's emotional experience, is a predictor of wellness during peak COVID-19 changes (Panayiotou et al., 2021; Prout et al., 2020). Approach-oriented emotion regulation strategies are shown to be more effective in managing negative emotions during the pandemic than avoidance-based strategies (Restubog et al., 2020). As such, each emotion regulation skill may impact the quality of life during lockdown differently (Panayiotou et al., 2021; Prout et al., 2020). Given that overall emotion regulation mediates treatment outcomes, therapists may improve treatment during global crises by applying a detailed emotion regulation framework (Gratz et al., 2015).

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Psychological functioning broadly refers to an individual's interpersonal functioning, quality of life, and symptom severity and can be measured at several stages of treatment to evaluate its effectiveness (Beckstead et al., 2003). The impact of global health crises on individuals' psychological functioning is articulated in the literature (Bults et al., 2011; Maunder et al., 2003; Shultz et al., 2016). However, existing studies neither address the impact of specific emotion regulation skills nor analyze a treatment-seeking population who transitioned to telehealth during COVID-19. The purpose of this study is to understand which specific emotion regulation difficulties most impact psychological functioning, specifically for psychotherapy clients who transitioned to telehealth during the COVID-19 lockdown.

### **Mental Health and COVID-19**

Adjusting to life during COVID-19 introduced uncertainty, medical risks, racial discrimination, personal losses, financial losses, and isolation—all of which undoubtedly contributed to widespread emotional distress and increased risk for psychopathology. Loneliness, domestic violence, substance abuse, depression, anxiety, and higher suicide risk increased during the first two years of the COVID-19 pandemic in several countries (Czeisler et al., 2020; Inchausti et al., 2020; Rambaran, 2020; Sood, 2020). This is apparent in the way individuals communicate to peers and family, too; overall, levels of communication about negative emotions increased, while positive emotions and life satisfaction decreased (Li et al., 2020, Wang et al., 2020). Further, those with psychiatric diagnoses may be emotionally impacted by COVID-19 to a greater extent than those without such conditions (Fernandez-Aranda et al., 2020; Yao et al., 2020). The broad range of individual outcomes points to the importance of

exploring new ways to understand and mitigate psychological distress.

### **Individual Responses to Distress**

Understanding how people cope during adverse experiences informs clinical work and may illuminate variations in psychopathology. The unprecedented nature of the COVID-19 pandemic unveiled a variety of individual coping strategies for managing anxiety around health and safety (Sood, 2020). However, research indicates that coping during a crisis is not uniform; individuals' health and lived experiences may inform their response. Observing how individuals manage during a disaster offers researchers an opportunity to understand how people may even thrive in adverse conditions. The effects of separation of families in London during World War II during the Blitz varied in different children; disparities in children's outcomes showed that some children were affected by the separation while others were not (Rao, 2020). There are implications that some people are predisposed to withstand the effects of a crisis while others may suffer.

While studies (Fullana et al., 2020; Tuason et al., 2021) include statistics on coping strategies and emotion regulation in normative populations, the current study focuses on emotion regulation in a clinical sample. For example, during the pandemic, older adults with pre-existing major depressive disorder (MDD) were coping better than expected, with no overall increase in clinical depression, anxiety, or suicidal thoughts (Hamm et al., 2020). These results indicate that not all individuals will suffer harmful effects while weathering a crisis. This is an important consideration when understanding that clinical interventions should consider variations in emotion regulation, particularly in a time of global turmoil

and uncertainty.

### **Mixed Impact of Telehealth**

The pandemic posed tremendous challenges to the mental health field with an abrupt shift to telehealth methods, forcing many therapists to adapt to a new modality of work to provide psychological relief to those in need (Bekes & Doorn, 2020; Miu et al., 2020; Silver et al., 2020). This introduced various challenges, including privacy and space concerns, technology issues, data security, and accessibility (Bierbooms et al., 2020; Jurcik et al., 2020).

Nonetheless, the field demonstrated flexibility, creativity, and responsiveness, presenting novel opportunities beyond in-person therapy, especially for clients who may find in-person therapy inhibiting or anxiety-provoking (Silver et al., 2020). Finally, some therapists report higher engagement and utility of psychotherapy during times of increased social isolation because of patients' desire to maintain a connection (Miu et al., 2020; Silver et al., 2020).

Given the importance of telehealth, mixed reports of effectiveness necessitate additional research to understand how psychotherapy clients are faring during COVID-19 and whether telehealth ameliorates psychological distress. Similar to responses in distress overall, there may be personal reasons that some adapt better to telehealth while others do not; these nuances must be examined. Emotion regulation and dysregulation and its relationship to psychotherapy treatment outcomes may predict a client's psychological functioning during COVID-19 and, inherently, their response to telehealth (Gross & Munoz, 1995; Gratz et al., 2015; Keltner & Kring, 1998).

### **Emotion Regulation and Distress**

The constructs of emotion regulation and

dysregulation are increasingly used to explain many forms of psychological disorders and maladaptive behaviors (Gross & Munoz, 1995; Keltner & Kring, 1998). William James (1884) defines emotions as adaptive behavioral and physiological response tendencies that surface in evolutionarily significant situations. *Emotion regulation* describes the processes by which an individual influences which emotions they have, when they have them, and how they experience and express these emotions (Gross, 1998). Gross (1998) also takes a process model view of emotion regulation, indicating that emotion can be regulated at five points in one's emotional process: (a) selection of a situation, (b) modification of the situation, (c) deployment of attention, (d) change of cognitions, and (e) modulation of responses. Psychoanalytic frameworks (Freud, 1959) and stress and coping traditions (Selye, 1956) emphasize the urge to minimize anxiety and negative emotion, and thus both traditions inform contemporary theories of emotion regulation.

Despite its clinical significance, the field has not entirely reached a consensus on the best way to define and measure emotion dysregulation, and our understanding of it continues to evolve (Gratz et al., 2015). Historically, measures of emotion dysregulation focused exclusively on a single population (e.g., examining adolescents solely) or a single aspect of emotion dysregulation (Weinberg & Klonsky, 2009). Some definitions of emotion regulation focus on the control of emotions and expressions and the reduction of emotional arousal (Garner & Spears, 2000; Kopp, 1989), while others focus on the functional nature of emotions or lack thereof (Cole et al., 1994). To account for this, Gratz and Roemer (2004) developed and validated the first measure of *several* clinically relevant difficulties in emotion regulation, the Difficulties in

Emotion Regulation Scale (DERS). DERS builds on theoretical work in emotion dysregulation in Borderline Personality Disorder (BPD; Linehan, 1993) and prior existing measures for emotion dysregulation such as the Negative Mood Regulation Scale (Catanzaro & Mearns, 1990). However, it also expands the phenomena, recognizing that emotion regulation extends beyond the minimization of negative emotion and includes aspects of awareness, acceptance, and goal-directed behavior capacity, for example (Gratz & Roemer, 2004). Since then, a shortened version of this scale (DERS-18) was created to improve its efficiency while still measuring the original six domains of emotion dysregulation (Victor & Klonsky, 2016). This measure was selected for use in the present study for its brevity, given that it was administered in conjunction with other measures at each clients' intake.

### **Emotion Dysregulation and Psychotherapy**

Given that the ability to experience, label, and regulate emotions is crucial for psychological functioning (Kubzansky et al., 2011), emotion regulation is a key focus area during psychotherapy treatment and managing distress (Grecucci et al., 2017). As such, several emotion-focused approaches to psychotherapy emerged in recent years to treat a broad range of psychopathologies, including, but not limited to, Dialectical Behavior Therapy (DBT; Linehan, 1993), Emotion Regulation Therapy (ERT; Renna et al., 2017), Schema Therapy (Fassbinder et al., 2016), Skills Training in Affect and Interpersonal Regulation (STAIR), and Acceptance and Commitment Therapy (ACT; Gloster et al., 2020). Even treatments that do not specifically target emotion regulation may still positively impact emotion regulation (Gratz et al., 2015). Furthermore, improvements in emotion regulation skills and diminishing difficulties in

emotion regulation mediate symptom improvement in eating disorders, substance use disorders, BPD, deliberate self-harm, and depression (Gratz et al., 2015). However, little research connects intervention outcomes with changes in specific dimensions of emotion regulation (Gratz et al., 2015).

