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**A Thematic Analysis of the Role of Mindfulness During the COVID-19 Pandemic**

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## Abstract

March 2020 saw the beginning of unprecedented times. With the declaration of a global health emergency due to the outbreak of the Coronavirus Disease 2019 (COVID-19), the lives of millions of people globally have been transformed. With all aspects of well-being threatened, individuals have sought ways to help navigate through the variety of stressors this pandemic imposes, including the use of mindfulness practise. Past research on mindfulness, has demonstrated efficacy in treating a variety of difficulties, including both physical and psychological symptomology. It may be particularly useful for decreasing stress and increasing well being during a significant life event such as COVID-19. The aim of this study was to explore the role mindfulness has had on individuals lives during the COVID-19 pandemic. Analysing posts and comments in Facebook support groups, thematic analysis was undertaken and revealed six core themes within the data; difficulties coping with COVID, connectedness, using mindfulness to cope with COVID, focusing on the bigger picture, disregard for mindfulness by medical professionals and scepticism and apprehension to use mindfulness. This study provides insight into the emerging research pertaining to COVID-19 and the ways mindfulness can help to navigate the stress it imposes through personal experiences with practice. It highlights not only the benefits people have had in relieving both physical and psychological symptoms involved but also the role social support plays in this. Barriers were also identified and discussed with inconsistent attitudes towards mindfulness use as a therapeutic tool by both medical professionals and the general public.

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## **A Thematic Analysis of the Role of Mindfulness During the COVID-19 Pandemic**

### **Threats to Wellbeing**

Over the duration of the human life span, it is a rare occurrence to experience the ever-changing nature of life without some form of trauma, crisis, or threat to wellbeing. Regardless of the perceived magnitude, stress due to external circumstances is a normal part of human experience and the means in which people cope with these external stressors can vary considerably. Due to the fluidity of the average life span, significant events can produce a variety of emotions affecting different aspects of life including personal, relational, and social wellbeing (Chan, Chan & Ng, 2006).

According to the World Health Organisation (WHO) (1998), human nature and societal structures fundamentally underlies understandings of health. Health, being synonymous with wellbeing, is defined as a “state of complete physical, mental, and social wellbeing and not merely the absence of disease.” This also includes an individuals’ ability to “realise aspirations, satisfy needs and to change or cope with the environment” (World Health Organisation, 1986). Different aspects of well-being that have been examined by research include physical well-being, economic well-being, social well-being, development and activity, emotional well-being, psychological well-being, life satisfaction, domain specific satisfaction and engaging activities and work (Centers for Disease Control and Prevention, 2018). When one or more aspects of well-being are threatened, this can result in negative consequences and decline in overall well-being.

### ***Personal Threats to Wellbeing***

On a personal level, threats to wellbeing can include contracting infectious and degenerative diseases, chronic medical conditions, mental health issues and financial threats.

Although rates of infectious diseases have declined in modern times due to technological advances, illness such as cancer, degenerative disease and chronic medical conditions have increased as people are living longer in general. However, with the advancement of technology comes with it more effective treatments to prolong individuals' lives with such illnesses, although this does not address the threat to physical, mental and economic wellbeing these illnesses can impose (Kachanoff, Bigman, Kapsaskis & Gray, 2020).

### ***Relational Threats to Wellbeing***

From a relational perspective, the loss of a loved one, a breakup or divorce, or the loss of a job produces stress and trauma in those experiencing them, resulting in a number of health consequences. The term 'broken hearted' is usually a reference to the intense emotions experienced after a breakup, divorce or death of a spouse although physical health is also compromised during the considerable emotional toll this imposes on an individual (Fagnundes & Wu, 2020). Studies have indicated, individuals who have suffered the loss of a spouse have increased risk of cardiovascular events and premature morbidity and mortality in general (Moon, Glymour, Vable, Liu, & Subramanian, 2014). Furthermore "broken heart syndrome" can occur due to stress and extreme emotions and is identified by a temporary heart condition. Interacting factors of negative health behaviours and emotional distress can potentiate risk of both mental and physical health concerns posing significant threat to wellbeing (Virani, Khan, Mendoza, Ferreira & de Marchena, 2007).

### ***Social Threats to Wellbeing***

Moreover, global events including diseases, terrorist attacks and natural disasters can produce stress in the individual by threatening public mental health which is exacerbated by prolonged and exaggerated social media exposure of the event (Schlenger, Caddell, Ebert,

Jordan, Rourke, Wilson, Thalji, Dennis, Fairbank & Kulka, 2002). According to Schlenger et al (2002), the September 11 terrorist attack on New York City in 2001 resulted in widespread post-traumatic stress disorder (PTSD) with direct exposure to the event, as well as amount of time spent viewing media coverage of the event, being associated with PTSD symptom levels. These findings are further supported by investigations into the psychological implications of media exposure to other collective traumas including the 1995 Oklahoma City Bombings (Pfefferbaum, 2001), indicating extensive exposure to the events through media has a stronger effect on stress responses than direct exposure to the event itself (Holman, Garfin, & Silver, 2014). PTSD and internalizing and externalizing symptoms are also shown to be prevalent in those who have been exposed to natural disasters including hurricane exposure (Cutright, Padgett, Awada, Pabis & Pittman, 2019) and tsunami exposure – more specifically the 2004 Sri Lanka tsunami (Catani, Kohiladevy, Ruf, Schauer, Elbert & Neuner, 2009).

In addition to the collective trauma of terrorist attacks and natural disasters mentioned above, the threat of disease is also shown to have a significant impact on humanity, endangering many aspects of health and well-being. Diseases such as Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS) and Ebola Virus Disease, have had a significant effect on wellbeing with increases in substance abuse/dependence, anxiety, and depression (Esterwood & Saeed, 2020). Media exposure is also shown to exacerbate effects of health-related crises such as disease. A recent study conducted by Thompson, Garfin, Holman and Silver (2017), investigated into the psychological effects of the Ebola public health crisis, finding a significant relationship between Ebola related media exposure and negative psychological responses to the outbreak. Thompson et al (2017) found that previous acute stress was significantly exacerbated by Ebola related media exposure.

## **The Psychological Impact of COVID-19**

Coronavirus disease (COVID-19) is caused by Severe Acute Respiratory Syndrome-Coronavirus 2 (SARS-CoV-2) (WHO, 2020). The most documented symptoms associated with the virus include shortness of breath, high fever, and a dry cough. Symptoms may range from people presenting as asymptomatic to severe symptoms resulting in death. By March 11, 2020 WHO declared COVID-19 a global pandemic. Within a short period of time, this pandemic posed significant threats to life as was previously known, including personal, relational and social threats.

The spread of the novel coronavirus occurred rapidly, resulting in widespread psychological impact and a proliferation of fear and anxiety. Although research on the psychological impact of COVID-19 continues to emerge, consequent post traumatic psychopathology including PTSD, long term anxiety and depressive symptomatology is expected and inferred due to past research on psychological impacts of disasters and diseases (Schlenger et al, 2002; Cutright et al, 2019, Catani et al, 2009). Facing fears associated with the pandemic such as isolation, the abolishment of social structures, financial struggles, illness, and death can be difficult to accomplish. Due to this unprecedented event, research investigating the effects of a global pandemic of this scale is in its infancy and only just beginning to accumulate. A recent study has investigated the effect this pandemic has had on subjective wellbeing. Data was collected by a sample of 979 participants, finding that overall subjective wellbeing was reduced between March and May 2020, with decreases in positive affect and life satisfaction. Subsequently, they investigated into how stress appraisals and coping strategies influenced individual differences in subjective wellbeing. Result showed improvements in life satisfaction in relation to active coping, positive reframing and controllability appraisals. Emotional support,

religion, active coping, and controllable-by-self appraisals contributed to positive affect while threat and centrality appraisals, denial, substance use and self-blame contributed to negative affect (Zacher & Rudolph, 2020). These findings suggest a significant psychological component when addressing the effects of this pandemic. It also highlights the importance of stress appraisals and coping mechanisms in dealing with COVID-19 stressors.

In attempts to eradicate the virus, governments have enforced social distancing and mass quarantine. In doing so, countries have slowed the transmission of the virus and in New Zealand's case have effectively eliminated it in the community. Despite these positive effects, unfortunately social distancing and quarantine have resulted in negative impacts to psychological wellbeing (Brooks, Webster, Woodland, Wessely, Greenberg & Rubin, 2020). According to Brooks et al (2020), stressors during quarantine can include fear of infection, frustration and boredom, inadequate supplies, and inadequate information. As a result of these stressors, psychological implications can include confusion, anger, as well as post-traumatic stress. Anxiety, depression, feelings of loneliness and insomnia are also shown to be psychological effects of feelings of confinement for those in quarantine and isolation (Li, Yang, Liu, Zhao, Zhang, Zhang, Cheung & Xiang, 2020). Moreover, quarantine, isolation, and lockdown enforcement has also contributed to increases in domestic violence and decreases in wellbeing associated with being in close confinement with an abusive partner. In an effort to protect public health, instructions were given to stay at home. Although in doing so, domestic violence, as anticipated, has magnified. In nine US major metropolitan cities, there was a 20% to 30% increase in domestic violence service calls after the first month of lockdown orders (Kofman & Garfin, 2020). Kofman and Garfin (2020) investigated into the increase in domestic violence reports and reviewed past literature on domestic violence increases during past disasters. They

concluded that disaster preparedness, response and recovery is warranted regarding domestic violence.

Furthermore, an increase in suicidality may be expected during this time. According to Tanaka and Okamoto (2021) monthly suicide rates increased by 16% between July and October 2020 during Japans second wave of COVID-19. Sher (2020) investigated into the increase of suicidality during COVID-19, looking at the link between anxiety, sleep disturbances and suicide during the COVID-19 pandemic. Results found an association between sleep disturbances and anxiety, depression and suicidal behaviour. This study concluded the importance of treating insomnia during times of stress such as COVID-19 as it may significantly reduce suicide rates. A number of stressors including isolation and financial threats may exacerbate suicidality although, further research is needed to gain an understanding of the extent this is having an effect.

Research has indicated that social media exposure can have a significant effect on mental health outcomes for individuals experiencing stressful events such as 9/11 (Schlenger et al, 2002). These psychological implications have also been demonstrated during the current global pandemic. According to Hong, Liu, Ding, Fu, Zhen and Sheng (2020), rumination mediates the association between social media exposure to COVID-19 information and psychological distress. Rumination refers to a response to a stressor in which an individual engages in repetitive and passive thoughts about the self and experiences (Papageorgiou & Wells, 2003). COVID-19 related ruminative thinking results in immersion into the situation which therefore increases psychological distress and symptoms. Hong et al (2002) demonstrated this by showing that college students with frequent social media exposure to pandemic related information having higher levels of psychological distress through more active rumination. Consequently, anxiety and depressive symptomology is more prevalent. Furthermore, past research, looking into the

effects of media exposure on public health crises, such as the Ebola outbreak, has shown psychological distress in otherwise healthy individuals (Thompson et al, 2017). This is in line with current research on the COVID-19 pandemic demonstrating that having exposure to COVID-19 related media coverage is associated with higher risk of depression and anxiety in a United Kingdom sample (Shevlin, Nolan, Owczarek, McBride, Murphy, Miller, Hartman, Levita, Mason, Martinez, McKay, Stocks, Bennett, Hyland & Bentall, 2020). These findings are in line with the model of social contagion through social media as presented by Kramer, Guillory and Hancock (2014), which indicates that when people engage in social media to express psychological distress these emotions can be transferred consciously or subconsciously resulting in depressive symptomology and anxiety.

## **Stress**

Considering the ubiquitous threat, COVID-19 has had on the world, it is necessary to understand the extent of the effect it is having on individuals. I have discussed the psychological impact of COVID-19 above, although a deeper understanding of why stressors related to COVID-19 are having such an impact is warranted. The following paragraphs address this by discussing the origins of stressful thinking, the stress response, and the neurobiology of both.

### ***The Origins of Stressful Thinking***

Before looking into the human stress response, it is important to understand where stress originates. Consistent thoughts about difficult experiences elicits the stress response and in turn adversely impacts health and wellbeing, but what mechanisms produce these negative thoughts in the first place? Past research has investigated into why some thoughts produce stress and why others do not. Ursin and Eriksen (2004) suggest that the stress response is initiated when the anticipation of an event does not align with what occurs in reality. Furthermore, perceived self-

threat, perceived inability to cope, the perceived severity of the situation, the individuals resilience and vulnerability, negative emotion and associated neuroendocrine response work together with the misalignment of expectation and reality, contributing to what makes an event stressful for an individual (Lebois, Papias, Gopinath, Cabanban, Quigley, Krishnamurthy, Barrett and Barsalou, 2015). Additionally, Lebois et al (2015) suggest immersion is a key component in stressful thinking. Immersion refers to strong self-engagement in an imagined situation. While engaging in these imagined situations, individuals can experience emotions, physical and sensory sensations as if they are experiencing the situation in real time. This consequently turns the imagined experience into a subjectively real situation through mental time travel. This immersion in turn, results in negative emotion, rumination, and the stress responses to be activated.

