

Efficacy of Mindfulness Meditation on Mental Health during the times of COVID'19- A Mixed-Method Study

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ABSTRACT

The current study aims to evaluate the impact of a two-week online Mindfulness Meditation (MM) intervention on levels of Depression, Stress, and Anxiety and gain insights into participants' motivation and experiences of the intervention. Twenty-five participants (16 females & 9 males) were recruited through web-based advertisement using a random purposive sampling technique. DAS scale was administered before and after the intervention period to identify quantitative changes over time. Further, ten participants (6 females & 4 males) who exhibited significant changes in their quantitative measures were interviewed via video conferencing to understand the particular motivators and experiences of participating; where the responses were analyzed using Interpretative Phenomenological Analysis. Change in outcome measures over time was examined using Mean, S.D., and paired t-test.

Results revealed significant improvements in reducing the severity of depression, anxiety, and stress symptoms significantly (all $p > 0.001$) and improvement was sustained at three month follow-up. The qualitative analysis depicted Spiritual inclination and Experience of stress and loneliness as motivation themes for enrolling. Moreover, lived experience of the participants exhibited three overarching themes – a. self-awareness, b. insight development, c. social cohesion.

The study provides evidence in support of the effectiveness of brief, MM in a non-clinical population and suggests that low-intensity intervention can be used for modulating negative psychological states through easily accessible and non-physical contact training mode. However, more research is needed to confirm and better understand these results and to test the potential of such interventions.

Keywords: COVID-19, Mindfulness Meditation, psychological well-being

Coronavirus Disease 2019 (COVID-19) outbreak has been recently declared as a pandemic by W.H.O. (2020) where it has encompassed the global psyche with fear, uncertainty, and affected the vulnerable populace with a lethal illness and death sprawling across the globe. In almost entire communities the physical, social, and psychological aspects of daily lives have been affected like never before. Physiologically the virus mainly attacks the respiratory and digestive tract where the symptoms range from mild fever to severe pneumonia, acute respiratory distress, septic shock, and may even cause systemic multiple organ failure syndrome.

The most susceptible population to it includes elderly, children, infants, and others with compromised immunity. Furthermore, patients with asymptomatic conditions can also be a potential carrier of the infection, spreading it via aerosols from the respiratory tract, and also through direct contact; suggesting the transmissibility of the disease to be even more lethal (Roth, 2020; Ru & Chun, 2020). Due to this, the disease has exponentially increased to several 70756 new cases and death toll raging to a towering number of 2293 across all the different regions of India by 12 May 2020 (National Informatics Centre, 2020). Another, challenge to this adversity is the nonavailability of a prescribed cure to the ailment other than attending to the symptoms or regulating its public contamination. Hence, the entire country has been forced for a complete lockdown since March 25 2020 till now. This has affected the ebb and flow of life, incapacitating people's perceptual contours of full lives- leaving them locked, isolated while halting all of their social, financial, psychological, and spiritual activities.

In the wake of such unexpected crises, it is natural to face negative psychological states punctuated with stress, fear, and anxiety to a varying degree to almost everyone. Research studies of epidemics or crises of history suggest that such adversities have not only immediate but long term psychological reactions like acute

stress, post-traumatic symptoms, addictive behaviors, suicidal nature, trauma, and depression (Lang, 2003; Norris, 2005; Sim, 2010). If we analyze the core primal human emotion behind such manifestations, it seems to be driven by "fear" where it is punctuated with feelings of helplessness, uncertainty, loss of control, security, and financial crisis to name a few. Also, there is a gripping fear of infection which has led to avoidance and withdrawal from the necessary human contacts limiting the opportunities of social support for adaptive functioning (e.g., Bonanno, Galea, Bucciarelli, & Vlahov, 2007). And unlike other crises, where people can collectively work towards resilience and resurrection, COVID-19 yet again puts us in an unfamiliar territory of "Isolation" where apartness is the strength and only strategy available (Bonanno, Rennie, & Dekel, 2005). As the prevailing conditions at a macro level is outside the locus of control, the micro-level (individual) of emotions and reactions should be harnessed in such a way that turmoil and despair can be morphed into awareness and attentiveness of actions (Fredrickson, Tugade, Waugh, & Larkin, 2003; George, 2013).

Mindfulness meditation offers us such strategies where overwhelming stressors can be handled by developing a discerning awareness of moment to moment basis. It is a practice that aims at providing practitioners with skill and discipline to achieve clarity and calmness during moments of turbulence and agitation (Gunaratana, 2011; Germer, & Siegel, 2009).