### **Emotion Dysregulation and COVID-19**

While the sweeping negative mental health consequences of COVID-19 are undisputed, our understanding of why psychological responses to COVID-19 are not uniform remains nascent. Many studies looked at the differences in responses between demographics, exploring dynamics between extroverts and introverts, males and females, and older and younger participants (Sonderskov et al., 2020). Studies also examine an individual's circumstances, revealing that those with a more significant duration of confinement, difficulty securing medical care, and greatest financial losses experienced the greatest psychological impact (Brooks et al., 2020; Pfefferbaum & North, 2020). However, few studies examine a skills-based model of conceptualizing the distress and the potential factors that protect against such despair.

An individual's emotional competence may predict distress levels during COVID-19 and shed light on opportunities for psychotherapy interventions (Park et al., 2021; Restubog et al., 2020). Velotti and colleagues (2020) found that emotion overall emotion dysregulation partially mediated the longitudinal relationship between loneliness and depression in response to COVID-19. This points to the therapeutic demand to support the regulation of negative emotional states and understand emotion regulation in a more nuanced way. Regarding specific emotion regulation skills and

positive life outcomes, one recent study on college students found that the ability to describe one's emotions and access emotion regulation strategies was the most significant predictor of quality of life maintenance during COVID-19 (Panayiotou et al., 2020). Paradoxically, the same study also found that difficulty identifying and describing emotions (alexithymia) was related to a better quality of life during COVID-19, likely because it may prevent complete encoding of the negative experience.

That said, there are several discrete domains of emotion regulation difficulties (e.g., low emotional awareness), and no known study to date addresses each of the specific domains of emotion dysregulation to understand the impact of COVID-19. Further, no study to date explores the relationship between emotion regulation and COVID-19 quality of life within a psychotherapy treatment-seeking population.

### **The Present Study**

The purpose of the present study is to examine which specific emotion regulation skills most impact the psychological functioning of psychotherapy clients during COVID-19. Psychological functioning and emotion dysregulation were measured at several psychotherapies stages at the Safran Center for Psychological Services at The New School. Each client in the present sample was classified as having as high or levels of each emotion regulation difficulty; there are a total of six. Using a multi-level linear model, psychological functioning was compared pre-and post-COVID-19 lockdown between the high and low groups.

The authors hypothesized that 1) psychological functioning will worsen to a significantly greater extent for clients with less overall emotion regulation difficulties than for those with more

emotion regulation difficulties, and 2) each individual emotion regulation will have a different impact on psychological functioning in response to the pandemic; difficulties in emotional awareness, goal-directed behaviors, and self-efficacy will be the most significant of psychological worsening. The implications of this study will illuminate ways that clinicians may hone into specific emotion regulation skills in helping clients navigate distress caused by global crisis and individual's situational traumas.

## **Methods**

### **Study Design**

An exploratory post-hoc analysis of psychotherapy clients was conducted using data collected from psychological intervention provided at The Safran Center for Psychological Services. The Safran Center offers low-fee brief psychotherapy intervention for various presenting problems using both psychodynamic and cognitive-behavioral approaches and a social justice framework. Therapists in the center are first-year clinical psychology doctoral students, and all services are provided in the context of clinical training. An exploratory posthoc analysis of psychotherapy clients was conducted using data collected from psychological intervention provided at The Safran Center for Psychological Services.

### **Participants**

Participants ( $N = 33$ ; female = 22, male = 10, gender non-conforming = 1) include individuals who began seeking psychological treatment at The Safran Center for Psychological Services. Participants were recruited for psychological services via word of mouth and social media. Ages ranged from 20 to 48 ( $M = 30.2$ ,  $SD = 6.41$ ). 64% of the sample identified as Caucasian/White, 18% as Asian or Pacific Islander, and 6% as black or

African American; the remainder declined to identify their race and ethnicity. 66% of clients identified as straight/ heterosexual, 12% as bisexual, 12% as gay/homosexual, and 10% as generally queer. Additional demographic information of client and therapist is listed in Tables 1 and 2 in the Appendix.

### **Procedures**

Data was extracted from the Safran Center Data repository, where all clients obtained informed consent to participate in the data repository and approved research studies. All clients underwent a thorough intake process including the completion of a demographic form and multiple assessment measures, including the Brief Difficulties in Emotion Regulation Scale (DERS-18). Each client then filled out the Outcomes Questionnaire (OQ-30.2) online before therapy sessions to assess their psychological functioning level to generate a report for the clinician, providing information regarding their client's progress relative to previous sessions. After the March 2020 stay-at-home orders in New York, therapy sessions were transitioned to a HIPPA-compliant zoom online. Clients continued to fill out the OQ-30.2 questionnaire before virtual therapy sessions.

### **Measures**

#### ***Brief Difficulty in Emotion Regulation Scale***

The (DERS-18; Victor & Klonsky, 2016), an 18-item self-report measure developed to facilitate understanding of how emotion dysregulation is associated with psychiatric symptoms, other emotion-related constructs, and treatment progress. This scale is a shortened modification of the original Difficulties with Emotion Regulation Scale (DERS; Gratz and Roemer, 2004). It consisted of 36 questions and was adapted to

increase its utility and reduce the participant burden. The DERS-18 demonstrates excellent reliability and validity despite half the questions and performs similarly to the original DERS measure. DERS also demonstrates validity across wide-ranging cultural contexts. The self-report questionnaire measures six emotion regulation difficulties: unwillingness to accept one's distress or negative emotional responses (Nonacceptance), difficulty engaging in goal-directed behavior and tasks when experiencing negative emotions (Goals), lack of control of one's behavior when experiencing negative emotions (Impulse), lack of awareness and acknowledgment of emotions (Awareness), limited access or awareness of strategies to help regulate emotions effectively (Strategies), and difficulty knowing and labeling what emotions are being experienced (Clarity).

#### ***Outcome Questionnaire 30.2***

(OQ-30.2; Ellsworth et al., 2006), a shortened version of the OQ-45.2 (Outcome Questionnaire; Lambert et al., 2004), which is widely used to measure patient progress during therapy interventions and is designed to be repeatedly administered during treatment and termination. Patient progress is measured within three core components of the patient's life: 1) subjective discomfort (intrapsychic functioning), 2) interpersonal relationships, and 3) social role performance. Each of these areas of functioning is measured along a continuum and captures how the patient feels inside, how well they get along with significant others, and how they manage important life tasks (e.g., work, school). Each item is scored on a five-point scale (0 to 4), with the total score yielding a range of possible scores of 0 to 120; changes in scores more significant than ten are estimated to be reliable. High scores are indicative of high symptom severity. The OQ-30.2 is,

however, not intended for patient diagnoses. The shortened version is sensitive to change over short periods and is designed to be brief while simultaneously maintaining high levels of reliability and validity. The results of the OQ-30.2 are used to measure patient functioning against their baseline functioning, as well as general population functioning.

### Analysis Plan

Multilevel modeling (MLM) was conducted in R (base; version 4.02) using the “lme4” package (Bates et al., 2015) as the data had a clear hierarchical structure (Tabachnick & Fidell, 2013). The “lmerTest” package (Kuznetsova et al., 2017) was used to calculate confidence intervals and significance values via Satterthwaite’s method (Giesbrech & Burns, 1985). Two-level linear mixed-effects models were built with assessment time-points (Session; Level 1 [ $ij$ ]), nested within participants (Level 2 [ $i$ ]). Restricted maximum likelihood (REML) estimation was used over complete information maximum likelihood (FIML) estimation as the number of Level 2 clusters was

relatively small such that FIML estimations would be more susceptible to error bias (Hox & McNeish, 2020). Participants were not nested within therapist as cluster sizes were too small (one to two patients assigned to each therapist). Seven models were built to test each hypothesis. Session (coded 0 to 33) and pre-/post-Covid-19 (C19; coded as -0.5 and 0.5, respectively) were included in the model as Level 1 predictors, while subscale scores (grand mean-centered) were included as a Level 2 predictor. A cross-level interaction between C19 and subscale score was also included in each model. Additional Level 2 predictors (e.g., age, gender, or therapist) could not be included in the models due to a lack of statistical power resulting from a small sample size. The analysis is focused on the difference in psychological functioning changes (OQ-30.2) between the two high and low groups, not the extent of the change for any given individual. Model assumptions and the influence of outliers were assessed by examining plots of residuals at each level. The models were specified as follows:

$$H_1: OQ \sim Total_j + Session_{ij} + C19_{ij} + Total.C19_{ij}$$

$$H_2: OQ \sim Awareness_j + Session_{ij} + C19_{ij} + Awareness.C19_{ij}$$

$$H_3: OQ \sim Clarity_j + Session_{ij} + C19_{ij} + Clarity.C19_{ij}$$

$$H_4: OQ \sim Goals_j + Session_{ij} + C19_{ij} + Goals.C19_{ij}$$

$$H_5: OQ \sim Impulse_j + Session_{ij} + C19_{ij} + Impulse.C19_{ij}$$

$$H_6: OQ \sim Non-acceptance_j + Session_{ij} + C19_{ij} + Non-acceptance.C19_{ij}$$

$$H_7: OQ \sim Strategies_j + Session_{ij} + C19_{ij} + Strategies.C19_{ij}$$

Significant interactions were probed using simple slopes analyses (Preacher, Curran, & Bauer, 2006), with high and low DERS total and subscale values being specified at one standard deviation above and below the mean.