### ***The Neurobiology of Stressful Thinking***

Understanding the mechanisms behind the development of stressful thinking, such as misalignment with expectation versus reality and immersion, are key aspects of gaining insight into experiencing stress in humans. The neural bases of stress also provide insight into this with consistent sets of neural regions becoming activated during stressful thinking. The anterior insula, amygdala and orbitofrontal cortex (OFC) facilitate in determining the relevance of an event or stimulus (Barrett, Mesquita, Ochsner, & Gross, 2007). The OFC in particular aids in categorizing the event as stressful and the storing of the event in working memory (Dedovic, D'Aguiar and Pruessner, 2009). When making appraisals regarding personal significance, emotional significance and valence of a situation, the anterior cingulate cortex (ACC), amygdala and dorsomedial and ventromedial prefrontal cortex operate together (Barrett et al 2007).

### ***The Stress Response***

Perceived threat, whether it be personal, relational, or social, inevitably result in the human stress response. This response is advantageous from an evolutionary perspective resulting in optimization of cognitive, cardiovascular, immunological, and metabolic function. With the function to survive, elevations in cortisol levels during a perceived threat can induce the human fight or flight response, activating the sympathetic nervous system resulting in increased alertness and energy and a decrease in appetite and food intake (Torres and Nowson, 2007). In moments of perceived threat, this is essential to protect yourself from that threat. However, chronic exposure to a perceived threat and therefore stress, is maladaptive and long-term exposure to cortisol results in harm through a variety of health issues including metabolic syndrome, obesity, cancer, mental health disorders, cardiovascular disease and increased susceptibility to infections (Russel and Lightman, 2019). Living in constant stress is living in constant survival mode. People are wired to deal with short term bursts of stress and return to a state of homeostasis within hours of the event occurring. However, due to the human capacity to think about problems, relive past experiences and forecast future ones, the stress response can be turned on by thought alone and the body's ability to restore balance is hindered consequentially. Threats to wellbeing discussed above will inevitably activate this stress response as a healthy survival response. It is the aftermath of an event, how people respond and exposure to events after the initial experience, that indicates whether the stress response becomes maladaptive and prolonged (Sapolsky, 2004).

### ***The Neurobiology of the Stress Response***

Regarding the neural basis of the stress response, the hypothalamus and brainstem form connections with the neural regions associated with stressful thinking mentioned previously,

initiating physiological, hormonal, and behavioural responses to stress (Barrett et al, 2007). Further key brain areas associated with the stress response include the hippocampus which facilitates the evaluation of a stressors effect on an individual's goals and self. The hippocampus role in the stress response can also inhibit the hypothalamic pituitary adrenal (HPA) axis with the help of the medial prefrontal cortex. In contrast, the amygdala potentiates HPA axis activation, although this potentiation is inconsistent based on different contexts being more likely to activate it (Dedovic et al, 2009). The HPA axis plays a significant role in the stress response, facilitating the provision and mobilization of energy stores and increasing awareness to salient environmental cues. This is achieved by the release of cortisol, providing the body with preparation for a response to a potential environmental threat (Owens, Helms, Rudolph, Hastings, Nock and Prinstein, 2019).

### **Coping Mechanisms**

Significant life events can lead to psychological stress. In order to adjust to this change in physical and emotional state, individuals utilize coping mechanisms which are behaviours that can help individuals deal successfully with stressors in their lives (Lazarus & Folkman, 1984). Coping mechanisms can be broadly categorized into problem focused or emotion focused coping styles. Problem focused coping styles involves looking at methods and solutions to deal with the event and emotion focused coping involves ways to handle the feelings of stress associated with the problem (Cramer, 2015).

Further categorisation includes avoidant or active coping styles where avoidant mechanisms are involved in ignoring or avoiding the problem through various means including the use of drugs and alcohol. Active coping involves conscious awareness and attempts to reduce stress from the event (Zacher and Rudolph, 2020). Problem focused and emotion focused

strategies in addition to socially supported strategies are seen to be more constructive and active ways of dealing with a stressor as they result in removal of stressors or a positive change in perception of the stressor. However, avoidant coping strategies such as substance abuse fails to directly address the stressor and only masks it. Therefore, the stressor is not removed, and the perceptions of that stressor remains the same. The latter is correlated to declines in subjective wellbeing (Carver, Scheier, & Weintraub, 1989). Umucu and Lee (2020) investigated participants with disabilities and chronic health conditions and discovered they used both maladaptive and adaptive coping mechanisms to cope with the perceived stress of the current COVID-19 pandemic. Maladaptive and avoidant strategies' included venting, denial, substance use, self-blame, behavioural disengagement, and self-distraction and adaptive or active strategies included active coping, planning, use of emotional support, use of instrumental support, positive reframing, religion, humour, and acceptance with self-distraction and acceptance being the most frequent coping strategies used.

### **Conventional Trauma Management and the Biomedical Model**

In times of distress, people will seek the help of medical professionals to aid in managing the uncomfortable symptoms of psychological stress. Social work, psychological and medical interventions are available to help people during difficult times with a number of strategies. Often operating within a pathology or biomedical based framework, there is a focus on removal of symptoms and an overarching goal to restore normal functioning to a pre trauma state (Chan et al, 2006). According to Chan et al (2006) the aim of the professional is to identify key trauma related symptoms and to remedy them with a variety of solutions. Whether it be pharmacological or non-pharmacological, conventional interventions can often be short term solutions. Short term, solution focused interventions have taken priority in recent history when it comes to

treating vulnerable individuals. This is based on the premise that the success of the professional is determined by the level at which the patient has decreased in symptoms and problems at the time of discharge. The biomedical model has been the dominant modal treatment for both psychological and physical ailments with a significant influence on health research, policy and practice for several decades (Deacon & McKay, 2015). This has had a contribution to funding initiatives based on biomedical research being implemented from federal agencies including the National Institute of Mental Health and the National Institute of Drug Abuse. Due to the premise under this model that psychological problems are a brain disease and chemical imbalance, medication and biological treatment has taken precedence with the aim to find biological solutions to biological health problems (Deacon, 2013). Due to heavy influence from pharmaceutical companies and academic psychiatry, the consensus of the public follows that psychological disorders are diseases of the brain and can be treated with pharmacological interventions. As a result, this is commonly the first point of call over psychosocial interventions (Deacon and McKay, 2015).

### **The Gaining Popularity of Psychosocial Interventions**

Due to the dominance of the biomedical model in medicine, psychological phenomena have been viewed from a biological perspective. This is supported by former president of the American psychiatric society stating “Our brains are biological organs by their very nature. Any [mental] disorder is in its essence a biological process” (Davis, 2003). This view has consequently minimized the importance and effectiveness of psychosocial interventions when it comes to psychological phenomena. Although biomedical interventions have been conventionally used in the last century, clinicians are becoming increasingly aware of interventions that are more permanent, long lasting, and preventative, placing emphasis on

psychoeducation and psychosocial techniques as vital factors in coping with stress (Shah, Klainin-Yobas, Torres, & Kannusamy, 2014). Psychoeducation is used to provide a patient experiencing trauma with information regarding the psychological repercussions of trauma. This is accomplished through various communication including face to face interaction and media. Although, face to face access to GPs and other medical professionals has been difficult during lockdowns, phone or skype appointments have often been provided. Providing patients with information on this has shown to increase health levels both physically and mentally (Phoenix, 2007). Subsequently, psychosocial interventions not only target biological factors of health and well-being but also behavioural, cognitive, emotional, interpersonal, social, and environmental factors (England, Butler and Gonzalez, 2015). Relaxation methods in particular are becoming increasingly prevalent regarding treating psychological disorders such as depression, anxiety but to also manage pain as a result of physical ailments. These techniques can also assist in reducing the stress levels associated with both physical and psychological symptoms (Schaffer & Yucha, 2004). Relaxation methods such as abdominal breathing and guided imagery aim to produce subjective feelings of calmness and acceptance by reducing sympathetic nervous system arousal (Mughairbi, Alnajjar, & Hamid 2019). In doing this, leads to decreased respiration, heart rate, blood pressure and muscle tension (Cramer, Lauche, Haller, Steckhan, Michelsen & Dobos, 2014). Regarding the stress response as discussed above, relaxation techniques aim to counteract this response by activating the parasympathetic nervous system and therefore convincing the brain into a relaxed state by conscious deep, slow breathing (Jacobs, 2004). Psychosocial interventions include Cognitive Behavioural Therapy (CBT), Mindfulness Based Cognitive Therapy and Acceptance and Commitment Therapy (Butler & Gonzalez, 2015; Shapero, Greenberg, de Jong & Desbordes, 2018).

## **Mindfulness**

### ***Origins of Mindfulness: Meditation***

Meditation has been used for thousands of years originating in traditional eastern philosophy as an activity with a primarily spiritual objective yet has only been evident in mainstream western culture in recent years and is increasingly used in therapeutic practice (Behan, 2020). Scientific interest in mindfulness and meditation practices has increased significantly both practically and in research in recent times (Shonin, Van Gordon, & Griffiths, 2014). Meditation refers to a formal practice that involves enhancing awareness of our body, mind and environment through calming the mind using breath (Behan, 2020). Rooted in spirituality, meditation has been used therapeutically to heal the root cause of human suffering, returning individuals to a way of being that involves consciousness and freedom from the human ego – a term used to describe a cause for suffering (Britton, Lindahl, Cahn & Davis, 2014). According to Buddhist philosophy, the human experience and the nature of the mind is made up of how we perceive the world through the senses: seeing, hearing, smelling, tasting, touching, and also thinking. However, the thinking aspect of the human experience can often overshadow the senses, inhibiting them and therefore dampening the experience of life as it occurs. Through meditation, individuals can quiet the thinking mind which in turn allows one to be present and experience life as it comes without preoccupation with thought (Plamintr, 1994).

### ***What is Mindfulness?***

Meditation and mindfulness are often used interchangeably although the practice of meditation falls under the umbrella of the broader concept of mindfulness. Mindfulness can be defined as the awareness that emerges through paying attention on purpose, in the present moment and non-judgmentally to the unfolding of experience moment by moment (Kabat-Zinn,

2003). Using tools including breath awareness and sensory awareness shifts awareness from emotions and thoughts to these present moment experiences and involves acceptance of these experiences whether pleasant or unpleasant through non-judgmental awareness. This can be divided into formal and informal practice with formal practice being meditation and informal practice involving paying attention to the present moment (Birtwell, Williams, Marwijk, Armitage & Scheffield, 2019).

### ***The Mechanisms Behind Mindfulness***

Looking into the mechanisms behind mindfulness, numerous theoretical models have been developed to understand the success behind mindfulness and mindfulness-based interventions (Behan, 2020; Carmody, et al, 2008). According to Brown, Ryan and Creswell (2007) and Shapiro, Carlson, Astin and Freedman (2006), practicing mindfulness aids in a cognitive process called “decentering” which refers to the ability to have a positive shift in perspective of life experiences and to perceive those experiences objectively. Shapiro et al (2006) also found the following mechanisms involved in mindfulness that form a single cyclical process and ultimately lead to a shift in perspective also known as ‘reperceiving’. These interwoven mechanisms include purposeful intention, paying attention and attitude with openness and nonjudgement. While facilitating the observation of one’s thoughts and feelings with better intention, attention, and attitude, reperceiving can also contribute to mechanisms such as self-regulation, clarification, cognitive, emotional and behavioural flexibility and exposure to strong emotions with objectivity. As a result, these mechanisms produce positive changes in psychological wellbeing through reduction in stress and ability to cope during a stressful experience. Furthermore, mindfulness can facilitate in reducing the power of the stress response by adopting a ‘mindfulness mediated stress response’. This response engages the reperceiving

mechanism as discussed above and aids the individual in the use of more adaptive and effective coping strategies than would be the case when engaging in an automatic stress response (Kabat-Zinn, 2013).

### ***Benefits of Mindfulness***

Navigating through the transience of life comes with it an array of different experiences. The perception of these experiences may be deemed as positive or negative and consequently lead to different emotional states, thought patterns, reactions, and subsequent behaviours. Mindfulness has become increasingly popular in recent times as a regular practice to navigate through these experiences and the peaks and valleys that comes with a lifetime. Through this popularity has come new discoveries in academic research on the benefits of mindfulness. Regarding the neurobiology of stressful thinking as discussed above, regular formal mindfulness practice has demonstrated a change in brain areas associated with stress and anxiety and may counteract the activation of these regions during stressful thinking. After long periods of regular meditation, increased activity is present in the prefrontal cortex, cingulate cortex and hippocampus while the amygdala decreases in activity, improving emotional regulation (Afonso, Kraft, Aratanha & Kozasa, 2020; Gotink, Meijboom, Vernooij, Smits & Hunick, 2016). In addition to the neurological changes, mindfulness has therapeutic uses involving a variety of conditions including mental health, pain, and somatic conditions. For example, Sollgruber, Bornemann-Cimenti, Szilagy and Sandner-Kiesling (2018) investigated into the effect's meditation has on pain perception in a sample of 147 volunteers. Results showed an increase in pain tolerance and a reduction in pain intensity in participants who were in the meditation group compared to participants who were informed to calm themselves in the relaxation group without any guidance. Further documented benefits of mindfulness meditation include aiding in the

treatment of sleep disorders, substance use, eating disorders and cancer (Cyr, 2019) as well as being a protective factor against the development of trauma-related psychopathology (Cutright et al, 2019).