Dr. Cheryl Rezek (2012) advocates that: "*Mindfulness is not a patronizing fad implying that, if we are calm, everything will be fine. The reality of our working world is that all may not be fine. What mindfulness can do is develop a thinking, and emotional, and an instinctual mind [to deal better with the situations in which we find ourselves].*" (p.5)

Mindfulness meditation is defined as a process of intentional self-regulation of attention, in a non-judgmental manner to all the passing internal and external experiences each moment with openness, curiosity and acceptance (Germer, 2005; Zinn & Hann, 2009; Kudesia and Nyima, 2014). Many researchers theorize multifold physical and psychological benefits of mindfulness meditation like enhanced immunity, metacognitive awareness, reduced rumination, and effective emotional regulation tendencies; thus promoting well-being and enhancing calmness, and clarity (Walsh & Shapiro, 2006; Farb et al., 2010; Williams, 2010; Pascoe & Thompson, 2020). Particularly in the present scenario, a study by Yanyu et al. (2020) asserts a probable threefold benefit of implying MM to cope with the impact of COVID-19.

Firstly, the orientation to the present moment enhances attention via directly focusing the mind on the sensations/ breaths/ object of concentration. This provides a standpoint of recognizing unhealthy emotions and regulating self from getting trapped in perceived negative emotions like fear, hope, and anxiety while strengthening internal motivation to cope (Goyal & Siblinga, 2014; Lengacher et al., 2016). Secondly, it helps in the identification and acceptance of underlying emotions of fear and anxiety as they are, in a safe space, which could restore the balance of emotions and provide impetus to cope with clarity and confidence (Carroll, 2007). It also promotes rational decision making instead of getting overwhelmed by the challenges faced in a state of impermanence (Weise, 2011; Begley, 2011). Lastly, physiologically the practice of meditation has been proven in the reduction of stress hormone and inflammatory factors which enhances antiviral immune response, resulting in health benefits (Buric et al., 2017; Black, 2016; Guan et al., 2020). Also, the meditation interventions are easy to learn and thus, could be offered as a cost-effective complementary therapy instead of investing heavily in long term psychological treatments.

Therefore, the scientific evidence encapsulates the beneficial effects of practicing Mindfulness meditation in the face of crisis. It should be understood that, though the practice cannot change any circumstance, but the disturbed and reactive reactions to these unsettling times can be transformed into informed responses. Hence, in the light of these substantiations, it was hypothesized that a brief online MM intervention could be a potential mental health opportunity as a stress, anxiety, and depression coping strategy to support during the uncertain and challenging times of COVID 19 social isolation period. Also, it is observed that researches on MM

relies very heavily on only quantitative literature which has a major limitation of providing the data through numerical representations; limiting the understanding of sensitive subjects (Tomlinson et al., 2018). Whereas, qualitative finding seeks to capture the vivid experiences of participants, understand novel insights of utilization and adaptation of these practices (Bryman, 2015). Therefore, we utilized a mixed-method approach, to explore both an objective measure of outcome, and gain insights into participants' experiences of the intervention. Consequently, the following research objectives were formulated to be explored through the study:

1. Pre-assessment of depression, anxiety, and stress level of the participants.
2. Post-assessment of depression, anxiety, and stress level of the participants after the intervention program.
3. Exploring the motivating factors towards participation in the intervention.
4. Analyzing the perceived experience of intervention on the participants.
5. Follow up assessment of depression, anxiety, and stress level of the participants, three months after the intervention program.

METHOD

Participants & Procedure

Participants were primarily recruited through a web-based advertisement for a two-week mindfulness-based meditation program. The original selective criterion was voluntary participation for the alleviation of stress and anxiety using meditation during the lockdown period. A total number of 55 volunteers were screened using the following inclusive criteria –

a. Age range of 25- 35 years; b. Comprehension of English; c. Novice meditators; d. Clinically healthy and not undergoing any major stressful period due to a drastic effect (like death of a loved one); e. Indian ethnicity.

Finally, 25 participants (16 females & 9 males) were selected who fulfilled the inclusive criteria, completed the pre-test assessment, and provided consent for participation. Furthermore, ten participants (6 females & 4 males) agreed for an interview to explore insights into their meditation practice.