## Results

### Missing Data Analysis

Little's Missing Completely at Random (Little, 1988) test was conducted on all outcome and covariate variables and found to be non-significant, indicating the data were missing completely at random,  $\chi^2(1370, N = 33) = 493.172, p = 1.000$ .

### Main Analyses

Descriptive statistics for each DERS subscale are set out in Table 3. The results of each model are set out in Table 4. There was a significant effect of session ( $b$  range = -0.43 to -0.45,  $p < .001$ ) and C19 ( $b$  range = 4.74 to 5.34,  $p < .001$ ) in each model, indicating that the severity of patients' psychological symptoms generally reduced as treatment progressed, but that patients' progress diminished after C19 began (see Figure 1). The effect of C19 on symptom severity varied depending on patients' total difficulties regulating emotion. However, contrary to hypotheses, simple slopes analysis revealed that symptom severity for patients with less difficulties in emotion regulation increased following C19,  $b = 7.15, SE = 1.46, p < .001$ , while patients who had more significant difficulties in emotion regulation were not significantly affected by C19,  $b = 3.00, SE = 1.60, p = .060$  (see Figure 2).

In terms of the individual DERS subscales, the extent of the effect of C19 on symptom severity did not depend on patients' 'clarity' in identifying emotions (see Figure 3) but did depend on the other five DERS subscales (awareness, goals, strategies, non-acceptance, and impulse). As expected, patients with lower levels of emotional awareness

experienced an increase in symptom severity  $b = 6.86, SE = 1.37, p < .001$ , on average, when compared to those with higher levels  $b = 3.81, SE = 1.26, p = .002$ ; see Figure 4. The OQ scores of patients with high emotional awareness increased by almost 4 points after C19, while patients low in emotional awareness increased by almost 7 points. Also as expected, symptom severity for patients who engaged in less goal-directed behavior increased following C19,  $b = 6.99, SE = 1.35, p < .001$ , to a greater extent than for patients reporting greater engagement in goal-directed behaviors,  $b = 3.16, SE = 1.36, p = .020$  (see Figure 5).

In contrast, clients who reported less control over their behaviors actually experienced a lower magnitude of symptom worsening,  $b = 3.03, SE = 1.37, p = .027$ , than clients who reported greater control over their behavior,  $b = 7.12, SE = 1.39, p < .001$  (see Figure 6). Also contrary to predictions, patients who were less accepting of negative emotional experiences did not experience a significant worsening in symptom severity after C19,  $b = 2.75, SE = 1.43, p = .055$ , while patients reporting a greater willingness to accept negative emotions experienced a significant worsening of symptom severity after C19,  $b = 6.99, SE = 1.31, p < .001$  (see Figure 7). Also unexpectedly, patients reporting lower use of strategies to regulate emotions did not experience a significant worsening in symptom severity after C19,  $b = 0.89, SE = 1.59, p = .576$ , while patients with greater use of emotion regulation strategies experienced a significant worsening of symptom severity after C19,  $b = 8.59, SE = 1.40, p < .001$  (see Figure 8).

## Discussion

The present research study explores an important gap in the literature on specific emotion regulation

difficulties and how they relate to psychological distress during a global crisis. While the focus of the present paper is COVID-19, future iterations of this work may explore other external problems, including political or economic historical markers. Overall, our preliminary results indicate that COVID-19 had a more significant adverse effect on our sample of patients who generally have *fewer* emotion regulation difficulties. While patients with less emotion dysregulation experienced symptom deterioration equivalent to a 7-point increase in OQ-30.2 score, patients with more dysregulation did not appear to worsen in symptom severity as a result of COVID-19 significantly.

The individual aspects of emotion regulation did not have a uniform or predictable impact on the effect of COVID-19. Results for two of the six emotion regulation domains (goals, awareness) aligned with the authors' hypothesis about awareness and goal-directed behavior protecting against the adverse impact of COVID-19. However, contrary to predictions, four of the six emotion regulation domains (impulse, strategies, non-acceptance, and clarity) align with the earlier finding that more significant emotion regulation difficulties don't necessarily lead to greater distress during COVID-19. For example, patients reporting higher levels of self-efficacy experienced a worsening in their symptom severity, increasing in OQ-30.2 scores by over 8.5 points on average as a result of COVID-19; patients with low self-efficacy did not experience a worsening of symptoms as a result of COVID-19. This specific emotion regulation skill demonstrated the most significant difference between low and high emotion regulation difficulty groups. This may illuminate how higher functioning individuals may experience more substantial disruption by a global health crisis, mainly because it is out of their control. Also,

contrary to predictions, patients who were more willing to accept their emotional responses experienced a more significant increase in distress following COVID-19 than patients who were not accepting of their negative emotions. This finding, in particular, aligns with the literature on avoidance strategies protecting one's psychological well-being during times of crisis (Restubog et al., 2020). Finally, patients reporting lower levels of impulsivity experienced a worsening of symptom severity because of COVID-19, more than double that of patients with high levels of impulsivity. Perhaps those who exhibit greater urges to control their behaviors and environments are bound to experience more significant distress under largely uncontrollable circumstances.

So why did some unexpectedly seem to cope better than others, and how do we make sense of this phenomenon? Lei and colleagues (2014) demonstrated that individuals with major depressive disorder (MDD) and overall greater maladaptive emotion regulation skills indicate one strategy more effectively than healthy controls: *acceptance*. During a crisis, pre-existing conditions such as anxiety and depression may fortify a portion of the population by "normalizing" what they experience daily. While in other realms, individuals who experience a sense (or illusion) of control and order find their world distorted and disorganized and struggle to cope with the rapid change.

It, therefore, cannot be assumed that an affected population will exhibit maladaptive behaviors during a catastrophe. A study conducted shortly after the September 11 terrorist attacks captured not only the pervasive depression that ensued, but also the emergence of positive emotions such as gratitude, interest, and love (Fredrickson et al., 2003). Positive emotions were also associated with

resilience in those who thrived after such a tragic event. Individuals may experience gratitude in simple pleasures that may otherwise be taken for granted to regulate affect.

Emotional *flexibility* may become more critical in coping with uncertainty than simply a lack of emotion regulation *difficulty*. Psychological flexibility refers to a person's ability to consciously engage in the present moment and the capacity to adapt or adhere to behavior that promotes chosen values (Bond et al., 2006). Acceptance and Commitment Therapy (ACT) is an evidence-based intervention that incorporates acceptance strategies to increase psychological flexibility. Rather than avoid circumstances that lead to discomfort and potentially exacerbate symptoms of psychopathology, the ACT approach proposes that psychological health involves accepting both positive and negative emotions instead of working against negative experiences, which may lead to maladaptive behavior and worsening symptoms (Blackledge & Hayes, 2001). While we realize that incorporating negative emotions may be difficult for some, ACT is a process that may help an individual accept that adversity is a facet of lived experience and facing distress, rather than avoiding it, may lead to increased mental and physical health. This provides vast new territory for exploration for many clinicians working with patients struggling during COVID-19.