### ***Mindfulness Based Interventions***

Originally drawing from contemplative Buddhist tradition, mindfulness has gained significant popularity in secular sectors, utilizing it in therapeutic interventions. Western scientific culture investigating the efficacy of these mindfulness-based interventions (MBIs) has resulted in improvements in psychological functioning in both clinical and non-clinical settings in not only individual wellbeing but also collective wellbeing (Carmody et al, 2008; Querstret, Morison, Dickinson, Cropley and John, 2020). Evidence based therapies such as Mindfulness Based Stress Reduction (MBSR) and Mindfulness Based Cognitive Therapy (MBCT) have shown reductions in depression, PTSD, anxiety, stress, blood pressure and cortisol levels among other physiological markers of stress (Behan, 2020). With an original aim to target patients with chronic medical conditions, MBSR is currently the most studied and utilized MBI using techniques including focused attention, meditation, and cognitive restructuring to reduce stress and pain and improve overall wellbeing (Kabat-Zinn, 2013). Segal, Williams and Teasdale (2002) more recently have adapted MBSR with an original aim to treat patients with recurrent depression, coining the programme Mindfulness Based Cognitive Therapy.

#### **Mindfulness Based Stress Reduction and Mindfulness Based Cognitive Therapy.**

Mindfulness based interventions, more notably MBSR and MBCT, generally involve an 8-week training program where participants meet once per week for 2-2.5 hours with a qualified mindfulness trainer to practice mindfulness and participate in dialogue about meditation. Meditative practice is also performed for approximately 30-60 minutes per day individually,

away from group meetings (Matiz, Fabbro and Cresscentini, 2018). Both formal and informal mindfulness practices are used and make up a significant portion of the program. Formal mindfulness practice consists of meditative techniques including breath awareness, body scan, mindful movement, and mindful yoga whereas informal mindfulness practice consists of awareness of bodily sensations, thoughts, emotions and sensory awareness. This encourages participants to mindfully engage in typically mindless activities such as walking, brushing teeth and eating (Querstret et al, 2020).

Carmody et al (2008), investigated into the efficacy of the MBSR program, looking at the associations between mindfulness, spirituality, and medical and psychological symptoms. Forty-four university participants were assessed on trait and state mindfulness, spirituality, psychological distress and reported medical symptoms. Results showed significant improvements in all variables with improvements in state and trait mindfulness and spirituality which were also associated with decreases in psychological and medical symptoms.

Furthermore, Grossman, Niemann, Schmidt and Walach (2004) conducted a meta-analysis of the health benefits of the MBSR program in people with a variety of chronic disorders. Examining 64 empirical reports, Grossman et al (2004) found that it was beneficial for participants and changes in distress levels were present in follow ups three months, six months, three years and four years later (Carmody et al, 2008). Additionally, these studies align with Querstret et al (2020) evaluation of the effectiveness of both MBSR and MBCT on psychological health and wellbeing in a meta-analysis of participants in the general population. Results found that these mindfulness-based programs effectively reduced depression, anxiety, rumination/worry, psychological distress as well as increased quality of life and overall wellbeing. These findings are also in accordance with Kriakous, Elliott, Lamers and Owen (2020) who not only found

MBSR effective in reducing anxiety, depression, and stress in a sample of healthcare professionals, but also found an increase in self-compassion.

Despite the growing popularity of mindfulness and MBIs' and the efficacy demonstrated in recent literature, concerns and precariousness regarding adverse effects have also emerged. Investigations into these adverse effects have identified, memory impairments, panic attacks, psychotic episodes, and addiction (Van Gordon, Shonin, Garcia-Campayo, 2017). Although reports of adverse effects are less common, there is a need for further specific investigations into why these negative health outcomes are occurring. Majority of empirical research suggests mindfulness is a safe and effective instrument for several health outcomes, although it must be practiced, administered, and taught correctly. Studies show that these risks may be occurring due to a lack of understanding of what effective mindfulness practice consists of and what constitutes successful mindfulness teachings (Shonin et al, 2014).

**Acceptance and Commitment Therapy (ACT).** ACT is a third wave behavioural therapy similar to CBT, that has been gaining popularity in therapeutical settings in recent times. Unlike CBT, ACT involves the overarching goal of addressing how behavioural responses work for an individual and to increase psychological flexibility opposed to a goal of symptom reduction as seen in CBT. ACT differs to CBT in that it focuses on process or function of thought and behaviour opposed to the content of the thought or behaviour. The processes underlying ACT include acceptance, cognitive diffusion, self as context, contact with the present moment, values and committed action (Trompetter, Bohlmeijer, Fox & Schreurs, 2015). These processes are in line with the mechanisms behind mindfulness in that instead of removing, suppressing, controlling or avoiding situations, the focus is on accepting all human experience without judgement, being present in the here and now and having awareness that thoughts and

feelings are separate from the self (Daltry, 2015). Cosio and Scafer (2015) investigated the efficacy of ACT in comparison to CBT in a sample of 96 veterans. Although there was no significant difference between the ACT and CBT groups, both groups resulted in decreases in illness focused coping strategies, catastrophizing behaviours, and global distress levels.

### ***Mindfulness for Threats to Wellbeing***

With the vast array of benefits mindfulness offers and the demonstrated efficacy of MBIs such as MBSR, MBCT and ACT, it may be inferred that mindfulness can play a positive role in the psychological outcomes of individuals experiencing or who have experienced a traumatic event such as a disease, disaster or terrorist attack. Recent research has investigated into the role mindfulness has on psychological outcomes for children following exposure to hurricane Irma and Maria in the United States. In a sample of 108 children and adolescents, results showed that mindfulness was negatively correlated with PTSD symptoms and concluded that mindfulness is an important and helpful tool after exposure to trauma such as a hurricane (Cutright et al, 2019). This study is in support of Xu, Fu, An, Yuan, Ding and Zhou (2018) who investigated into the relationship between mindfulness and PTSD symptoms, depression and social functioning impairment in a sample of 247 Chinese adolescents who had experienced the trauma of a severe tornado six months prior. Results found that mindfulness was negatively correlated with negative cognitive change. Mindfulness is not only shown to be effective in treating psychological distress in victims of natural disasters but also patients of neurodegenerative disease. A recent study investigated into the efficacy of mindfulness-based therapies in treating patients with Parkinson's Disease (PD) and Multiple Sclerosis (MS) by conducting two meta analyses of randomized controlled trials. Results found that MBIs were effective in reducing psychological distress in

patients although more research is needed in samples of MS and PD patients (Ghielen, Rutten, Boeschoten, Houniet-de Gier, Van Wegen, Van Den, Van den Heuvel and Cuijpers, 2019).

### *Mindfulness Used in a Pandemic*

Humankind is not unfamiliar with being at the hands of a pandemic. Although very few are here to recall such events such as the Spanish flu of 1918. Moreover, there is not a person alive to recall events of more historic and deadly pandemics such as the Black Death in the 1300s or the Great Plague of the 1600s. Due to this, we have little understanding on how best to cope due to lack of scientific literature on these widespread health crises. More recent epidemics including AIDS, SARS, Ebola and Swine Flu have given us insight into this, although they did not create such a significant, pervasive and prolonged effect on the global population as COVID-19 has. Due to these unprecedented, widespread disruptions to daily life there is little scientific research on how to navigate and negotiate this global health crisis and all the stressors that accompany it. Unemployment, isolation, financial pressure, threats to physical health of self and loved ones are just some of the stressors people are facing during the COVID-19 pandemic. With the exacerbation of social media, these stressors have been shown to result in psychological effects including fear, anger, confusion, frustration, boredom as well as more long-term psychological effects such as clinical depression and anxiety (Esterwood and Saeed, 2020). With the efficacy of mindfulness and MBIs' used in global threats including natural disasters, terrorist attacks and patients with chronic illness, it follows that this tool has the potential to be effective when dealing with stressors associated with the COVID-19 pandemic, although more research is needed to support this inference.

## **Social Media Support**

Social support in times of stress is encouraged by medical professionals. Through social support groups individuals can gain empathy, experiential knowledge, practical information, emotional coping, and friendships (Munn-Giddings & McVicar, 2007). By having the opportunity to release negative emotions, share relatable experiences and gain more knowledge and understanding, social support may reduce the stressful impact of an event and provide a sense of comfort (Cohen, 1988).

With the increase of communicative technology, opportunities to share and discuss information online has increased through social media platforms such as twitter, Facebook and Instagram. These platforms allow individuals to easily communicate and network, providing psychological and social support. Barak, Boniel-Nissim & Suler (2008) conducted a study on online support groups finding that they provide a sense of control, increased well-being, feelings of independence, self-confidence, and social interaction. Furthermore, Gilmour, Machin, Brownlow and Jeffries (2020), conducted a systematic review to examine the impact Facebook based social support has on health. Reviewing 27 studies, the review found that Facebook based social support improved both general physical and mental health as well as well-being. Also, depression, anxiety, loneliness, and online victimization was effectively reduced.

## **The Current Research**

The current global pandemic humanity is currently facing poses a significant threat to all aspects of wellbeing. Stress and feelings of fear and worry are heightened due to a variety of stressors associated with COVID-19; fear of dying, fear of losing a loved one, contracting the virus, financial pressures and social isolation adversely affect mental health. With the proven efficacy of mindfulness for a variety of physical and psychological difficulties as well as the

capacity to reduce stress and increase wellbeing during a global threat, the current research focuses on how mindfulness use may be beneficial during the difficulties people are facing during COVID-19. The primary aim of the current investigation is to focus on individual experiences navigating through the many stressors COVID-19 is presenting, with a particular focus on exploring the role mindfulness plays on navigating through these experiences. Posts and discussions in online Facebook support groups are investigated to achieve this aim. Considering the nature of online support groups, the role social support plays on these experiences is also explored.

## **Methodology and Method**

This chapter addresses both the methodology and method used in the current study. I discuss the theoretical framework chosen, addressing ontological and epistemological perspectives as well as the approaches I chose to undertake. The method is also discussed, providing detailed insight into the research process including ethical consideration, participants, data collection, data analysis and reflexivity.

### **Theoretical Framework**

#### ***Qualitative Research***

Qualitative research allows us to gain understanding of a phenomenon. It does so through exploring meanings of experiences from the perspective of individuals, who are viewed as holding the utmost understanding of that experience (Parker, 2005). This allows the researcher to investigate and gain insight into individual perspectives on an experience as well as their subjective interpretations (Holloway and Todres, 2003). Therefore, using a qualitative research design in this investigation was considered appropriate for this study as it explores participants experience of COVID-19 and how sharing experiences of using mindfulness has improved wellbeing during these times.

#### ***Ontology and Epistemology***

According to Braun and Clarke (2006) it is important for researchers to identify and reflect on ontological and epistemological stances while deciding on appropriate research methodology for research aims and objectives. Furthermore, transparency of the theoretical framework in which the analysis is conducted is important. This is particularly important in qualitative research as the researcher plays an active role in data collection and interpretation of that data. Particular theoretical approaches align with particular assumptions about the nature and

representation of a data set. However, thematic analysis (TA), unlike other forms of qualitative analysis, is not associated with a particular theoretical framework, allowing flexibility to be used with a variety of different approaches. The present study was conducted using TA with a critical realist approach. Themes were identified at the semantic level with a hybrid of inductive and deductive analysis (Braun and Clarke, 2006).

**Critical Realism.** Critical realism presents a theoretical framework that is both positivist and subjectivist in nature, occupying a middle ground between two oppositions. The philosophical position of positivism is used predominantly in quantitative analysis, highlighting empirical analysis of objective phenomenon with an emphasis on the mechanisms grounded in a material reality. Conversely, subjectivism highlights individuals' perceptions and understandings of reality (Haigh, Kemp, Bazeley & Haigh, 2019). Therefore, critical realism accepts that objective reality exists separately to human perception while simultaneously recognising individual subjective interpretation of that reality. It allows for flexibility to analyse a phenomenon from an objective perspective yet also analyses subjective observations including understandings, theorisations, and perceptions. Ultimately critical realism highlights and recognises there are multiple levels of engagement and interpretations between the known and the knower and provides an ontology that is flexible during analysis (Gorski, 2013). Due to the nature of social reality, the interpretation of this knowledge is difficult to isolate into variables due to the possibility of many different interpretations. Thus, the current investigation follows a critical realist perspective as there is a focus on the objective perspective of the material reality of COVID-19 and scientific evidence of the efficacy of mindfulness as well as individuals' personal experiences of the pandemic and mindfulness and underlying meaning of these experiences.