Intervention Process

The meditation intervention package was developed and guided by certified meditation trainers with experience of psycho-educational training of over ten years. The mode of intervention was entirely online through the Zoom video conferencing app. The link and necessary guidelines of usage was provided after the pre-assessment through emails. Each session lasted for 30 minutes for seven days a week which continued for two weeks followed by post-test assessment and personal interview of selected candidates based on their availability and readiness to participate. The training module was divided into four major sections (Table 1) and the objective of each component is discussed below:

Breathing exercise- It sets the stage by calming down the nervous system where the immediate break from thought cycle can be achieved along with enhanced focus, attention, and peace. It acts as a link between mind and body and as an anchor for the cultivation of meditation practice (Salmon et al. 2009).

Reflection Activity- After breathing, the concentration is consciously redirected to positive emotions like confidence, gratitude, compassion, and love.

Guided Meditation- With the inculcation of a positive state of mind, participants were gradually introduced to meditation practice with everyday objectives like grounding self, understanding personal reactions, quick coping strategy, self-compassion, finding ease, and integrating everything in daily practices.

Discussion- The entire session concluded with a Q& A round which helped in getting clarity in practices and concentrated on discussing the participant's experiences with each other. It aimed majorly on promoting feelings of group solidarity.

Additionally few recommendations based on WHO (2020) guidelines were shared and participants were encouraged to follow for improved mental health:

1. Take care of physical health.
2. Get adequate and quality sleep.
3. Establish a routine by going to bed and waking up at the same time daily.
4. Avoid excessive screen time or news intake or any other stimulating activities which create panic/stress.
5. Practice physical exercise at home daily.
6. Practice healthy eating habits and avoid alcohol or any other addictives.

MEASURES.

Baseline Proforma.

A questionnaire studying baseline demographic details like age, sex, marital status, meditation experience, ethnicity, and personal health was administered.

Depression Anxiety Stress Scale (DASS)

The DASS is a set of three self-report scales designed to measure the negative emotional states of depression, anxiety, and stress. It is developed by Lovibond and Lovibond (1995). Factor's coefficients of the scale are- depression subset- 0.25 to 0.61, anxiety subset- 0.30 to 0.53 and for stress subset- 0.31 to 0.51. Compliance validation points of DASS were respectively found between 0.85 and 0.80. Item total correlations were 0.25 to 0.61.

DATA ANALYSIS

The quantitative data were analyzed using Mean, S.D., and paired-samples *t*-test to compare the differences between the pretest and posttest outcome variables. Further, a semi-structured interview was conducted via the Zoom video conferencing app which was analyzed using Interpretative Phenomenological Analysis (IPA) technique. This method helps in capturing the detailed experience and feelings of participants and finds shared patterns while adhering to scientific standards.

RESULTS

Demographic Profile of Participants

The final sample consisted of twenty-five participants of mean age 28.5 years (S.D. = 9.12) with a range between 20 to 35 years. Participants were mainly females (64%), higher educated (95%), unmarried (75%) students (60%), residing alone during the lockdown period (Table- 2).

Level of Depression, Anxiety and Stress

MM intervention has been effective in improving the mental health of the participants where mean scores of depression dropped from moderate to lower levels; Pre = 14.56, S.D.= 10.2, Post = 10.12, S.D.= 10.5, $t(24) = 2.12$, $p < 0.001$, similarly anxiety levels reduced from moderate to low; Pre= 14.25, S.D.= 10.1, Post= 11.05, S.D.= 10.1, $t(24) = 2.89$, $p < 0.001$ while mean scores of stress plummeted from severe to moderate; Pre= 27.05, Post, $t(24) = 6.43$, $p < 0.001$ at the post-testing level (Table 3).

Comparable findings have been reported by Galante et al. (2018) where MM intervention has been established as a favorable mental health coping strategy in reducing stress, anxiousness, and other depressive outcomes. The probable action mechanism behind it was the cultivation of resilience and grit parallel to the preceding negative mental states. Where in the face of adversity, the outlook of positive or even neutral reappraisal tendencies were inculcated which helped in breaking the cycle of worry, anxiety and stress (Aboalshamat, Hou & Strodl, 2015; Bennett & Dorjee, 2016; Gallego, Aguilar, Cangas, Rosado & Langer, 2016).

Motivation of Participating in MM Intervention

Spiritual inclination – It emerged as a prominent factor suggesting that during the time of constant uncertainty and vulnerability; people tend to rely more on perceived higher forces; attuning to which, might help in facing the adversity adequately.