The timing of the study and switch from in-person psychotherapy to telehealth similarly required many clients (and therapists) flexibility. It's possible that this transition exacerbated existing pandemic-related anxieties for those unable to demonstrate such flexibility and provided ease for others. While the shift was beneficial by providing uninterrupted support, many clients still do not prefer telehealth.

Qualitative inquiry is required to examine the subjective experience of the transition to telehealth. A recent qualitative study showed that only 3 of 20 participants would elect to receive telehealth for psychological services in the future (Venville et al., 2021). Additionally, each therapist may have navigated this transition differently, further impacting the present study results for each client. Further analysis may examine additional details around the transition to telehealth, including treatment modality, level of client engagement, and therapeutic alliance throughout the peak of the crisis.

### **Limitations and Future Research**

While this study explored the emotion sub-skills and their relationship to distress during COVID-19, future research must address the adversity faced by psychotherapy clients in the context of other crises and global issues. Future research may also further explore sub-samples of psychotherapy clients. Importantly, this study examined a small sample of clients and would benefit from a larger, more diverse sample with more males and individuals of an ethnic and sexual minority. A more significant number of participants would also enable future studies to control for demographic covariates (e.g., age and gender) and whether participants had a diagnosable mental health disorder. The *post hoc* exploratory design of the present study prevented the collection and analysis of data relating to other potential mediators or moderators of the effect of COVID-19 on patient symptom progression. These modifications would allow the current findings to translate across more demographically balanced groups and periods.

Separately, given that much of the findings tie back to a theme of control, future researchers have much opportunity to explore this concept further using

instruments and measures that capture the degree to which the illusion of control indeed plays a role in psychological functioning during the crisis. Further, developing a detailed understanding of individual disorders in which emotion regulation is particularly impacted may also fruit future findings. Additionally, comparing the client population by type of psychotherapy (e.g., psychodynamic, CBT, etc.) may be insightful to assess the effectiveness of such therapies on emotion regulation and psychological functioning.

### References

- Bates, D., Mächler, M., Bolker, B., & Walker, S. (2015). Fitting Linear Mixed-Effects Models Using lme4. *Journal of Statistical Software*, 67(1), 1–48. <https://doi.org/10.18637/jss.v067.i01>
- Beckstead, D. J., Hatch, A. L., Lambert, M. J., Eggett, D. L., Goates, M. K., & Vermeersch, D. A. (2003). Clinical significance of the Outcome Questionnaire (OQ-45.2). *The Behavior Analyst Today*, 4(1), 86.
- Békés, V., & Aafjes-van Doorn, K. (2020). Psychotherapists' attitudes toward online therapy during the COVID-19 pandemic. *Journal of Psychotherapy Integration*, 30(2), 238. <https://doi.org/10.1037/int0000214>
- Bierbooms, J. J., van Haaren, M., IJsselstein, W. A., de Kort, Y. A., Feijt, M., & Bongers, I. M. (2020). Integration of online treatment into the “new normal” in mental health care in post-COVID-19 times: Exploratory qualitative study. *JMIR Formative research*, 4(10), e21344. <https://doi.org/10.2196/21344>
- Bond, F. W., Hayes, S. C., & Barnes-Holmes, D. (2006). Psychological flexibility, ACT, and organizational behavior. *Journal of Organizational Behavior Management*, 26(1-2), 25-54.
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet*, 395(10227), 912-920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)
- Bults, M., Beaujean, D. J., de Zwart, O., Kok, G., van Empelen, P., van Steenberghe, J. E., ... & Voeten, H. A. (2011). Perceived risk, anxiety, and behavioural responses of the general public during the early phase of the Influenza A (H1N1) pandemic in the Netherlands: results of three consecutive online surveys. *BMC public health*, 11(1), 1-13.
- Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry research*, 287, 112934. <https://doi.org/10.1016/j.psychres.2020.112934>
- Catanzaro, S. J., & Mearns, J. (1990). Measuring generalized expectancies for negative mood regulation: Initial scale development and implications. *Journal of Personality Assessment*, 54, 546–563.
- Cavicchioli, M., Movalli, M., Ramella, P., Vassena, G., Prudenziati, F., & Maffei, C. (2020). Feasibility of dialectical behavior therapy skills training as an outpatient program in treating alcohol use disorder: The role of difficulties with emotion regulation and experiential avoidance. *Addiction Research & Theory*, 28(2), 103-115.
- Cole, P. M., Michel, M. K., & Teti, L. O. D. (1994). The development of emotion regulation and dysregulation: A clinical perspective. *Monographs of the society for research in child development*, 59(2-3), 73-102. <https://doi.org/10.1111/j.1540-5834.1994.tb01278.x>
- Czeisler, M. É., Lane, R. I., Petrosky, E., Wiley, J. F., Christensen, A., Njai, R., Rajaratnam, S. M. (2020). Mental health, substance use, and suicidal ideation during the COVID-19 pandemic—United States, June 24–30, 2020. *Morbidity and Mortality Weekly Report*, 69(32), 1049. <https://doi.org/10.1016/j.jpsychires.2021.05.080>
- Fernández-Aranda, F., Casas, M., Claes, L., Bryan, D. C., Favaro, A., Granero, R., ... & Treasure, J. (2020). COVID-19 and implications for eating disorders. *European Eating Disorders Review*, 28(3), 239. <https://doi.org/10.1002/erv.2738>
- Freud, S. (1959). Inhibitions, symptoms, anxiety (J. Strachey, Ed., & A. Strachey, Trans.). *Norton*. (Original work published 1926).
- Fullana, M. A., Hidalgo-Mazzei, D., Vieta, E., & Radua, J. (2020). Coping behaviors associated with decreased anxiety and depressive symptoms during the COVID-19 pandemic and lockdown. *Journal of affective disorders*, 275, 80–81. <https://doi.org/10.1016/j.jad.2020.06.027>
- Garner, P. W., & Spears, F. M. (2000). Emotion regulation in low-income preschoolers. *Social Development*, 9(2), 246-264. <https://doi.org/10.1111/1467-9507.00122>
- Giesbrecht, F. G., & Burns, J. C. (1985). Two-Stage Analysis Based on a Mixed Model: Large Sample Asymptotic Theory and Small-Sample Simulation Results. *Biometrics*, 41(2), 477–486. <https://doi.org/10.2307/2530872>
- Gloster, A. T., Walder, N., Levin, M., Twohig, M., & Karekla, M. (2020). The empirical status of acceptance and commitment therapy: A review of meta-analyses. *Journal of Contextual Behavioral Science*, 8, 181-192.
- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of psychopathology and behavioral assessment*, 26(1), 41-54.
- Gratz, K. L., Weiss, N. H., & Tull, M. T. (2015). Examining emotion regulation as an outcome, mechanism, or