**Thematic Analysis.** When considering theoretical and epistemological approaches to qualitative research, TA is considered a foundation method of analysis (Braun and Clarke, 2006). TA is the examination of themes within data. Through segmentation, categorisation, summarisation, and reconstruction it allows for data reduction and analysis, capturing significant concepts and ideas both implicitly and explicitly (Guest, MacQueen, & Namey, 2012). By identifying, analysing, and reporting patterns of information within a data set, TA allows for a high degree of flexibility. It is a method that highlights similarities and differences and produces unanticipated insights into a data set through theoretically informed interpretations (Clarke & Braun, 2013). This allows for the researcher to capture intricacies of meaning within a data set. I have selected TA for the present study to capture individual experiences of navigating through the stressors of COVID-19, using mindfulness as a tool through online social support. Furthermore, I concluded TA would be an appropriate analysis to use that was in line with my chosen theoretical framework of critical realism as it examines any patterns found within the data that can be conceptualised into themes regarding COVID-19, mindfulness and social support from both a realist/positivist and subjectivist/constructionist perspectives.

**Hybrid Approach to Research.** Primarily inductive analysis is used in the present study although there is an element of deductive analysis due to the preconceived anticipation of several codes. I did not create these codes before analysis, although I acknowledge I did have expectations to find codes that align with previous research and with the projects aims and research questions. I, as the researcher, am taking a position that mindfulness is a beneficial tool to utilise in times of stress and this extends to the COVID-19 pandemic. I am following on from past literature that suggest mindfulness practise results in relief from psychological distress during and after situations that threaten wellbeing. By researching into individual experiences of

using mindfulness during COVID-19, I hoped to gain an in-depth perspective using TA on experiences of mindfulness practise during this time. Other codes were analysed inductively in that they were unanticipated and materialised from the data during early analysis. Therefore, a hybrid of both inductive and deductive analysis was used (Fereday & Muir-Cochrane, 2006; Swain, 2018). I decided to include both analyses as I wanted to provide more insight into past literature yet wanted to allow for any theory to emerge that was not preconceived. I allowed for the data to drive the analysis yet also identified data that aligned with preconceived notions. I have chosen a hybrid approach entailing both inductive and deductive analysis to further reflect the critical realist approach. Using deductive analysis provides a positivist/realist approach based on past literature on the efficacy of mindfulness as well as anticipated effects of coronavirus. The use of inductive analysis allows for a more constructionist approach in that analysis was approached in a way that emphasised individual experience and meaning of the pandemic and use of mindfulness to cope.

**Semantic Approach to Research.** This investigation used a semantic approach to TA. Developed by Braun and Clarke (2006), this approach entails organising content in a way to demonstrate patterns in a data set. Using this approach, I identified themes within the data explicitly, looking at surface level meanings of experiences opposed to a latent approach of looking beyond what the participant has written. I organised the data in a way that demonstrated semantic level content. This was later followed by attempting to theorise any broader meaning or significance in the patterns of data (Patton, 1990).

### **Ethical Considerations**

This study was conducted in accordance with the Massey University Code of Ethical Conduct for Research Involving Human Participants. The current research was then discussed

with my supervisor of the Psychology department at Massey University who informed me to apply for a low risk notification as there were no major ethical issues. The ethical issues that did present themselves were autonomy and confidentiality. Due to the nature of the research, I collected data through Facebook posts and was not able to ensure anonymity as I could see the identity of the authors of each post.

Informed consent ensures participants are able to make a personal decision about their involvement in the study (Clarke & Braun, 2013). Due to the nature of Facebook based research and posts being publicly accessible, Facebook users that are members of public groups do not expect to become a part of research, however majority of users are aware of the public nature and accessibility of their posts in these groups. Regardless of this, it is important for researchers to ensure that there is clarity on how participants data will be used and to also maintain anonymity of individuals Facebook information to ensure safety (Franz, Marsh, Chen and Teo, 2019). I inferred that participants in public groups did not mind being identified due to posts being public and the easy access of such posts. Regarding posts in private groups, I sought permission to use and quote content from selected posts. I will use pseudonyms for all participants to ensure confidentiality. I did not collect any new data from participants but rather observed existing data available through Facebook posts.

## **Participants**

This research is not focused on individual participants as such, but rather on the content of online posts and discussions. A total of 183 posts and comments were analysed across nine Facebook support groups with 132 individuals being the author of these posts and comments. Information on each Facebook group is included in Appendix A.

## **Data collection**

Facebooks search feature was utilised to find suitable groups for the current study. I began by using the search engine and using terms including “COVID-19” and “Mindfulness” and conjoining the two together. I filtered the search to “groups” and manually selected appropriate groups that I believed would provide data that related to my research aim. I joined a variety of groups in which some were private, and I had to await acceptance. This took up to three days with some groups. I collected data from a total of nine different Facebook groups and divided the groups into three categories: COVID focused groups, Mindfulness focused groups and COVID and Mindfulness focused groups. I investigated into time periods different countries went into lockdown and decided on collecting data that was posted during this critical time period considering the effect it had on people. I decided to initially look at posts between March 2020 and May 2020 and collected data accordingly. In each group, I filtered the posts to most recent and scrolled down until I reached March 2020. I then manually read through posts during this time period and collected data I thought relevant to the current investigation with the criterion being posts that were related to providing support or own experiences of COVID-19 with a focus on mindfulness and mindfulness related concepts. Within each group I also used the search function to find posts that discussed these concepts although search terms altered slightly according to which category the groups were in. Posts were manually copied from Facebook and posted into a one note document where I was able to make notes about observations and thoughts as I went. Relevant corresponding comments or replies on posts were also included.

On the first days of data collection I focused on groups emphasising COVID-19 support. These included: COVID-19 Support Group, COVID-19 Symptoms, Experiences, Questions, Remedies and Sharing, COVID-19 Recovered and COVID-19 Survivors and Support. In the

group, “COVID-19 Support Group”, the earliest posts containing any mindfulness related content was May 10<sup>th</sup>. Due to this finding, I extended the time period to July as I discovered data I believed to be interesting and relevant to the study. Following this, when collecting data from the groups “COVID-19 Recovered” and “COVID-19 Survivors and Support”, I came across some interesting posts, although they did not fall in the time frame between March and July. Therefore, I decided to extend the time frame to November. As 2020 progressed, the pandemic did not seem to improve globally. Therefore, I decided to extend the time period to include experiences throughout the year. These groups did not have a focus on mindfulness-based support but support in general for those affected by COVID-19. Therefore, I focused my search for posts that mentioned mindfulness within these groups. I did so using the search tool within each group. Search terms included “mindfulness” and “meditation”.

I then proceeded to focus on mindfulness related Facebook groups. These included: Mindfulness, Meditation and Mindfulness, Mindfulness Daily and Mindfulness Based Stress Reduction (MBSR). In these groups I sought to find posts that related to COVID-19. The primary aims of these groups were to discuss mindfulness, therefore I inferred most posts and discussions would be mindfulness related. I used the search tool within the group using the terms “COVID”, “COVID-19”, “virus”, “pandemic” and “coronavirus” to find relevant posts. I also went to the time period of the first lock down and read through posts from then onwards, in the hope people would have discussed their experiences with COVID-19 in that time frame.

Lastly, I collected data from the group “Yoga-Health- Mindfulness helping people through COVID-19 together”. This group contained an aim that integrated both COVID-19 support and mindfulness, using mindfulness as a tool to help others during the pandemic. Scrolling through this group, I found a significant number of posts and comments that were

relevant during the appropriate time period. I did not use the search tool for this group as it was not needed.

## **Data Analysis**

Using TA, I identified key themes by interpreting both individual posts and how posts are related to one another. It is important to note, the themes did not emerge from the data itself, they were imposed and conceptualised by me, as the researcher, in order to form an understanding of the posts and comments in online COVID support and mindfulness related Facebook groups. I began analysis by considering the extent that the data reflected the current literature on both COVID and mindfulness yet also having an open mind in which new information could be conceived. Suggestions from Braun and Clarke (2006) were used during analysis, adhering to a step by step guide on how to conduct TA. Although, these are applied flexibly and in a nonlinear fashion. I moved back and forth between steps when necessary.

### ***Step One: Familiarisation of Data.***

The first step was familiarisation (Braun and Clarke, 2006). During data collection I was able to get an initial sense of the posts I was collecting, mentally identifying common words, phrases and ideas in posts. Once I thought to have reached data saturation, I printed out all posts and comments and began the process of immersion in which I repeatedly read the data in an active way, searching for patterns and meanings and recognising any salient information. I paid particular attention to each post and after reading through the entirety of the data set, I then interactively read through again, manually underlining any key words or phrases that were of significance or interest while also writing down initial ideas from each post. During this early stage of analysis, I recognised data that reflected literature I had researched during the writing of

my literature review but also began to see patterns that were not reflected in current research that I interpreted as salient.

***Step Two: Generating Initial Codes.***

Phase two of analysis consisted of generating initial codes (Braun and Clarke, 2006). The purpose of coding is to identify interesting features of a data set. According to Boyatzis, (1998) codes refer to the meaningful assessment of raw data, looking at the most basic elements and segments of that data. Data can be coded inductively (data driven) or deductively (theory driven). During familiarisation, I recognised both deductive and inductive ideas and patterns were becoming apparent to me. Therefore, during coding I used a hybrid of these two approaches during analysis. During the coding process, I manually coded the entire data set, giving full attention to each post and comment and intended to code for as many potential patterns as possible. I actively read the data set and highlighted anything of interest to me as well as writing down codes on a separate sheet of paper as I went. During the process of coding, I added new codes as I went and highlighted any data extracts that reflected existing codes. At the conclusion of this process, I conceptualised 56 potential codes in which I synthesised and organised succinctly, considering overlapping codes as well as codes that I considered more applicable, significant, and meaningful to the study. I also considered how codes could be potential themes during this process. I gave more significance to codes that appeared more frequently within the data set and decided to not include codes that appeared only once. When I believed I had read through each piece of data and attributed it to a code, I then collated each piece of data and organised them according to codes in a one note document.

### ***Step Three: Searching for Themes***

Phase three of analysis involved the organisation of codes into potential themes and then collating all coded data into the identified themes. It consisted of the analysis of formulated codes and the consideration of how codes were grouped to form a broader level theme (Braun and Clarke, 2006). Referring to the list of codes, I then organised the codes into theme piles on a separate sheet of paper. I read thoroughly through the code list and began to conceive potential themes, writing down these themes as headings with relevant codes underneath. Both themes and subthemes were formed from initial codes. During this process, I combined similar codes to form themes and sub themes and also discarded codes that had little data, or I perceived as less significant to the study. Initially some codes did not fit into thematic categories and I labelled them as miscellaneous although upon further analysis I was able to form further themes which I deemed as significant to the study.

### ***Stage Four: Review Themes***

At this stage it is important to ensure reliability between the data collection and analysis by checking if the themes and subthemes hold as they are and make sense when referring to the coded data extracts (Braun and Clarke, 2006). Themes may be discarded, may collapse or merge into each other to form one theme or may be broken into separate themes at this stage. According to Patton (1990) a dual criterion of internal homogeneity and external heterogeneity should be utilised for judging categories and themes. This involves making sure there is coherence between data and themes and ensures clarity of distinctions between themes. If there is a lack of coherence, clarity and distinction, a review of the themes is warranted, considering the theme itself or the data within the theme. I scrutinized the themes, subthemes, and theme piles, analysing how well they reflected the data set. I noticed that some sub themes overlapped or had

similar meanings therefore there was not a clear distinction between them. At this stage I deleted themes, merged themes, and recognised where some sub themes were a better fit in other major themes. Originally I had seven major themes, although upon further reflection, I recognised that the theme of “Attention and Awareness” overlapped with the theme of “Using Mindfulness to Cope with COVID-19” and decided to make “Attention and Awareness” a sub theme in this major theme.

### ***Stage Five: Define and Name Themes***

It is important at this stage to continue analysis to refine each theme and assess the overall information the analysis provides. During this stage, the formulation of succinct names and definitions for each theme is needed. Checking coherence and consistency is vital for each theme and sub theme if there are any changes at the coding level (Braun and Clarke, 2006). This stage occurred as I was reporting my findings. I continued to recognise slight discrepancies between themes and subthemes which I altered slightly so themes were concise. I also further defined the names of themes and subthemes to encompass any that I had merged. For example, I altered the one theme name from “Frustration with GPs” to “Disregard for Mindfulness by Medical Professionals”. This process resulted in six core themes.