A participant stated, “*yielding to higher power*” as the only alternative left for coping while the other reported being pushed to find a new meaning to life by quoting, “*Probably there is something or someone more to life.*”. These expeditions for anchoring to something more powerful to regain strength and grit seemed to be a very important motivator for commencing a meditative journey.

However, this role of faith is in complete contrast to the earlier quest of choosing a secular agenda behind any mind-body practices where people preferred contemporary and religiously neutral practices while refraining to be categorized in any spiritual quest. While now, people cited inclination towards the spiritual context for adopting meditation techniques to train their internal crisis.

Bearance & Dolvenly (2015) explains that during the moments of collective anxiousness and trauma, a sense of helplessness all over, internally compels to seek the answers to challenges from tapping the innate wisdom and turn to holistic ways of healing. Perhaps, the prolonged periods of isolation might have also catalyzed in utilizing the time for self- introspection attributing spiritual inquisitiveness to be a significant inspiration to start a meditative journey.

Loneliness & stress- This theme is related to the perception of loneliness and unending stress as motivation for initializing a meditative practice. As most of the studied population were students staying away and isolated from their homes, they were occupied in consuming thoughts of worry and uncertainty. A participant quoted, “*feeling overwhelmed*”, “*stuck in the cycle of anxiety and worry*” while the other looked for “*practical and implementable way to curb stress*”.

Thus, to redirect their self to respond rationally and address the mental health issue, they became self-motivated to pursue mindfulness meditation practices.

Little (2016) also corroborates with these findings where participants report being intrinsically motivated to practice meditation for the fulfillment of their basic psychological need of mental health and well-being.

Experiences of the MM intervention

When the salient ways through which participants internalized the MM practices were explored, it revealed an overall positive experience (Table 5). As almost every interviewee talked about the different ways of

embodying MM in their daily lives and its contribution to coping with the mental mayhem caused by the pandemic.

Self Awareness was the first emerging theme where respondents expressed that the development of a deeper attention with focused clarity and calmness allowed them to fine-tune to their internal states, preferences, resources, and intuitions. This helps in separating the clouding worrisome thoughts from the rational state.

It was evident through quotes like, *“meditation holds me from my usual pattern of sinking into the vortex of panic and anxiety”*, *“helps in reconnecting me to myself when my thoughts and emotions are often grappled and hijacked by uncertainty”*, that meditation practice and reflective activities enabled the participants to become more aware of their inner state without being self-critical while consciously realigning to restore well-being.

Various studies uphold the findings suggesting that awareness-building during meditation helps in effective handling of challenges by being conscious and discerning about the realities while allowing to make the best possible decision with a sense of non-judgment (Long & Christian, 2015; Ryan & Rigby, 2015; Holzel et al., 2011). George (2013) also affirms that mindfulness allows a person to become adept and aware of inner self while stimulating focus on the task at hand; this helps in confronting unpredictable situations competently and create a transformative change within self.

Insight development – Another group reported cultivating a tendency to explore inwards before reacting as an output of their meditational practices.

Participants quoted, *“I started using discernment with my intake of thoughts, activities, and media usage. Nothing is in my control but my response could be”*, *“develop an attitude of putting question marks and re-evaluate feelings, when things go wrong”*.

They recounted the unfolding of a slight internal reminder either amid or sometimes after a chaotic or difficult experience. It acts as a prompter to delve deeply into a given situation without being entrapped by emotions.

A study by Golovey et al. (2015) established that mindfulness practices during crises are often associated with a journey of self-discovery and growth. As it provides an opportunity to learn and define our true selves by observing the thoughts while stilling the mind. Coffey & Hartman (2008) further clarifies that these practices facilitates clear coping strategies by unmasking the underlying problems (like fear and anxiety behind stress) while extenuating negative emotions and releasing cognitive-affective faculties to be reflective and utilizing value-based internal judgments in place of hurried reactions.

Social Cohesion emerged as the last theme where participants attributed feelings of group solidarity and community support as both – a positive experience of practicing MM while a significant tool to cope with the feelings of loneliness whilst practicing isolation. They commented that reaching out to others and virtually connecting while sharing value-driven behaviors helps in fuelling the feelings of social bonds and togetherness.

Narratives like, *“Being alone and being lonely are two different things which partly feel like my own choice now”*, *“We will fight through”* demonstrate the strength of solidarity to curb loneliness.

Thus, instead of dwelling on cycles of self-pity, worry, sadness, and anxious insecurities, one tries to change the mindsets with feelings of interconnection and collectively work towards uplifting thought patterns in a compassionate and fulfilling manner.