- target of psychological treatments. *Current opinion in psychology*, 3, 85-90.
- Grecucci, A., Frederickson, J., & Job, R. (2017). Advances in emotion regulation: From neuroscience to psychotherapy. *Frontiers in psychology*, 8, 985.
- Gross, J. J., & Muñoz, R. F. (1995). Emotion regulation and mental health. *Clinical psychology: Science and practice*, 2(2), 151-164.
- Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of general psychology*, 2(3), 271-299.
- Hamm, M. E., Brown, P. J., Karp, J. F., Lenard, E., Cameron, F., Dawdani, A., ... & Lenze, E. J. (2020). Experiences of American older adults with pre-existing depression during the beginnings of the COVID-19 pandemic: a multicity, mixed-methods study. *The American journal of geriatric psychiatry*, 28(9), 924-932. <https://doi.org/10.1016/j.jagp.2020.06.013>
- Hox, J., & McNeish, D. (2020). Small Samples in Multilevel Modeling. In R. V. de Schoot & M. Milica (Eds.), *Small Sample Size Solutions* (pp. 215-225). Taylor & Francis. <https://doi.org/10.4324/9780429273872-18>
- Inchausti, F., Macbeth, A., Hasson-Ohayon, I., & Dimaggio, G. (2020). Telepsychotherapy in the age of COVID-19: A commentary. *Journal of Psychotherapy Integration*, 30(2), 394-405. <https://doi.org/10.1037/int0000222>
- James, W. (1948). What is emotion? 1884. *Mind*, 9, 188-204.
- Jurcik, T., Jarvis, G. E., Zeleskov Doric, J., Krasavtseva, Y., Yaltonskaya, A., Ogiwara, K., ... & Grigoryan, K. (2021). Adapting mental health services to the COVID-19 pandemic: reflections from professionals in four countries. *Counselling Psychology Quarterly*, 34(3-4), 649-675.
- Keltner, D., & Kring, A. M. (1998). Emotion, social function, and psychopathology. *Review of General Psychology*, 2(3), 320-342.
- Kopp, C. B. (1989). Regulation of distress and negative emotions: A developmental view. *Developmental psychology*, 25(3), 343.
- Kubzansky, L. D., Park, N., Peterson, C., Vokonas, P., & Sparrow, D. (2011). Healthy psychological functioning and incident coronary heart disease: The importance of self-regulation. *Archives of General Psychiatry*, 68, 400-408.
- Kuznetsova, A., Brockhoff, P. B., & Christensen, R. H. B. (2017). lmerTest Package: Tests in Linear Mixed Effects Models. *Journal of Statistical Software*, 82(13), 1-26. <https://doi.org/10.18637/jss.v082.i13>
- Lambert, M. J. (2012). Helping clinicians to use and learn from research-based systems: The OQ-analyst. *Psychotherapy*, 49(2), 109.
- Lei, H., Zhang, X., Cai, L., Wang, Y., Bai, M., & Zhu, X. (2014). Cognitive emotion regulation strategies in outpatients with major depressive disorder. *Psychiatry research*, 218(1-2), 87-92.
- Li, S., Wang, Y., Xue, J., Zhao, N., & Zhu, T. (2020). The Impact of COVID-19 Epidemic Declaration on Psychological Consequences: A Study on Active Weibo Users. *International journal of environmental research and public health*, 17(6), 2032. <https://doi.org/10.3390/ijerph17062032>
- Linehan, M. M., Heard, H. L., & Armstrong, H. E. (1993). Naturalistic follow-up of a behavioral treatment for chronically parasuicidal borderline patients. *Archives of general psychiatry*, 50(12), 971-974.
- Linehan, M. M. (1993). Cognitive-behavioral treatment of borderline personality disorder. *The Guilford Press*.
- Little, R. J. A. (1988). A Test of Missing Completely at Random for Multivariate Data with Missing Values. *Journal of the American Statistical Association*, 83(404), 1198-1202. <https://doi.org/10.1080/01621459.1988.10478722>
- Maunder, R., Hunter, J., Vincent, L., Bennett, J., Peladeau, N., Leszcz, M., & Mazzulli, T. (2003). The immediate psychological and occupational impact of the 2003 SARS outbreak in a teaching hospital. *Cmaj*, 168(10), 1245-1251.
- Miu, A. S., Vo, H. T., Palka, J. M., Glowacki, C. R., & Robinson, R. J. (2021). Teletherapy with serious mental illness populations during COVID-19: telehealth conversion and engagement. *Counselling Psychology Quarterly*, 34(3-4), 704-721. <https://doi.org/10.1080/09515070.2020.1791800>
- Odriozola-González, P., Planchuelo-Gómez, Á., Irurtia, M. J., & de Luis-García, R. (2020). Psychological effects of the COVID-19 outbreak and lockdown among students and workers of a Spanish university. *Psychiatry research*, 290, 113108. <https://doi.org/10.1016/j.psychres.2020.113108>
- Panayiotou, G., Panteli, M., & Leonidou, C. (2021). Coping with the invisible enemy: The role of emotion regulation and awareness in quality of life during the COVID-19 pandemic. *Journal of Contextual Behavioral Science*, 19, 17-27. <https://doi.org/10.1016/j.jcbs.2020.11.002>
- Park, C. L., Finkelstein-Fox, L., Russell, B. S., Fendrich, M., Hutchison, M., & Becker, J. (2021). Americans' distress early in the COVID-19 pandemic: Protective resources and coping strategies. *Psychological Trauma: Theory, Research, Practice, and Policy*, 13(4) 422-431. <https://doi.org/10.1037/tra0000931>
- Pfefferbaum, B., & North, C. S. (2020). Mental health and the Covid-19 pandemic. *New England Journal of Medicine*, 383(6), 510-512. <https://doi.org/10.1056/NEJMp2008017>
- Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational Tools for Probing Interactions in Multiple Linear Regression, Multilevel Modeling, and Latent Curve Analysis. *Journal of Educational and Behavioral Statistics*, 31(4), 437-448. <https://doi.org/10.3102/10769986031004437>
- Prout, T. A., Zilcha-Mano, S., Aafjes-van Doorn, K., Békés, V., Christman-Cohen, I., Whistler, K., ... & Di Giuseppe, M. (2020). Identifying predictors of psychological

- distress during COVID-19: a machine learning approach. *Frontiers in psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.586202>
- Rao, M. (2020, May 9). *The Melancholia Postulate*. The Atlantic. <https://www.theatlantic.com/culture/archive/2020/05/watching-melancholia-during-pandemic/611383/>.
- Renna, M. E., Quintero, J. M., Fresco, D. M., & Mennin, D. S. (2017). Emotion regulation therapy: a mechanism-targeted treatment for disorders of distress. *Frontiers in Psychology*, 8, 98. <https://doi.org/10.3389/fpsyg.2017.00098>
- Restubog, S., Ocampo, A., & Wang, L. (2020). Taking control amidst the chaos: Emotion regulation during the COVID-19 pandemic. *Journal of vocational behavior*, 119, 103440. <https://doi.org/10.1016/j.jvb.2020.103440>
- Selye, H. (1956). *The stress of life*. McGraw-Hill.
- Shultz, J. M., Cooper, J. L., Baingana, F., Oquendo, M. A., Espinel, Z., Althouse, B. M., ... & Rechkemmer, A. (2016). The role of fear-related behaviors in the 2013–2016 West Africa Ebola virus disease outbreak. *Current psychiatry reports*, 18(11), 1-14.
- Silver, Z., Coger, M., Barr, S., & Drill, R. (2020). Psychotherapy at a public hospital in the time of COVID-19: Telehealth and implications for practice. *Counselling Psychology Quarterly*, 1-9.
- Sood, S. (2020). Psychological effects of the Coronavirus disease-2019 pandemic. *Research & Humanities in Medical Education*, 7(11), 23-26.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics* (6th ed.). Pearson Education.
- Tuason, M. T., Güss, C. D., & Boyd, L. (2021). Thriving during COVID-19: Predictors of psychological well-being and ways of coping. *PLoS one*, 16(3), e0248591. <https://doi.org/10.1371/journal.pone.0248591>
- Velotti, P., Rogier, G., Beomonte Zobel, S., Castellano, R., & Tambelli, R. (2020). Loneliness, emotion dysregulation and internalizing symptoms during Covid-19: a structural equation modeling approach. *Frontiers in Psychiatry*, 11, 1498. <https://doi.org/10.3389/fpsyg.2020.581494>
- Venville, A., O'Connor, S., Roeschlein, H., Ennals, P., McLoughlan, G., & Thomas, N. (2021). Mental health service user and worker experiences of psychosocial support via telehealth through the COVID-19 pandemic: qualitative study. *JMIR Mental Health*, 8(8), e29671. <https://doi.org/10.2196/29671>
- Victor, S. E., & Klonsky, E. D. (2016). Validation of a brief version of the difficulties in emotion regulation scale (DERS-18) in five samples. *Journal of psychopathology and Behavioral Assessment*, 38(4), 582-589.
- Weinberg, A., & Klonsky, E. D. (2009). Measurement of emotion dysregulation in adolescents. *Psychological Assessment*, 21(4), 616.
- Yao, H., Chen, J.-H., & Xu, Y.-F. (2020). Patients with mental health disorders in the COVID-19 epidemic. *The Lancet Psychiatry*, 7(4), e21. [https://doi.org/10.1016/S2215-0366\(20\)30090-0](https://doi.org/10.1016/S2215-0366(20)30090-0)
- Zhou, X., Snoswell, C. L., Harding, L. E., Bambling, M., Edirippulige, S., Bai, X., & Smith, A. C. (2020). The role of telehealth in reducing the mental health burden from COVID-19. *Telemedicine and e-Health*, 26(4), 377-379. <https://doi.org/10.1089/tmj.2020.0068>