### **Reflexivity**

As a researcher, I am an active participant in the research process with my own experiences, beliefs and values influencing the process and results of the investigation. According to Berger, (2013), reflexivity is method used in qualitative research to ensure the interpretation and outcome of the research is not affected by a researcher’s ideas and background. It is important to be aware of the inability to be completely impartial due to the

nature of qualitative research and acknowledge my own thoughts, experience, and position on the topic. The researcher should distinguish this from the information acquired in the study to ensure information is derived from the research itself and not preconceived ideas based on personal experience, belief, and value (Alvesson & Sköldberg, 2000).

Regarding the current investigation, I acknowledge I have past experiences that have formed my own personal beliefs on aspects of the topic at hand. Therefore, reflection on this is of extreme importance. As mentioned earlier in this study, it is a rare occurrence to experience life without a threat to wellbeing. I am no exception to this. Following graduation, I had a variety of stressors affecting my overall wellbeing and felt motivated to make a change by improving my stress levels and my outlook on life. I began using mindfulness to do so. I believe it made a significant difference in my physical and mental health, giving me more energy, improving mood as well as giving me the ability to cope with the various stressors I was experiencing. I was not only able to cope more effectively but I also became less reactive and had an increased awareness and acceptance of emotions that would arise. Furthermore, it changed my outlook on life, allowing me to look at the bigger picture and trust the process of these experiences without judgment and with acceptance. Being human, this is difficult to achieve and required regular practice.

Working as a Teacher Aide in Auckland, I felt inspired by my own experience with mindfulness and began researching into mindfulness benefits for students. I then suggested the idea to my bosses and formulated and facilitated regular mindfulness sessions for vulnerable students. Teaching and facilitating mindfulness and mindfulness related concepts allowed me to continue mindfulness practise daily but also gave me first-hand experience on the benefits for school aged children. I witnessed improvements and received positive feedback from students,

teachers, and parents with improvements in anxiety, focus, emotional regulation and attitude to school to name a few. These factors had a significant influence on my decision to focus the current research on Mindfulness.

Initially, I planned to do the investigation based on my mindfulness programme at the school I taught at. This initial idea had to be re-evaluated at the onset of the first lockdown here in New Zealand due to the Coronavirus pandemic. Consulting with my supervisor, I decided to focus the research on how mindfulness could be used as a resource to cope with the stressors that were arising as a result of the pandemic. I decided to use Facebook posts to collect data as at this point in time, I was unable to have any face to face interaction and did not want to burden potential participants who were experiencing the first New Zealand lockdown . Experiencing the global pandemic myself, has given me preconceived notions on the potential data that may come to light. Although I did not contract COVID, have anyone I know pass away due to COVID or have any effect on my financial situation, I did experience the repercussions of a full lockdown. During this, I experienced fear and anxiety about contracting the virus and what was to come as a result. Watching news coverage as this unfolded contributed to my stress and worry significantly. Although, the first week was difficult, adjusting to these significant changes to life as I knew it, I decided that this was the time, more than ever, to regularly practice mindfulness. During the remainder of the New Zealand lock down I practiced both formal and informal mindfulness daily as well as daily yoga practice. I also made a conscious effort to limit what I was being exposed to in the media as well as shift my focus on gratitude and acceptance, writing in a gratitude journal daily. As time went on, I found my fear and anxiety lessened significantly, felt better able to cope with the stress of the pandemic, had more energy, sleep improvements, and I had a more positive outlook on life in general.

My personal experiences of mindfulness during the first New Zealand lockdown and other times during stress, as well as advocating mindfulness in schools has shaped my values and beliefs around mindfulness being positive and beneficial during the current pandemic. It is important for me to reflect, acknowledge and disclose this information so the audience is aware I have the ability to reflect on my own journey with COVID and mindfulness and have a sense of empathy and understanding. At times during data collection, I felt a great sense of sadness reading peoples experiences during this difficult time. It also caused me to reflect on how grateful I am to live in New Zealand where there is little threat of the virus at this time. Due to this, it is fair to say a lot of kiwis are very sheltered from others experiences in overseas countries where the threat is still very significant with lockdowns still occurring, hospitals over run, individuals contracting the virus themselves and loved ones being ill or dying. During the research process it was important to keep these experiences separate, allowing for new information to come in without my preconceived ideas affecting the research.

## Results

This chapter describes the major themes conceptualising individual experiences during the COVID-19 pandemic and how mindfulness use has influenced this experience using data from Facebook posts and comments in relevant online groups. There were seven major themes identified in this study. These include: *Difficulties Coping with COVID*, *Connectedness*, *Using Mindfulness to Cope with COVID-19*, *Focusing on the Bigger Picture*, *Disregard for Mindfulness by Medical Professionals and Scepticism and Apprehension to Try Mindfulness*. Several respective sub themes were also identified and described below.

### **Difficulties Coping with COVID**

During data collection and analysis, I recognised a significant number of posts consisting of people's experiences with COVID and the difficulties that they are facing. I included this theme to present a premise to the studies aims and to outline the difficulties people around the world are experiencing with COVID-19. Later themes discuss how experiences of mindfulness and social connection can help relieve or improve some of these difficulties. I interpreted these posts and comments as a way to share their experiences in the hope to receive support and validation from others with later themes demonstrating this. Some difficulties that arose were expected due to my own experience with media reports and literature on physical symptoms and others were unexpected and provided more insight into the topic. Difficulties were divided into physical symptoms and psychological symptoms. These are outlined below.

#### ***Physical Difficulties.***

Participants often shared experiences of difficulties they had with COVID symptoms. Experiences of breathlessness and lung issues were common and an expected finding in the

current study as a dry cough is considered a main symptom when contracting COVID (WHO, 2020).

*“I am 12 weeks in and thought I was on the mend, but the last two day I have been short of breath again and the cough has returned”* (Nicole, Covid-19 Support Group)

Natalie experienced severe lung issues associated with COVID, sharing her experience on a thread discussing COVID symptoms.

*“I have severe asthma and got pneumonia and pleurisy with COVID, so it will likely take much longer for that lung healing to take place”* (Natalie, Covid-19 Support Group)

Other commonly discussed symptoms were fatigue, hair loss, tremors, sore eyes, itching, palpitations, stomach issues and headaches. Some examples of these are below.

Nadia shares her atypical symptoms and her relief that she is not the only one in the group experiencing these.

*“I’m on week 12 now and still feeling very tired, low, continuous stomach issues, headaches, feeling wavy and sick and most of all the other things people are talking about. I thought it was all in my head so I’m glad to have found this group, it was driving me insane thinking it was just me!!!”* (Nadia, Covid-19 Support Group)

Lauren shares experiences of a tremor and seeks support by asking the group whether they are experiencing the same symptom. Responses gave Lauren validation that she is not alone with experiencing this symptom.

*“Does anyone have a visible tremor in their hands? I feel generally shaky as well especially my legs. Week 13 and have had a tremor for a couple of weeks now. Has anyone had a tremor that went away?”* (Lauren, Covid-19 Support Group)

### ***Psychological Difficulties.***

Individuals also discussed the psychological difficulties they have had during this pandemic, sharing feelings of fear, uncertainty, hopelessness, sadness, and loneliness as well as anxiety, PTSD, and depression. Participants acknowledged their emotions and mental health, showing awareness of how the current circumstances are affecting them on an emotional and psychological level. In sharing these experiences, people opened conversations and participated in dialogue with other group members who provided support and reassurance through acknowledging their own difficult emotions and mental health struggles. This provided a feeling of normalisation of concerns people were having.

Loneliness was a common shared experience between and within groups. The following participant, Tara, demonstrated this by sharing how she was feeling and asking other group members if they were feeling this way also. She then acknowledged the extent of the effects of emotional stress on her, comparing it to the physical stress she had had with COVID symptoms. Tara shows hesitancy to discuss her mental health concerns but does so anyway, reaching out for social support and showing courage and vulnerability while doing so.

*“I am debating whether or not to post this but feeling kind of alone and wondering if there’s others feeling this way out there. For me, the emotional stress was greater than the physical stress on my body.”* (Jessica, Covid-19 Survivors and Support)

Peter shared his experience of lockdown and acknowledges the effects this is having on his mental well-being, opening a thread for others to share their feelings and experiences also. This invites others to reflect on their own experiences and understand they are not alone with these feelings.

*“I feel like being locked in my home has brought a change in my nature. I’m a bit more grumpy than usual and a little less productive. I’d be lying if I said I was in the best shape and mental health. So, feel free to drop a comment to follow this thread to share your feelings or your experiences, or just send a DM”. (Peter, Mindfulness Based Stress Reduction)*

Anxiety was a very common experience shared by group members. Shirley shared a post about how “COVID anxiety” is affecting her behaviour, emotions and sleeping, identifying the aspects of the pandemic that are affecting her to such a significant extent.

*“COVID anxiety is a beast of its own!*

*I can’t be the only one...*

*Since my husband tested positive and started quarantining in our bedroom, I have paced our floors, cleaned and re cleaned every surface 10x’s daily, hardly eaten meals, cried more times than I can count, stayed up for 3 days straight stiff and shaking at one point and had one terrible panic attack.*

*I’m not someone that has ever experienced anxiety. It’s the fear of the unknown, it’s the media, it’s trying to avoid this very thing for almost a year that is now in my home and worse, inside of my HUSBAND!”. (Shirley, COVID-19 Recovered)*

Katy shares her concerns about getting COVID and how this is giving her anxiety, acknowledging fear of the virus and death as well as obsessive thinking and the effect this is having on her marriage.

*“My anxiety about getting COVID is getting worse than it’s ever been. It’s even affecting my marriage. I am so scared I am going to get it and die.*

*It’s all I think about. I’ve become obsessive.*

*I feel like I’m not living life. I’m just existing. And the fear of getting the virus and dying is taking over my life”.* (Katy, Covid-19 Support Group)

Lastly, insomnia was one of the most discussed psychological difficulties people were experiencing during this time. Participants often linked insomnia to anxiety and there were a considerable number of suggestions to try mindfulness/meditation for relief.

Ricky reached out about his ongoing insomnia, looking for advice and people he can share this experience with. He is aware the underlying cause of this may be anxiety and heightened stress, talking about the fight or flight response and adrenaline. There were 51 comments in response to this post, providing reassurance he is not alone in this experience and solutions that work for them. These included mindfulness/meditation, melatonin, CBD oil and lavender oil to name a few.

*“Has anyone else suffered severe insomnia, and if so, did it eventually pass? I am at day 55 and for the last 10 days I have managed just one night of natural sleep (4 hours) and on the other nights, I have either got no sleep or ended up using a sleeping aid. Even with a sleeping aid, I am only managing an hour or two... I speculate that the underlying issue is that my body is in some sort of 'flight or fight' mode and constantly pumping adrenalin.*

*Any help or advice greatly appreciated. I have to believe it will eventually pass or ease but would love to hear from people with a similar experience". (Ricky, COVID-19 Support Group)*

### **Summary**

According to (WHO, 2020), the most documented symptoms of COVID include shortness of breath, high fever, and a dry cough. These symptoms were discussed among participants although I was able to gain more insight into individual experiences as they discussed symptoms that were not anticipated as well as the effects the pandemic is having on them psychologically – not just physically. This theme addresses people’s experiences with dealing with the various stressors of COVID-19 and how these have contributed to both physical and psychological symptoms. Furthermore, I found people discussing how psychological effects contribute to physical difficulties and vice versa, demonstrating the importance of the mind-body connection. There were often discussions about the link between anxiety and physical symptoms such as hair loss, palpitations and breathing issues and how physical symptoms contribute to anxiety. This finding suggests mindfulness may have benefits for both physical and psychological difficulties people are experiencing at this time. This is supported by past literature on mindfulness and psychological symptomology and mindfulness and chronic pain (Cutright et al, 2019; Sollgruber et al, 2018). Later themes discuss the role mindfulness plays in relieving some of these symptoms.

### **Connectedness**

This theme encapsulates the ways in which individuals have connected through shared experiences of COVID, sharing and suggesting resources, sharing personal experiences and providing words of support with a focus on mindfulness. It explores the importance of social

connection through people's experiences when going through stress. The term connectedness is defined by Townsend and McWhirter (2005) as a psychological construct with a similar understanding to relatedness. Connectedness has also been described as a state that occurs "when a person is actively involved with another person, object, group, or environment, and that involvement promotes a sense of comfort, well-being, and anxiety-reduction" (Hagerty, Lynch-Sauer, Patusky, and Bouwsema, 1993). Below are the sub themes that were identified under the core theme of connectedness.

### ***Sharing and Suggesting Mindfulness Resources***

I identified a pattern of people posting mindfulness resources into groups to provide support to others. Individuals shared and suggested resources that they had found and, shared their own resources that they had developed. This highlights the connectedness between people and a sense of community, as people provided helpful tools and resources to decrease stress and improve wellbeing of others. This subtheme also assumes these individuals are advocates for the benefits of mindfulness during times of stress. Participants used critically acclaimed apps on their phones including "Headspace" and "Calm" and identified benefits. Using their experience, they suggested to those struggling to try these apps to relieve stress and COVID symptoms.