Leiberg, Klimecki & Singer (2011) substantiates the finding by advocating the development of feelings of social connectedness through MM directed towards love and kindness. These practices help in supporting each other

through the development of empathy, resilience, active listening, and sharing of mindfulness resources and their experiences with each other.

FOLLOW-UP ASSESSMENT

The follow-up assessment reveals sustained changes in the mental health of the participants where although mean levels of depression and anxiety exhibited a non-significant change; stress levels significantly reduced; Post = 15.25, S.D.= 12.1, Follow-up = 12.25, S.D.= 10.9, $t(24) = 2.01$, $p < 0.001$ at follow up level after the intervention (Table 6).

Further when pre scores and follow up scores were compared to understand a complete picture of the impact of intervention on mental health, it depicted tremendous enhancement. The mean scores of depression reduced dropped from moderate to lower levels; Pre = 14.56, S.D.= 10.2, Follow-up = 11.50, S.D.= 10.7, $t(24) = 2.1$, $p < 0.001$, similarly anxiety levels came down from moderate to low; Pre= 14.25, S.D.= 10.1, Follow-up= 9.54, S.D.= 12.4, $t(24) = 2.59$, $p < 0.001$ while mean scores of stress dropped from severe to low; Pre= 27.05, S.D.=10.8, Follow-up= 12.05, S.D.= 10.9, $t(24) = 4.88$, $p < 0.001$ at the follow -up level (Table 7).

This shows that the intervention was successful in bringing about positive transformation and the results received earlier were not due to contiguity to treatment, but to real and stable psychological change among the participants.

Analogous results were documented by Mak et.al., (2015) where online mindfulness program has been proven effective in sustained improvement of mental health, even at the follow- up stages of the intervention.

DISCUSSION

Mindfulness Meditation has been voluminous studied on its efficiency of providing psychological well-being and enhancing coping skills. Hence, the current study aimed to identify the impact of a two week online MM intervention on mental well-being through the current COVID'19 pandemic situation. It further aimed to qualitatively explore the motivations of enrolling and lived experiences of participants.

The results reveal an interesting mix of responses where it has been evidenced in enhancing mental well-being along with varied shared subjective experiences of the participants.

It also helps in elaborating on the psychological situation of people during the COVID-19 epidemic, where "aloofness" and "isolation" has taken up deserted spaces of the thwarted daily routines. The moderate to severe categorical levels of depression, anxiety, and stress were reflective of the immediate need for a coping intervention strategy for the population.

Along the same line, the study highlights the different ways people are integrating or are looking for strategies for mental well being. The motivation analysis for enrolling in MM intervention depicted Spiritual inclination and experiences of stress and loneliness. While seeking meditative practices for curbing stress and anxiety has been widely reported and documented (e.g., Hjeltnes et al.,2015; Hawley et al. 2014; Querstret & Cropley, 2013), the embracing of spirituality in the face of uncertainty by young adult category is novel. Perhaps, it might open the avenues of reintegrating meditations within their historical spiritual context which was contemporarily differentiated by widely prevalent western psychoanalytical methods (Brown, Ryan & Creswell, 2007).

Moreover, lived experiences of the participants were observed to be positively mediated by three emerging themes of integrating the MM practices into their lives - self-awareness, insight development, and social cohesion. Although there are not many researchers studying the ways of contending with the psychological impact of COVID'19 on population. Yet, researches on adversities like terrorist attacks, natural calamity

suggests that aligning with personal values, becoming present- moment orientated and development of group cohesion are very important determinants in coping with the aftermath of a crisis (Bonanno, Eakman, Schelly, & Henry, 2016; Rennieke, & Dekel, 2005; Peterson, & Seligman, 2003).

Hence, it can be extrapolated that participants utilized the MM techniques in a way to maximize its impact suitable to their immediate psychological needs amidst the perils of COVID-19 and its benefits sustained at later stages of the program too.

However, the findings of the present study are limited to the following factors:

The study was conducted only on experimental group design with a very small sample size which limits its applicability. Also, there was an oversampling of a particular network of peers (e.g., students), leading to selection bias. This makes the findings less generalizable to the entire population, specifically to the economically disadvantaged and lesser-educated people.

Further, a prospective study on the same group of participants would be ideal to get concrete findings on the use of meditation as a coping strategy and for gaining insights if it is relevant to be a focused public health strategy initiative in the long term.