## Appendix

**Table 1**

*Sociodemographic Characteristics of Clients*

	<i>n</i>	<i>%</i>
<i>Gender</i>		
Female	22	66.7%
Male	10	30.3%
Gender Non-Conforming	1	3.0%
<i>Sexual Orientation</i>		
Straight/Heterosexual	22	66.7%
Gay	4	12.1%
Bisexual	4	12.1%
Queer	3	9.1%
<i>Ethnicity</i>		
Caucasian/White	21	63.6%
Asian or Pacific Islander	6	18.2%
Decline to Answer	3	9.1%
Black and African American	2	6.1%
Caucasian/White, Asian, or Pacific Islander	1	3.0%
<i>Income</i>		
Less than \$10,000	7	21.2%
\$10,000-\$14,999	3	9.1%
\$15,000-\$24,999	7	21.2%
\$25,000-\$34,999	2	6.1%
\$35,000-\$49,999	6	18.2%
\$50,000-\$74,999	5	15.6%
More than \$100,000	2	6.1%
Missing	1	3%
<i>Age</i>		
20–29	16	48.5%
30–39	14	42.2%
40–49	3	9.3%
<i>Employment Status</i>		
Full-time Employed	15	45.5%
Part-time employed	8	24.2%
Full-time student	4	12.1%
Not employed for pay	2	6.1%

	<i>n</i>	%
Other	4	12.1%
<i>Education</i>		
Associate's degree, academic	2	6.1%
Associate's degree, occupational/trade school	2	6.1%
Bachelor's degree	18	54.5%
Education (Highest Level Earned):	1	3.0%
High School Equivalent/GED	1	3.0%
High school graduate	1	3.0%
Master's degree	8	24.2%
Some universities/college, no degree	1	3.0%

**Table 2***Sociodemographic Characteristics of Therapist*

	<i>n</i>	%
<i>Therapist Gender</i>		
Female	11	91.7%
Male	1	8.3%
<i>Sexual Orientation</i>		
Straight/ Heterosexual	10	83.3%
Gay	1	8.3%
Bisexual	1	8.3%
<i>Racial and Ethnic Groups</i>		
Caucasian/White	8	66.7%
African American,	2	16.7%
Asian or Pacific Islander	1	8.3%
Decline to Answer	1	8.3%
<i>Income</i>		
Less than \$10,000	3	27.3%
\$10,000-\$24,999	2	18.2%
\$35,000-\$49,999	1	9.1%
\$50,000-\$74,999	2	18.2%
\$75,000-\$99,999	2	18.2%
More than \$100,000	1	9.1%

**Table 3***Descriptive statistics for DERS scale and subscales*

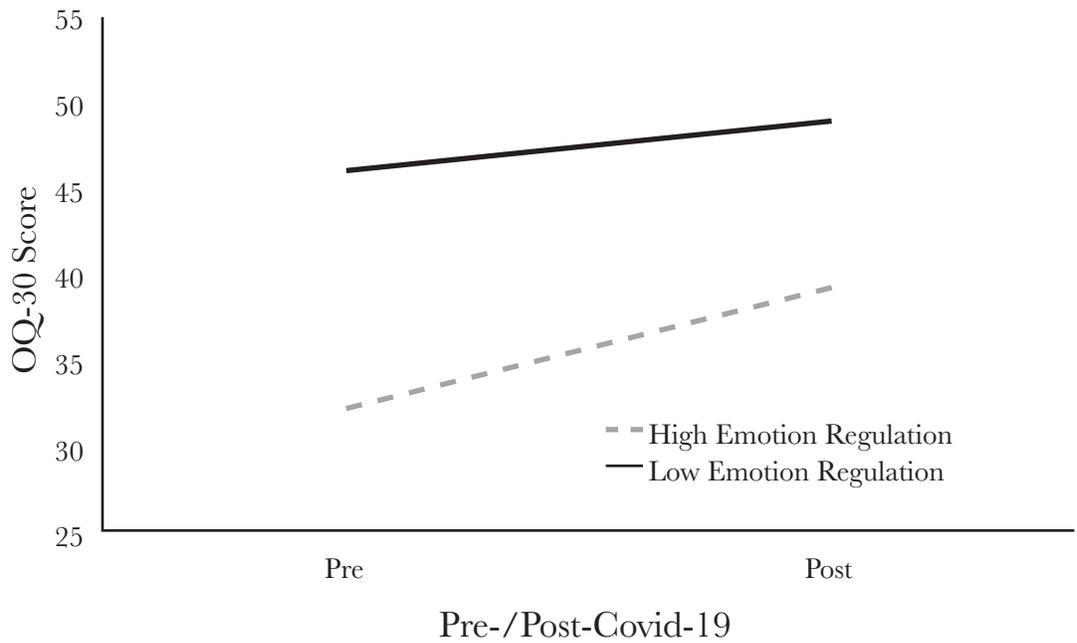
DERS Subscale	Min	Max	<i>M</i>	<i>SD</i>
Total	23	66	42.65	10.01
Awareness	3	12	6.18	2.17
Clarity	3	15	7.76	2.82
Goals	4	12	6.82	2.08
Impulse	3	15	8.06	2.99
Non-acceptance	3	15	6.52	2.72
Strategies	3	14	7.32	2.73

**Table 4***Results of multilevel analyses (N=33)*

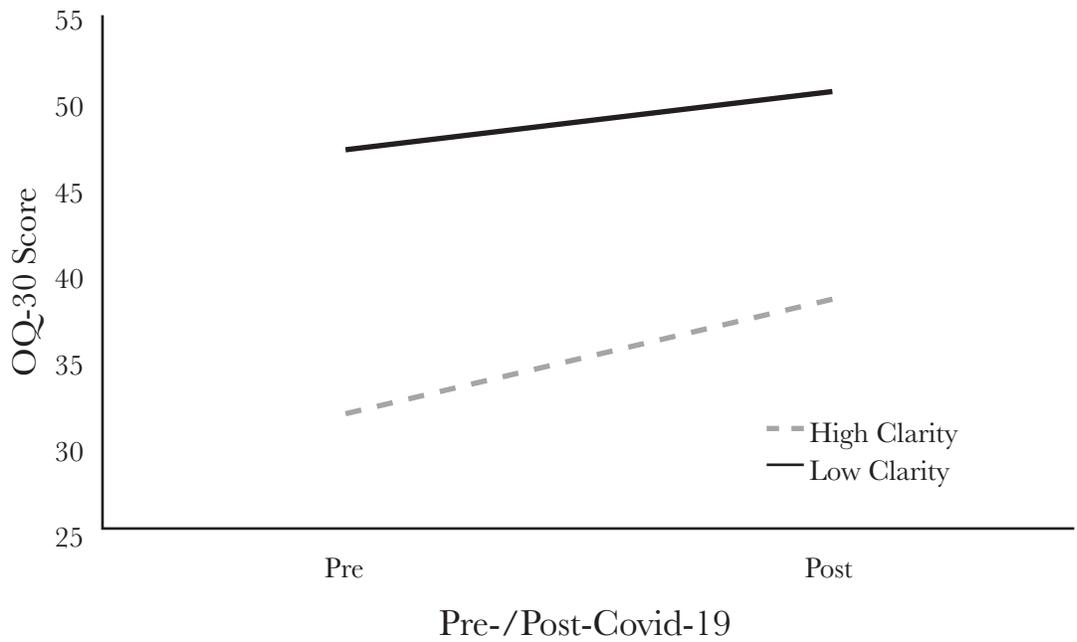
Model (Scale)	Intercept $b_{0j}$	Scale <sub><i>i</i></sub>	Session <sub><i>j</i></sub>	C19 <sub><i>j</i></sub>	Scale <sub><i>i</i></sub> C19 <sub><i>j</i></sub>	$s_{2\epsilon}^1$	$s_{2\mu}^2$	REML Fit Criterion	
<i>Model 1</i>									
<i>(Total)</i>	<i>b</i>	45.59	<b>0.60</b>	<b>-0.44</b>	<b>5.08</b>	<b>-0.21</b>	54.89	147.15	3,953.20
	<i>SE</i>	2.33	0.23	0.07	1.16	0.10			
	<i>z</i>		2.64	-6.10	4.39	-2.08			
	<i>p</i>		.013	<.001	<.001	.038			
	95%LL		0.159	-0.587	2.796	-0.409			
	95%UL		1.052	-0.302	7.332	-0.013			
<i>Model 2</i>									
<i>(Awareness)</i>	<i>b</i>	45.98	0.87	<b>-0.44</b>	<b>5.34</b>	<b>0.71</b>	53.29	183.60	4,219.60
	<i>SE</i>	2.49	1.12	0.07	1.11	0.33			
	<i>z</i>		0.78	-6.43	4.83	2.13			
	<i>p</i>		.442	<.001	<.001	0.033			
	95%LL		-1.312	-0.567	3.157	0.052			
	95%UL		3.068	-0.302	7.490	1.363			