James shares his experience with the Headspace app. Headspace, launched in 2010, is a popular app that entails guided meditations, animations articles and videos with the mission to "improve the health and happiness of the world" (Headspace, 2021). He highlighted ways this app had benefited him and used that positive experience to help and suggest it to others.

*"I started practicing meditation using the Headspace app. It's been brilliant for introducing an element of calm into things and, in a really immediate way, dealing with some of the horrible, random fight or flight adrenaline surges I was getting until recently.*

*Totally recommend it, even if you've not really looked at mindfulness before".* (James, Covid-19 Support Group)

Cathy discusses the "Calm" app, suggested by her doctor. With a mission to "make the world happier and healthier" Calm is an award-winning app for sleep, meditation, and relaxation (Calm, 2021). The participant states the functionality of the app and her experience with using it for sleep to provide help in the form of information to others. This quote highlights connectedness through this suggestion in hope of helping others.

*"My doctor told me about an app called Calm. I have it now. It has all sorts of music, night-time stories to help sleep, mindfulness, meditations etc. It helps me get to sleep. I hope this might help you."* (Cathy, Covid-19 Support Group)

Furthermore, several participants suggested searching YouTube to find meditations. There were suggestions to search for positive meditations, guided meditations, sleep meditations, CBT and affirmation-based meditations with suggestions often followed by potential benefits of doing so. Examples of this are shared below:

*"Look up positive meditation on YouTube. It's amazing how good you will feel after a few days of this"* (Helen, Covid-19, Symptoms, Experiences, Questions, Remedies and Sharing)

*"Look up CBT and mindfulness for sleep. Mindfulness meditation during the day helps our nervous system so at night it's easier to chill out. Also, these strategies are lifelong skills and can help with other things too!!!"* (Sara, Covid-19 Survivors and Support)

I also recognised a pattern of individuals posting resources formulated by themselves and offering these for others to engage in. This included blogs, zoom invites to online meditation and

yoga classes, links to podcasts on Spotify as well as relaxation music made on SoundCloud. Results showed that individuals used their own expertise and knowledge and provided free access to people in need. This was encouraging to read and further demonstrated the core theme of connectedness. Examples of this are below with Mark offering his own mindfulness music/soundscape for people to use.

*“I practice mindfulness on the daily and I had decided to make my own music/soundscape for this. Then it struck me, “Maybe someone else would love this”, and therefore I would like to invite those of you, who would be interested, to listen to it, it’s free 😊”.* (Mark, Mindfulness Based Stress Reduction)

Raven shared a blog she had written in a hope to help others during these times of stress.

*“Wear Your Stress Lightly”. This is the title of my latest blog. In it I explore stress, looking at how it can be a friend as long as you own it rather than let it own you. Understanding this is transformative. I hope that over the coming weeks and months, especially during this pandemic, I am able to offer tools such as meditations, these blogs and other bits and pieces that help you navigate your own stress during this time”.*  
(Raven, Mindfulness Based Stress Reduction).

### ***Sharing Personal Experiences with Mindfulness to Provide Hope***

By sharing personal experiences of COVID, including physical and mental health issues, it provides a message to others that they are not alone and opens dialogue to relate and connect with one another over shared experiences. By sharing how mindfulness has contributed to improved wellbeing, participants provide others a sense of hope that their symptoms will improve, and that mindfulness is a beneficial tool in helping with this. Participants shared

experiences of both physical and mental health issues including anxiety, depression and insomnia and feelings of loneliness and fear. Also, physical COVID symptoms were reported including breathing issues and hair loss as discussed in the above theme. Experiences of relationship difficulties due to this was also reported.

Sally's comment below was in response to a woman reaching out for help due to hair loss accompanying COVID symptoms. She suggests decreasing stress and follows with her own experience with COVID and how mindfulness has helped.

*“Try to do things that are peaceful and comforting for you to decrease stress. Mindfulness activities were helpful for me. I had terrible brain fog and anxiety. I'm 3 months out from my positive test and doing so much better. It will get better”.* (Sally, Covid-19 Survivors and Support)

Janice acknowledges the usefulness of having online social support and how others experiences provide hope. She then proceeds by discussing her own experience and what has been helpful for her during this process.

*“It's so important for me to have some good examples that give hope and help to go through these rough days or hours of total misery and desperation. Dealing with it for 4 weeks now. Some adds from my side:*

- *Breathing exercises for anxiety and panic attacks during the tachycardia episodes*
- *Short mindfulness exercises.*

*I do them when I can without pushing myself”.* (Janice, Covid-19 Support Group)

Sonia's comment is in response to a woman's post about her anxiety regarding contracting COVID, how this is affecting her relationship and her life in general. She demonstrates connectedness through responding to the woman's concerns with her own experience of COVID affecting her mental health and how she has used mindfulness during these times.

*"I'm also in this position. I worked on a COVID ward and have been off for 12 weeks. I have had COVID, but I'm terrified to get it again and have PTSD from what I've seen. I've become obsessive to the point it's affecting my relationship and the way I live and I'm due back to work next week and I'm having severe panic... You're not alone hun. Have you tried meditation and mindfulness? I do it every day just to relax me a little bit xxx". (Sonia, Covid-19 Support Group)*

Furthermore, experiences of having trouble breathing was commonly reported. Participants were attributing this to COVID symptoms, anxiety, and both. The Natalya captures this in her post, talking about her experiences with breathing struggles and what she has been doing to relieve it.

*"This has caused my lung irritation/inflammation, doing breathe work exercises helps. Focusing on taking small, but complete breaths, especially on exertion. Anxiety doesn't help, it causes us to breathe inefficiently. Meditation and mindfulness and progressive muscle relaxation have been key to my not adding to my lung issues. Tricky breathing causes anxiety and anxiety feeds breathing issues. They don't help each other, but there are things that can be done for part of the anxiety 😊". (Natalya, Covid-19 Support Group)*

### ***Providing Words of Support***

The theme of connectedness is further demonstrated by this subtheme as it highlights the ways in which people interact with one another for the purpose of providing support during these difficult times. I recognised during analysis a significant amount of people sharing experience of struggle and hardship, yet also recognised a great deal of uplifting, positive messages in response. This subtheme addresses individuals' experiences with providing and receiving social support and also demonstrates the frequency of people providing words of support for others in mindfulness focused groups indicating a potential link between mindfulness practice and providing others with positivity, kindness and words of encouragement. Some examples of this are below.

Marissa posted in a mindfulness based COVID support group, sharing words that encompassed reassurance, encouragement, understanding and acknowledgement, particularly focusing on the hardship people are facing regarding loneliness and isolation.

*No matter how lonely we may feel right now, we need to remember we are never really alone. We are a beautiful tapestry of beings all belonging to nature and connected to each other. Reach out to each other, phone that long-lost friend, message that person you haven't spoken to for a while. Remember love is in your heart and all around you <3".*

(Marissa, Yoga-Health-Mindfulness helping people through Covid-19).

The following comment is in response to a woman who is experiencing both COVID symptoms and grief due to a COVID related death in her family. Clarise is providing words of support by acknowledging the hardship the woman, as well as so many, are going through due to the virus. She also offers her time, further support, and encouragement to "be gentle with herself".

*“So sorry for your loss hun. This virus is taking so much from all of us. Here if you ever need to talk my love. As for your body, I’d just be really gentle with yourself and allow yourself to heal. Your body will let you know when it’s ready. I’m glad you’re feeling happier. I hope this is the start of more happy days for you”* (Clarise, Yoga-Health-Mindfulness helping people through Covid-19).

Individuals also tried to normalise negative feelings associated with the pandemic and reassured that it will pass – giving words of encouragement. Some examples of this are documented below:

*“Cut yourself some slack! – This is all overwhelming! – Hang in there!”*

*“It’s normal to be feeling lonely and scared. Don’t judge it. Acknowledge that’s how you feel”*

*“Be kind to yourself, while remembering this will not last forever!”*

*“You’re doing great, keep going!”*. (Constance, Covid-19 Survivors and Support)

The following post is from the administrator of the group “Yoga-Health-Mindfulness helping people through Covid- 19”. I noticed Chloe regularly posted words of support; opening dialogue, offering her time and energy, and acknowledging not only the difficulties people are facing but also the opportunity for connectedness that comes with it. Two examples of this are demonstrated below. The first post had 18 comments in response and demonstrates compassion through understanding of stressful and uncertain times. She also emphasizes the importance of social connection and how this group is a good opportunity to do so.

*“I realised that many people are struggling right now, and that the uncertainty of the situation may be stressful for some. I think we have been given a real opportunity to come together as a community and find connection near and far! I’ve created this group to bring people together and share our knowledge and expertise” (Chloe, Yoga-Health-Mindfulness helping people through Covid-19).*

The second example from Chloe had 51 comments in response. She offers her support and encourages her online community to reflect on their feelings, needs and circumstances, while opening a dialogue with not only her but anyone interested in participating in the discussion.

*“Hi lovelies,*

*Just wanted to check in with you all, how you all doing?*

*Has week two brought up new insights or worries for you? Are you settling into the groove of it now? Or are you feeling lost in this week two?*

*What do you need?*

*Hope you’re all enjoying this welcomed sunshine this Tuesday morning xxx” (Chloe, Yoga-Health-Mindfulness helping people through Covid-19).*

### ***Summary***

The theme of connectedness highlights the importance of social support with an emphasis on mindfulness. These findings demonstrate Hagerty et al’s, (1993) definition of connectedness, promoting comfort, wellbeing, and anxiety reduction through online social support. It encapsulates the experiences of people both asking and providing support during COVID and how they are using, suggesting, and providing information on mindfulness to do so. Due to the

nature of online Facebook groups, participants were able to share mindfulness related resources, experiences of mindfulness and support others. This not only gave people an opportunity to deepen their mindfulness practice and knowledge but also strengthened social support. These findings are supported by previous research suggesting the benefits of social support groups in times of stress; increasing wellbeing and reducing the impact of a stressful event (Cohen, 1988; Munn-Giddings and McVicar, 2006). The current findings provide further insight into this, demonstrating the support people are giving and receiving. It can be inferred that these posts are beneficial for wellbeing in accordance with previous literature.

### **Using Mindfulness to Cope with COVID-19**

The current study investigates into experiences of COVID -19 and the use of mindfulness in facilitating recovery, managing symptoms, and reducing psychological stress. This theme was an expected finding among the data, especially within the group Yoga-Health-Mindfulness helping people through COVID-19” as the purpose of the group was to share and discuss information, videos and online practices in relation to yoga and mindfulness to help people through COVID-19. Mindfulness practice encompasses a range of concepts including meditation, breath awareness, body awareness, sensory awareness, acceptance of current circumstances, acceptance of emotions, mindful movement, present moment awareness and awareness of thoughts to name a few. This theme discusses people’s experiences using these mindfulness tools to help with both physical and psychological difficulties associated with COVID-19 as discussed in a previous theme. Sub themes are discussed below, detailing experiences of aspects of mindfulness as well as what difficulties they are using mindfulness to manage.

## *Acceptance*

In relation to mindfulness, the concept “Acceptance” is a fundamental component. According to Harris (2009), acceptance involves allowing thoughts, feelings, and sensations, whether painful, pleasant or neutral, to “be” as they are and come and go naturally. It is about being mindfully aware of their presence with openness and curiosity. Research has shown that practicing acceptance can be beneficial in response to stress (Ford, Lam, John and Mauss, 2018). Acceptance is a also key component in ACT, MBCT and MBSR (Trompetter et al, 2015; Querstret et al, 2020). Participants in the current study shared experiences and suggestions to other group members to apply this important aspect of mindfulness during the difficulties of the current pandemic to decrease stress and improve wellbeing. Some examples of this are shared below.

Lauren posted in “COVID-19 Support Group” sharing her experience with COVID, followed by advice that has helped her. The following extract from her post entails the sub theme of acceptance and how she has used this during her difficulties with COVID. Lauren discusses accepting the current circumstances as well as her health and what she needs to do to recover.

*“The things that I have found particularly helpful have been: Accepting that this is the way things are at the moment, that my body won’t always be struggling but for now it needs to rest and recover and not be pushed beyond its limits (I am usually very active so this was the hardest part”.* (Lauren, Covid-19 Support Group)

Furthermore, posts and discussions were had about acceptance of feelings and emotions. Often when difficult feelings arise it feels uncomfortable and people can use suppression and distraction as avoidant coping mechanisms. Although, adopting these maladaptive coping mechanisms can result in declines in wellbeing (Carver et al, 1989). According to a recent study

surveying 1000 college students, mindful awareness and acceptance of these emotions is shown to contribute to greater wellbeing and reductions in anxiety and depression (Ford et al, 2018). This result is demonstrated in the current study by people's experiences of accepting difficult emotions.

Below is an extract of a post written by Tessa on accepting the difficult emotion of loneliness during COVID-19, acknowledging how difficult it can be and the importance of allowing yourself to feel this emotion.