And lastly, all the data was self-reported which cannot nullify the probabilities of self- expectations for the output.

IMPLICATION

Although, the present study cannot serve as a generalization for all the populace, but rather as a starting point to begin to integrate mind-body techniques. Thereby, helping to modulate negative psychological states while equipping people with preventive coping strategies through easily accessible and non- physical contact training mode.

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TABLES

Table 1
Intervention Schedule

Activity	Duration	Component
1. Breathing exercise	Five minutes	Rhythmic breathing
2. Reflection Activity	Five minutes	Activities related to Positive Psychology like Gratitude Journaling, Forgiveness Prayer, Grounding activity, Identifying personal strengths, Sorting Happy Memories.
3. Guided Meditation	Fifteen minutes	Topics like- Auto-tuning to self, Holding the scattered mind, Recognizing the stressors, Confronting storms, Returning to the heart space, Letting go, My self-care corner, Integrating the experiences.
4. Brief Discussion	Five minutes	A brief Q & A was conducted to share the experiences and answer the arising queries.

Table 2
Demographic Profile of the Participants

Age	Mean = 28.5	S.D.= 9.12
Gender	Males= 36%	Female= 64%
Qualification	Above Graduation = 95%	Below Graduation= 5%
Occupation	Working= 25%	Students = 60%
	Home maker= 15%	
Marital Status	Married = 25%	Unmarried= 75%
Stay during social isolation	Alone = 80%	With Family = 20%

Table 3
Descriptive statistic and t-test scores of DAS levels (pre- posttest level)

Variables	Pre	Post	t- value	Df
Depression	14.56 (10.2)	10.12 (10.5)	2.12*	24
Anxiety	14.25 (10.8)	11.05 (10.1)	2.89*	24
Stress	27.05 (10.8)	15.25 (12.1)	6.43*	24

* indicates p < .001.

Table 4

Motivation to participate in Mindfulness Meditation

Category	Themes	Codes	Verbatim
Motivation	Spiritual inclination (6)	Faith in Higher Self	<i>I yield myself to the higher power, now that nothing is in my hand; I plan to put myself in his.</i>
		Surrendering to the uncertainty of nature	<i>This uncertainty of these days makes me feel helpless; this cannot be all. Probably there is something or someone more to life.</i>
	Loneliness & Stress (4)	Need to find internal solutions to the problems	<i>I have been cycling through stress and anxiety cycle. The feeling of being alone overwhelmed. Maybe it can help in breaking the chain.</i>
		Train the mind out of distress & loneliness	<i>I need a practicable and implementable way to handle my stress; think it could help.</i>

Table 5

Experience of Mindfulness Meditation Intervention.

Category	Themes	Codes	Verbatim
Experiences	Self Awareness (3)	Cues to draw upon my resources	<i>Breathing space& meditation kind of holds me from my usual pattern sinking into the vortex of panic and anxiety.</i>
		Enables noticing the triggers and cues preceding an outburst	<i>It helps in reconnecting me to myself when my thoughts and emotions are often grappled and hijacked by uncertainty.</i>
	Insight Development (4)	Identifying ways to tune in with self	<i>It enables me to develop an attitude of putting question marks and re-evaluate feelings, and come out of worry when things go wrong.</i>
		Unfolding capacity to alter reactions into responses	<i>I have started using discernment with my intake of thoughts, activities and media usage. Nothing is in my control but my response could be.</i>

Category	Themes	Codes	Verbatim
	Social Cohesion (3)	Changing perception to oneness	<i>Being alone and being lonely are two different things which partly feel like my own choice now.</i>
		Strength of solidarity	<i>We are geographically apart but we can be and are together in this. We will fight through.</i>

Table 6

Descriptive statistic and t-test scores of DAS levels (post- follow-up test level)

Variables	Post	Follow-up	t- value	Df
Depression	10.12 (10.5)	11.50 (10.7)	0.46	24
Anxiety	11.05 (10.1)	9.54 (12.4)	0.89	24
Stress	15.25 (12.1)	12.05 (10.9)	2.01*	24

Table 7

Descriptive statistic and t-test scores of DAS levels (pre- follow-up test level)

Variables	Pre	Follow-up	t- value	Df
Depression	14.56 (10.2)	11.50 (10.7)	2.1*	24
Anxiety	14.25 (10.8)	9.54 (12.4)	2.59*	24
Stress	27.05 (10.8)	12.05 (10.9)	4.88*	24