<i>Model 3</i>									
<i>(Clarity)</i>	<i>b</i>	45.82	<b>2.46</b>	<b>-0.43</b>	<b>5.02</b>	-0.58	53.49	128.92	4,211.70
	<i>SE</i>	2.13	0.74	0.07	1.10	0.31			
	<i>z</i>		3.35	-6.29	4.57	-1.86			
	<i>p</i>		.002	<.001	<.001	0.063			
	<i>95%LL</i>		1.027	-0.558	2.945	-1.186			
	<i>95%UL</i>		3.904	-0.293	7.155	0.028			
<hr/>									
<i>Model 4</i>									
<i>(Goals)</i>	<i>b</i>	45.82	0.65	<b>-0.44</b>	<b>5.08</b>	<b>0.93</b>	53.24	181.51	4,218.30
	<i>SE</i>	2.48	1.16	0.07	1.10	0.39			
	<i>z</i>		0.56	-6.44	4.62	2.42			
	<i>p</i>		.579	<.001	<.001	0.016			
	<i>95%LL</i>		-1.611	-0.568	2.909	0.177			
	<i>95%UL</i>		2.924	-0.303	7.229	1.689			
<hr/>									
<i>Model 5</i>									
<i>(Impulse)</i>	<i>b</i>	45.89	<b>2.03</b>	<b>-0.43</b>	<b>5.08</b>	<b>-0.70</b>	53.26	139.70	4,212.00
	<i>SE</i>	2.21	0.72	0.07	1.10	0.29			
	<i>z</i>		2.84	-6.39	4.62	-2.44			
	<i>p</i>		.008	<.001	<.001	.015			
	<i>95%LL</i>		0.637	-0.563	2.905	-1.255			
	<i>95%UL</i>		3.434	-0.298	7.210	-0.138			
<hr/>									
<i>Model 6</i>									
<i>(Non-acceptance)</i>	<i>b</i>	45.70	0.62	<b>-0.43</b>	<b>4.87</b>	<b>-0.79</b>	53.19	176.24	4,217.90
	<i>SE</i>	2.45	0.87	0.07	1.10	0.30			
	<i>z</i>		0.71	-6.39	4.41	-2.59			
	<i>p</i>		.485	<.001	<.001	.010			
	<i>95%LL</i>		-1.092	-0.564	2.691	-1.384			
	<i>95%UL</i>		2.329	-0.299	7.012	-0.191			
<hr/>									
<i>Model 7</i>									
<i>(Strategies)</i>	<i>b</i>	45.32	1.40	<b>-0.45</b>	<b>4.74</b>	<b>-1.44</b>	53.69	167.38	3,940.00
	<i>SE</i>	2.47	0.89	0.07	1.15	0.36			
	<i>z</i>		1.58	-6.20	4.12	-4.03			
	<i>p</i>		0.126	<.001	<.001	<.001			
	<i>95%LL</i>		-0.331	-0.588	2.475	-2.135			
	<i>95%UL</i>		3.137	-0.305	6.986	-0.740			

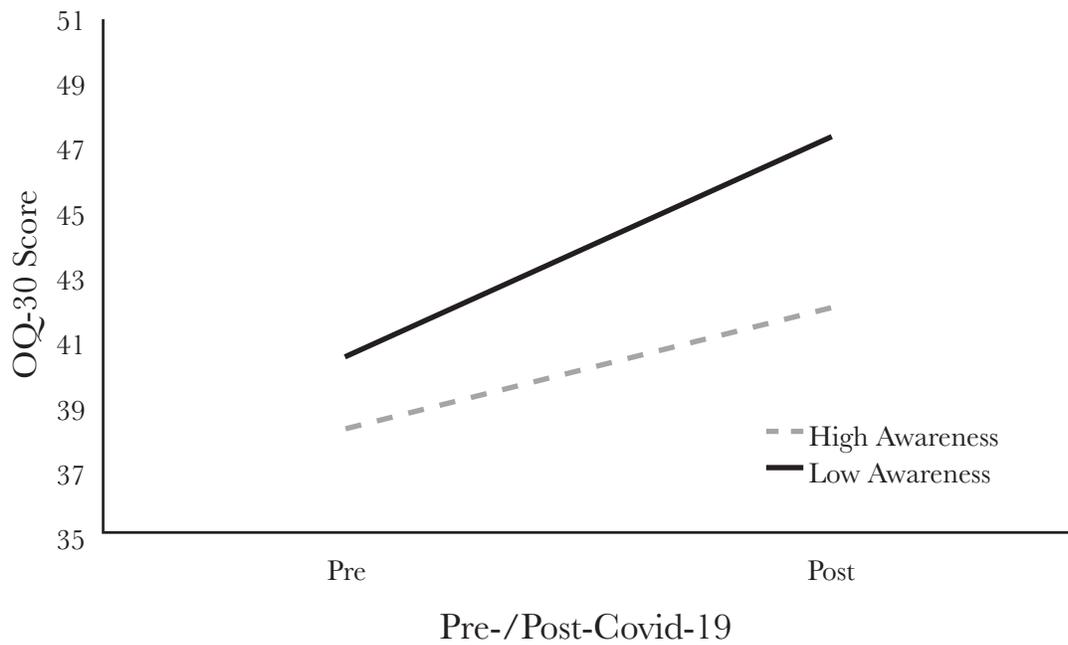
*Note:* Bolded values represent the primary values compared in the study that were statistically significant.



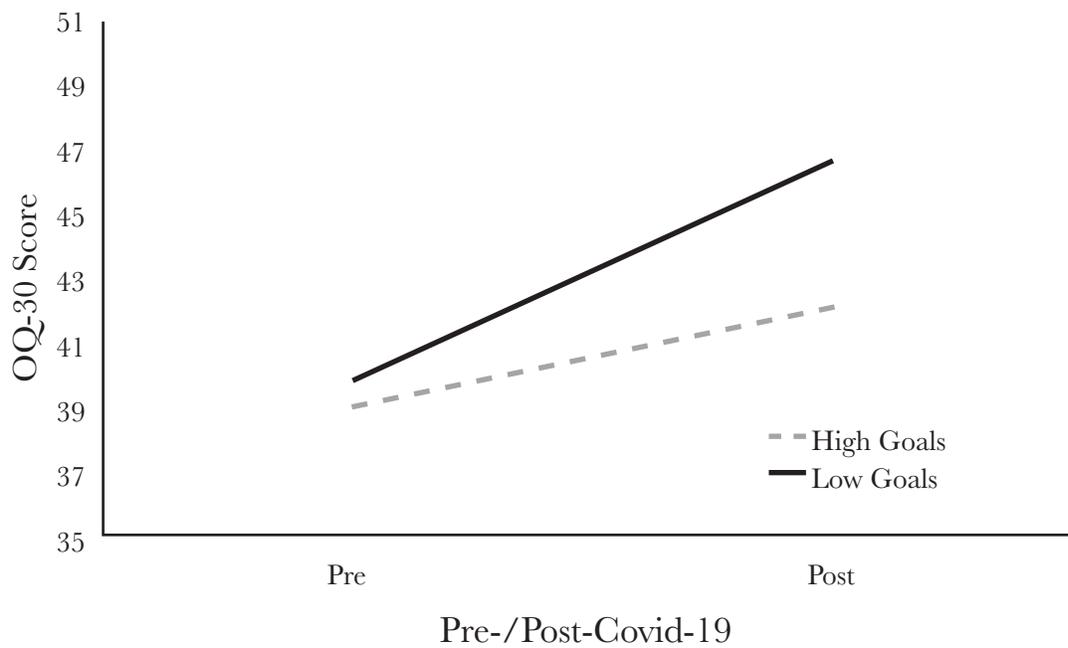
**Figure 1.** Changes in symptom severity (OQ-30.2 score) as psychotherapy sessions progressed both pre-and-post-C19 controlling for DERS Total scores (models including all DERS subscales were substantially similar).