*“So, what can we do when we feel lonely? Well our first instinct is usually to distract ourselves from the feeling. The issue is that this masks the emotion. It buries it deep down inside of us. So, naturally it comes back again. It's a difficult emotion. To feel alone can be really unsettling. So next time you feel lonely, try your best to sit with it. Wait. Watch the thoughts that arise. Notice how your body is responding. The longer you can sit with it, and allow the emotion to be there, the better. You will find once this emotion has been heard and held, it will pass on by”.* (Tessa, Mindfulness Based Stress Reduction)

Leah shared a post on tools to cope with COVID-19. She discussed the importance of accepting anxiety during this time and that it is normal to be anxious, especially during a pandemic.

*“It is important that you accept your anxiety. Do not run from it. Just tell yourself “It's okay that I'm anxious, there's nothing wrong with me, this is normal for what I'm going through”.* (Leah, Mindfulness Daily)

Below is another extract from this post, discussing the effects of suppressing feelings and how important it is to allow yourself to experience these emotions, with suggestions on how to do so when feeling angry.

*“Suppressed feelings can contribute to anxiety and panic attacks. If you’re feeling angry, scream into a pillow, cry, do whatever is going to help get those feelings out. One of the worst things you can do is avoid or suppress them”.* (Leah, Mindfulness Daily)

The sub theme of “Acceptance” demonstrates a significant aspect of mindfulness practice. Participants discussed how accepting the current circumstances and difficult emotions has been helpful as well as suggestions on how to do so to help others. According to Umucu and Lee (2020), acceptance is classified as an active or adaptive coping mechanism, indicating participants demonstrated a constructive way to deal with the stressors associated with COVID. They did so by altering perception of stressors and viewing them in a positive way. The current findings are in alignment with previous literature on acceptance, indicating that practicing acceptance can benefit wellbeing and decrease stress levels (Casio, 2015). These findings provide further insight into past literature and the current study, highlighting participants experiences of using acceptance as a tool during COVID and their personal belief of the effectiveness through suggestions to others.

### ***Present Moment Awareness***

Present moment awareness is an important mindfulness concept that encapsulates shifting focus, attention, and awareness to what is occurring in the present moment. With our well-developed prefrontal cortex, humans differ from other animals in that we have the ability to “mental time travel”, shifting our thoughts to both past and future situations. Unfortunately, our brains cannot distinguish between experiencing the situation and thinking about the situation. As

a result, this can produce difficult emotions that arise just by thought alone (Sapolsky, 2004).

This sub theme captures participants discussing present moment awareness as a beneficial tool to help with the difficulties of COVID-19. Included in this are posts and comments discussing breath, body and sensory awareness as during these practices, present moment awareness is in effect.

The following post in “Yoga-Health-Mindfulness helping people through Covid-19” is an extract posted by Megan that demonstrates present moment awareness. She challenges her fellow group members to pick a task to be present in, giving examples of breath, body and sensory awareness while completing the task of gardening.

*“Pick one thing and be fully present as you perform that task. If you are gardening feel the feeling of the sun on your skin, hear the sounds around you, sit with and observe your breath, the activity or stillness in the body, the caring temperatures, tension, softness, take in the smells around you, even the tastes. Get curious, investigate, explore. Try this as you eat, as you shower or as you walk the dog and let me know how you get on.. maybe this will even become a daily habit!”*. (Megan, Yoga- Health-Mindfulness helping others through Covid-19)

The below comment is in response to a post in” COVID 19 Survivors and Support” about feelings of loneliness and emotional stress during these times. Erin responds with her own emotional and psychological struggles followed by how she uses present moment awareness to help “get out of her head”. An extract from Erin’s comment is below.

*“I’m just trying to stay grounded through mindfulness. Taking in my surroundings to get out of my head, even if briefly”*. (Erin, Covid- 19 Survivors and Support)

Present moment awareness plays a pivotal role in the practice of mindfulness as it trains the brain to shift focus from worries of the past and anticipation of the future. Participants discussed experiences using present moment awareness to increase wellbeing and often suggested doing so when offering advice on how to cope with COVID related stressors. In focusing on the present moment through breath, senses and bodily awareness, participants are demonstrating a key aspect of mindfulness which is beneficial in improving wellbeing in times of stress such as the current pandemic.

### *Attention and Awareness*

This subtheme incorporates the concepts of attention and awareness. I initially analysed these two ideas as separate subthemes although decided they were similar in meaning and both conveyed important aspects of mindfulness. Often these terms are used interchangeably, although there is a key difference in their definitions. Attention involves focusing the senses on something at the expense of other things in a mechanistic way whereas awareness is involved more in explicit knowledge about what that something is doing (Al-Hejin, 2004). For example, attention can be focused on the TV through sensory perception but awareness of the information the TV is conveying may not always be present. I therefore decided to form one theme incorporating these two topics because in doing so I am able to capture people's experiences of where attention is given and also awareness of how that attention is having an effect.

**Awareness of Negative Input.** The focus of this section of the subtheme is on awareness of being exposed to negative information. This includes COVID related media, COVID related conversations as well as the thoughts we are feeding ourselves and how this influences our wellbeing over time. Awareness of negative thinking was a pattern that arose during analysis. Considering human beings are prone to a negativity bias due to evolutionary purposes to keep us

safe, the fact that people are having more negative thoughts during this time is not unexpected (Norris, 2019). Mindfulness is a beneficial skill to have to bring awareness to this negativity bias (Kiken & Shook, 2011). This is demonstrated in the results of this study with participants bringing awareness to their own negative thought patterns and how mindfulness can be helpful with this. Alice's comment below, is in response to a discussion thread of relapse of symptoms.

*“Also finding mindfulness meditation and actively controlling negative thoughts, fears and anxieties is deeply helpful”.* (Alice, Covid-19 Support Group)

Furthermore, there were several posts from individuals across many different support groups that detailed ideas for self-care during times of anxiety and ways to decrease stress during these times. A reoccurring pattern that I perceived in these posts was the identification and awareness of negative thinking and how this influences wellbeing.

Lee explains the relationship between thought and action and therefore body and mind, explaining the potential effect of negative thinking on this relationship.

*“All our thoughts, words send a message to our consciousness that creates certain actions. We fatigue our body and mind. If we constantly live full of negative thoughts, feelings, and actions, we might attract negative situations into our life”.* (Lee, Mindfulness Based Stress Reduction)

Furthermore, John explains a way to be aware of negative thoughts and defines them as “storylines” and “catching” the thoughts before they have potentially harmful effects.

*“Thoughts are not facts. Catch yourself when you are running story lines in your head and say “thoughts” to yourself and smile because you just caught yourself and prevented a potential negative thought from running amuck in your head. The act of noticing will*

*help you step back, become aware and feel safe again*". (John, Mindfulness Based Stress Reduction)

Subsequently participants often wrote about media consumption and the effects that come with it, often contributing to the negative thought patterns as discussed above. Individuals wrote about their experience with the media and offered words of advice about bringing awareness to the effects of media. In response to a post asking group members what was causing them the most stress during this time, a significant amount of people attributed their stress to media. This is in line with previous literature outlining how media exposure can contribute to exacerbation of psychological symptomology (Hong et al, 2020; Thompson et al, 2017). The following extract is an example of this, detailing anxiety surrounding the news and the feelings that arise when watching the news. This demonstrated awareness of the effects of the media on Joelle's wellbeing.

*"If I don't check the news on covid-19 every few hours I feel anxiety. When I watch the news, I feel saddened and stressed"*. (Joelle, Mindfulness Based Stress Reduction)

Furthermore, in an effort to provide advice and guidance on ways to navigate through these times, individuals highlighted media effects in their posts and the importance of avoiding too much negative information. Examples of this are below:

*"Avoid infoxication (information overload) – You really don't need an hourly update on the pandemic. Too much and too frequent information shall only increase your anxiety, Check the news, say once in the morning and once in the evening from reliable sources. Stay away from sensationalising news"*. (Sophie, Mindfulness Based Stress Reduction)

*“Become selective about the news. The 24/7 news broadcasts are overstimulating. They create a sense of urgency. Turning off the news for a few hours can help you de stimulate the brain”.* (John, Mindfulness Based Stress Reduction)

Lastly, participants also discussed the ways in which frequent COVID related conversations can have a negative effect on wellbeing. By bringing awareness to the content of your conversations, participants discussed the importance of reducing the amount of discussions related to COVID to increase wellbeing and reduce stress. This example is a suggestion from Leah on becoming aware and limiting COVID related conversations.

*“It’s important that you and your family compartmentalise your thoughts associated to COVID. Set a time that you allow yourself to talk about it for 20 minutes a day. Set a timer if you need to and then don’t bring the subject up again. Focus on other unrelated conversations, so that you/your family don’t become engrossed in the topic”.* (Leah, Mindfulness Daily)

**Conscious Attention to Positive Input.** This subtheme was created through people’s experiences of where they are consciously focusing their attention. It follows on from the above sub theme of awareness of negative input as they are, in a way, two sides of the same coin. Often posts and comments addressing awareness of negative information and thoughts, also contained experiences, support, suggestions and advice to shift attention to more positive, uplifting information. This included messages to be kind to oneself, gratitude, positive affirmations, appreciation for what you have and focused attention on what is going well and what is within your control. Examples of some of these posts and comments are detailed below.

Words of gratitude was a reoccurring pattern during analysis. Participants expressed gratitude for a variety of things, making a conscious effort to focus attention on this during trying times. The following extract is a post written by a Nicky, expressing her gratitude for technology in times of isolation and quarantine.

*“Grateful for technology today! Enabling us to reach out and stay connected with family and loved ones”.* (Nicky, Yoga-Health-Mindfulness helping people through Covid-19)

Subsequently, Nicky finds gratitude and positivity during a stressful day; the funeral of a loved one that she is not able to attend.

*“I’m grateful for family today as although it’s a sad day (the funeral of my uncle and I’m not permitted to attend due to restrictions on numbers) I’m able to look back on the happy memories over the years and all the fun and laughter!”.* (Nicky, Yoga-Health-Mindfulness helping people through Covid-19)

Gratitude for health, family/friends and medical professionals were also identified consistently. Leah posted tips on how to take care of your wellbeing during the pandemic. She highlights how the current circumstances are contributing to feelings of lacking control and also provides suggestions to put conscious attention into things you can control. In doing so relieves anxiety and contributes towards better psychological functioning (Macdonald & Olsen, 2019).

*“What we are going through is something we cannot control, so finding something you can control is helpful, such as changing up the furniture in your room”.* (Leah, Mindfulness Daily)

A significant number of posts also detailed experiences of focusing on positive thinking. Also, a lot of people offering advice to do so. This follows from the above subtheme detailing

awareness of negative thinking. According to Macdonald and Olsen, (2019) improvements in wellbeing will result when bringing awareness to negative thoughts and shifting focus to positive ones. Participants demonstrated this with the examples below suggesting others to focus on positive thinking, explaining the relationship between thoughts and actions and how positive energy will spread.

*“Let go of concerns, worries and keep focusing your mind on positive thoughts. All our thoughts, words send a message to our consciousness that creates certain actions.”* (Lee, Mindfulness Based Stress Reduction)

*“Turn your attention to the positive things within and around you. The more we focus on ourselves and the positivity around us, the more our collective healing energies will spread”*. (Drew, Meditation and Mindfulness)

Furthermore, individuals identified journaling as a helpful activity to focus on positivity. Becky, suggesting it before sleep.

*“Journal! I will write something in my gratitude journal right before bed so that I could think about something pleasant just before my head hits the pillow.”* (Becky, Mindfulness)

When addressing mindfulness, attention and awareness play important roles. Considering mindfulness is defined by the emergence of awareness through paying attention on purpose, the mechanisms of attention and awareness are significant in isolation (Kabat-Zinn, 2003). The findings in this sub theme contribute to the current study by isolating and focusing on these variables. Participants discuss bringing awareness to what they are focusing their attention and thoughts on. According to Gregorio and Pinto-Gouveia (2013), attention and awareness are

primary characteristics of mindfulness. This has been validated by the development of the Mindful Attention and Awareness Scale – a self-report instrument developed by Brown and Ryan (2003) with the purpose of measuring individual attention and awareness in present moment experiences. Previous findings investigating into this scale show positive correlations with higher levels of mindful attention and awareness and positive affect as well as presentations of emotional disturbances and psychopathological symptoms associated with lower levels of mindful attention and awareness (Gregorio and Pinto-Gouveia, 2013). The current findings provide further understanding to these past findings and demonstrate the major theme of using mindfulness to cope with COVID as participants are using these mindfulness variables to improve their own wellbeing as well as others through online social support.