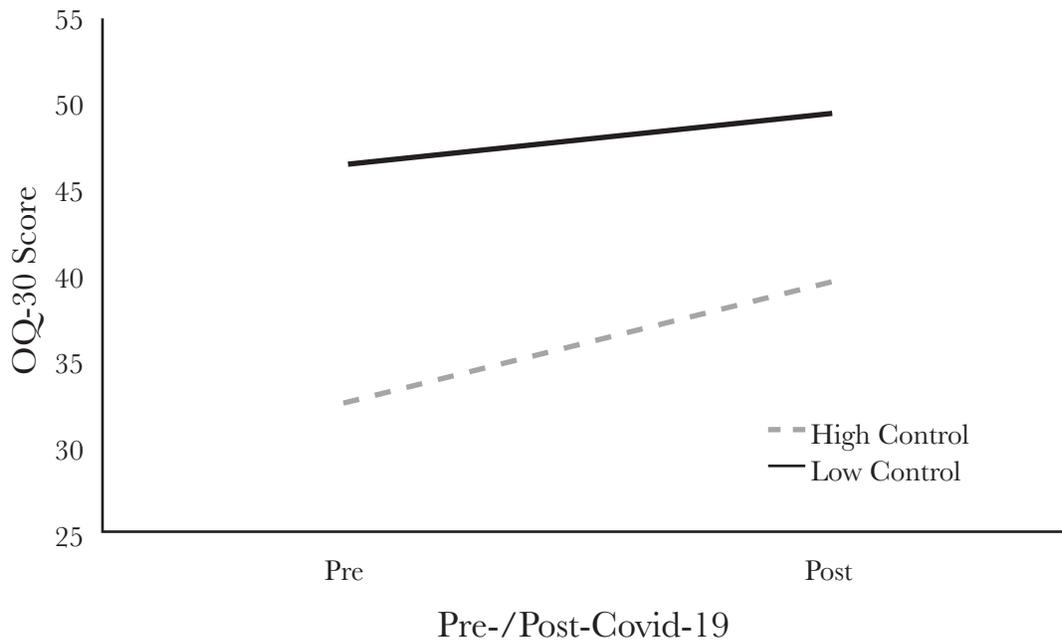
**Figure 2.** Changes in symptom severity (OQ-30.2 score) from Pre- to Post-COVID-19 for patients with high and low levels of emotion regulation, controlling for the effect of treatment



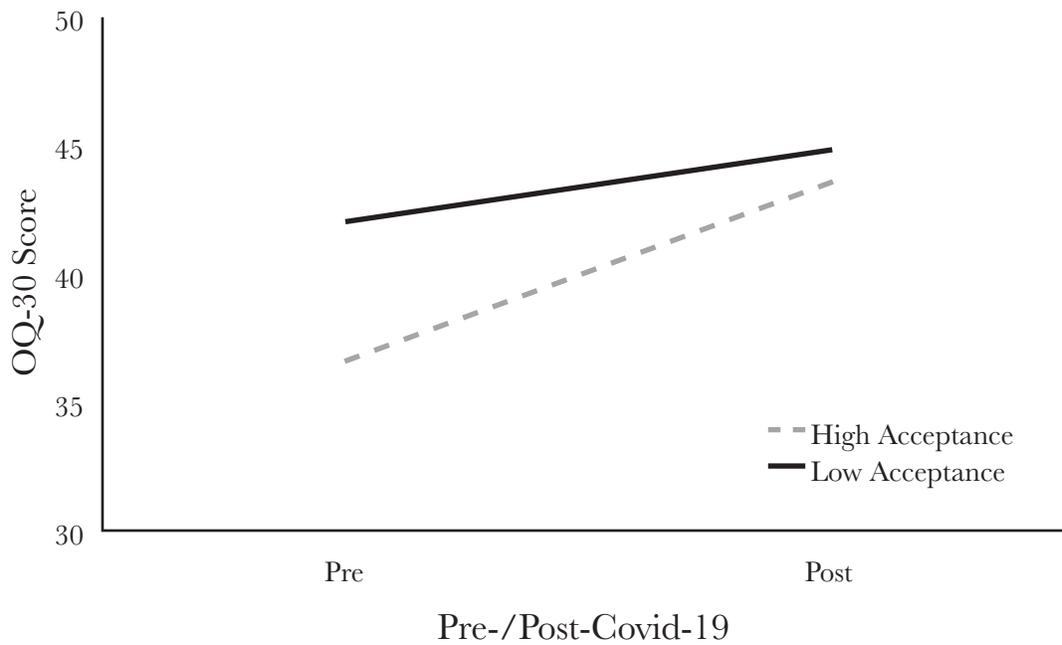
**Figure 3.** Changes in symptom severity (OQ-30.2 score) from Pre- to Post-COVID-19 for patients with low and high rates of clearly identifying emotions, controlling for the effect of treatment.



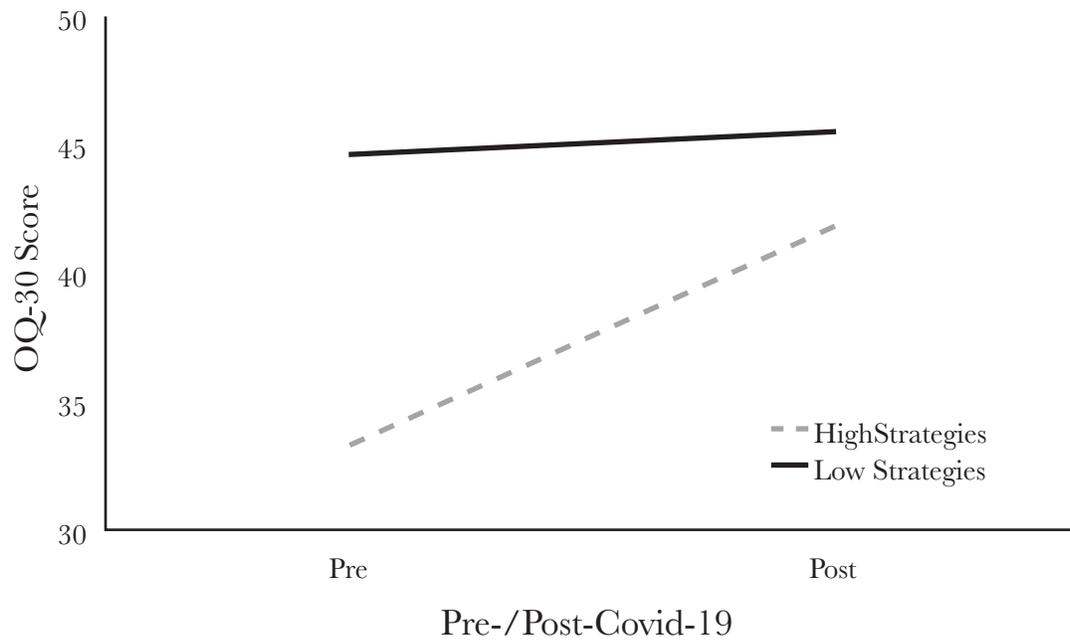
**Figure 4.** Changes in symptom severity (OQ-30.2 score) from Pre- to Post-COVID-19 for patients with low and high awareness of their emotional experience, controlling for the effect of treatment.



**Figure 5.** Changes in symptom severity (OQ-30.2 score) from Pre- to Post-COVID-19 for patients with low and high goal-directed behavior, controlling for the effect of treatment.



**Figure 6.** Changes in symptom severity (OQ-30.2 score) from Pre- to Post-COVID-19 for patients with low and high control over behavior, controlling for the effect of treatment



**Figure 7.**

Changes in symptom severity (OQ-30.2 score) from Pre- to Post-COVID-19 for patients with low and high acceptance of negative emotional experiences, controlling for the effect of treatment.