### *Summary*

Although other themes in this study also explore the role mindfulness plays during the COVID-19 pandemic, the core theme of “Using Mindfulness to Cope with COVID-19” effectively allows more specific insight into this. Mindfulness practice incorporates a range of different aspects and the above theme demonstrates individuals’ experiences of these during the stress of the current circumstances. Acceptance, present moment awareness and attention and awareness all contribute to mindfulness practice and were discussed separately in Facebook online support groups. These discussions provided understanding into people’s experiences utilising mindfulness and mindfulness-based concepts as well as demonstrated how people were engaging in conversation about mindfulness, encouraging use and advocating efficacy. The finding presented in this theme support previous literature on the efficacy of mindfulness in times of stress to improve chronic pain (Sollgruber et al, 2018) anxiety, depression , worry and psychological distress (Kriakous et al, 2020) and also mindfulness use during global threats

(Cutright et al, 2019; Xu et al, 2018) , in particular during a global pandemic (Esterwood and Saeed, 2020).

### **Focusing on the Bigger Picture**

This theme demonstrates how people demonstrate the ability to change their perception of a negative situation and view it in a more positive light. In regards to COVID and associated stressors, participants posted in mindfulness groups, encouraging others to focus on the bigger picture by viewing the current circumstances as a lesson or teacher and ask what we are learning from it as well as finding meaning through pain. These sub themes are discussed below.

#### ***Viewing the Virus as a Lesson/Teacher***

In the mindfulness focused groups, I recognised a pattern of people discussing what they have learned from the current circumstance. This follows on from the attention and awareness subtheme discussed above as it indicates individuals are showing awareness of the negativity of the situation and decidedly shifting attention to what they can benefit from it in terms of lessons and growth.

The following participant, Niamh, shared a story about a conversation she had with her friends about COVID. She wrote about the complaints they were having when they all had a shift in perspective and began discussing what they are learning from these situations. An extract from Niamh's post is below.

*“Yesterday I was on a call with my two close friends. We were discussing corona and the impact on the world. And we were complaining. Suddenly, we all went into inquiry about what this situation is trying to teach us”*

*We went from complaining to asking how can we contribute to help mother earth? How can we support others? What is my health telling me? Care or commitment? What are my emotions telling me? Change or acknowledgement? ”. (Niamh, Mindfulness Based Stress Reduction)*

Jaimee discusses how the pandemic is preventing her from going out but that nothing can prevent us from “exploring within”. This subtheme is demonstrated in this extract as she emphasises that we can use this difficult time wisely to practice meditation – potentially using it as a lesson or reminder to focus on healing.

*“The world is closed due to the Coronavirus pandemic. We cannot go out as much, but nothing prevents us from exploring within. This is a great time to start or deepen meditation practice. Let’s do it.”. (Jaimee, Meditation and Mindfulness)*

### ***Finding Meaning Through Pain***

Furthermore, participants demonstrated they were able to focus on the bigger picture of the pandemic by finding meaning in the painful experiences associated with it. Individuals discussed discovering resilience, strength, empowerment, and motivation through emotional, physical, and psychological struggles. Some examples of this are share below.

Sam emphasises strength, discussing how we can focus on our own resilience during these difficult times.

*“In times as this, when the future isn’t something we can look forward with arrant hope, we can look back into our past and collect our strength from there. We can flip through the things we did before that went right and do those things again”.* (Sam, Mindfulness)

Rachel finds motivation in her current unfortunate circumstances, living with illness in quarantine and not being able to continue a project. She acknowledges her struggles yet looks further than her individual circumstances and considers the impact on others. In doing so she wonders if she can do anything to help others suffering.

*“I, like so many people living with illness have been put in quarantine because of coronavirus and have been medically advised to hold off completing the film I’m making until the pandemic settles”.*

*I was angry, but then I saw the suffering of people all over the world and realised this situation is bigger than me and my film. In that moment I saw, even though I am isolated at home, perhaps there is still something I can DO”.* (Rachel, Meditation and Mindfulness)

Lastly, Rachel discusses pain. Although pain is uncomfortable, she emphasises that it is an important and “fulfilling” part of life. Rachel demonstrates that through pain there is meaning.

*“The negative things in life define who we are and what we eventually become. Pain comes in all forms, sickness, loneliness, poverty, shame, and hunger – pain itself always feels the same. Never feel guilt for your own unique experience of pain and therefore life because it is the key to living a fulfilling life”.* (Rachel, Meditation and Mindfulness)

### **Summary**

The findings of the above theme demonstrate people’s ability to change their perception of the current circumstances. Overlapping with the sub theme of “conscious attention to positive input”, individuals are changing their thoughts and awareness of how the virus is negatively impacting them to aspects of the situation that they can view in a positive light. This is being

achieved by looking at what they can learn from the situation and how the pain and hardship of the situation can provide meaning. Furthermore, there is some overlap here with the sub theme of “Acceptance” in which acceptance of difficult emotions and pain is discussed. The above theme goes a step further and provides an understanding of how this acceptance of pain and difficult circumstances may act a guide or lesson and may ultimately result in growth. Recent research looking into post traumatic growth has investigated into benefits of perceiving benefits and growth through psychologically painful and traumatic experiences (Tedeschi and Blevins, 2015). A recent study in a sample of cancer patients investigated the relationship between mindfulness and post traumatic growth. Results showed a sense of meaning, peacefulness, connectedness, and personal growth may be facilitated through MBSR (Labelle, Lawlor-Savage, Campbell, Faris, & Carlson, 2015). The current findings support past literature with participants in mindfulness-based support group demonstrating post traumatic growth during the COVID-19 pandemic.

### **Disregard for Mindfulness by Medical Professionals**

This theme incorporates the frustrations people have experienced with lack of support and information by medical professionals regarding mindfulness research, practice, and benefits. Participants expressed their concerns regarding this in COVID-19 support groups. Although, research on mindfulness has increased significantly over the last decade, these participants are still experiencing disregard, dismissiveness and lack of support when suggesting mindfulness to health professionals as well as identifying lack of information from professionals and in medical settings.

The following participant, Adeline, shared her experience discussing mindfulness with an ER doctor. The doctor informed Adeline, she was having an anxiety attack in which a discussion was had about her using mindfulness as a tool for the troubles she was having with her breathing.

The doctor then dismissed Adeline as having “psychological issues” for using mindfulness to cope. This demonstrates a lack of support and validation of the patient’s experiences.

*“By the time the male doctor came, I was already starting to feel better, he didn’t even do a proper physical examination, he just said I was having an anxiety attack. I tried to explain I had never had anxiety attacks before, that I had been practicing mindfulness for years and the breathing exercises via meditation I do regularly really helped me through these moments (also not to panic). His answer was: “well there you go you practice mindfulness; it means you have psychological problems””. (Adeline, Covid-19 Support and Recovery)*

Samantha responded to the above post expressing her concerns after reading the story followed by making a statement about some doctor’s unwillingness to look at different perspectives.

*“Your story is so upsetting to read. It’s disgraceful you were treated this way. Doctors sometimes make snap decisions about what they think is going on and nothing will change their minds...”. (Samantha, Covid-19 Support and Recovery)*

Furthermore, Andrea posted in “Covid-19 support group”, sharing a resource on how mindfulness and breathing exercises can aid in COVID recovery. Other group members expressed their gratitude in her sharing this resource in which she responds with how helpful it would be for these resources to be in medical settings. This demonstrates that she has noticed this lacking in these settings.

*“All GPs and hospitals should be sign posting to resources like this - I will be letting my GP know about it x” (Andrea, Covid-19 Support Group)*

In response to a post in “COVID-19 Symptoms experiences, Questions, Remedies and Sharing” about the emphasis on “chemical medication” in western society, Jessica responds with the following comment which relates to mindfulness as it is considered “alternative support” to traditional western methods of treating disease.

*“In the US we are being actively discriminated against for offering “alternative support”, even with references. Why don’t they want people to have the latest non-invasive and most affordable/accessible prevention treatment and recovery info?”.*

(Jessica, Covid-19 Symptoms, Experiences, Questions, Remedies and Sharing)

### **Summary**

This theme establishes the experiences of individuals have had with medical professionals or in medical settings regarding mindfulness. Participants expressed concerns due to a lack of acknowledgment and even discrimination when discussing mindfulness as an alternative method to relieve symptoms. These findings indicate the biomedical model continues to hold dominance in today’s society. Although mindfulness and other alternative support is becoming more prevalent, medication and medical procedures still takes precedence in medical settings (Deacon, 2013). In turn, the efficacy of mindfulness and mindfulness-based interventions can be disregarded or seen as secondary to the pathology-based framework of the biomedical model. This is demonstrated in previous findings, suggesting the underutilisation of mindfulness in clinical settings is due to a link with lack of knowledge and understanding of mindfulness and negative attitudes towards use (Hipol and Deacon, 2013).

### **Scepticism and Apprehension to Try Mindfulness**

This theme incorporates people discussing mindfulness to help with COVID -19 related stressors and symptoms, although captures the scepticism and apprehension some participants

experienced in doing so. A pattern I recognised in these posts and comments was that although these participants had initial reservations about using mindfulness as a tool to cope, they all showed willingness to try. Furthermore, participants stated the benefits of mindfulness and suggested its use even though they were hesitant initially.

This extract is a response to a post in “Covid-19 support group” about a man’s experience with insomnia. Cathy responds by sharing her experience with the Calm app, stating how it has been beneficial for her sleeping even though it is not something she would usually use.

*“I have the app “Calm”, it has all sorts of music, night-time stories to help sleep, mindfulness, meditations etc. I don’t normally go for things that are like this, but it helps me get to sleep”.* (Cathy, Covid-19 Support Group)

In response to a post in “Covid-19 support group” about relapse of symptoms, Alissa states how mindfulness has been useful, sharing that she was “*formerly cynical and snarky*”.

*“Also finding Mindfulness meditation and actively controlling negative thoughts, fears and anxieties is deeply helpful. Formerly cynical and snarky”.* (Alissa, Covid-19 Support Group)

The following extract is a suggestion from Shane to try mindfulness techniques. Shane demonstrated scepticism by stating “*it might sound ridiculous*”, yet shares his experiences benefiting from the practice.

*“Please try some mindfulness techniques (breathing exercises, meditation etc.). I know it might sound ridiculous, but I was in a bad way on Friday and I threw some of this at it and I seemed to calm down a lot.”.* (Shane, Covid-19 Support Group)

Lastly, this comment is in response to other group members suggesting her chest pain and breathing troubles may be anxiety related and how she could benefit from mindfulness.

Although, Cynthia seems sceptical that anxiety is the cause of these issues, she is willing to investigate and try meditation to help relieve her difficulties.

*“I feel like something is wrong, but yea? I’ll try meditation. I’ve never dealt with anxiety, so ill research it. Thank you!”.* (Cynthia, Covid-19 Recovered)

### **Summary**

In summary, the above theme indicates there continues to be apprehension and scepticism when it comes to mindfulness use. Individuals shared their lack of experience with mindfulness, their acknowledgment that others may be hesitant to try and former views on the subject before experiencing it themselves. In line with the summary of the theme “Disregard for Mindfulness by Medical Professionals”, the findings from this theme allude to the fact that the biomedical model continues to hold more weight than alternative methods and may be viewed as a marginalised concept to some (Chan et al, 2006). People’s attitudes demonstrate the lack of awareness and understanding of the efficacy of interventions such as mindfulness. This is in support of previous literature on knowledge and attitudes associated with mindfulness showing people may lack confidence to engage in mindfulness practise and have potentially negative attitudes towards use due to a gap in actual knowledge of mindfulness and perception of understanding mindfulness (Russel, Orellana, Ulgade, Milne, Krishnasamy, Chambers and Livingstone, 2017). Although there seems to be apprehension and scepticism, participants also demonstrated willingness to try and how practising mindfulness has changed their former views in a positive way.

## Discussion

The aim of this investigation was to explore individual experiences of the impact COVID-19 has had on their lives, with a focus on the role mindfulness plays in reducing stress and increasing wellbeing during this time. Using posts and comments in Facebook groups, social support and connectedness was also explored. Using a critical realist framework, Facebook posts in mindfulness and COVID-19 support groups were analysed, focusing on content relating to COVID-19 difficulties and support involving mindfulness and mindfulness-based concepts. Thematic analysis was used to analyse and interpret the collected data.

Six core themes were revealed from this investigation. These included: *Difficulties Coping with COVID*, *Connectedness*, *Using Mindfulness to Cope with COVID*, *Focusing on the Bigger Picture*, *Disregard for Mindfulness by Medical Professionals and Scepticism and Apprehension to Use Mindfulness*. These themes incorporated all aspects of the study aims and provided further insight into the topic. The themes encompassed experiences of COVID, the role mindfulness has in reducing these symptoms and improving wellbeing and the role of social support and connectedness during these times. Further insight into experiences with medical practises and medical professionals regarding mindfulness as well as personal attitudes toward mindfulness and mindfulness-based concepts are also demonstrated within the six core themes. Discussion of the six themes are explored below. The aim of this section is to discuss overall conclusions of the present study, to link findings with previous literature and highlight new insights into the topic. Also, to contribute to the new emerging literature on not only COVID but also mindfulness as a tool to deal with the unprecedented effects of the current global pandemic. Implications are also incorporated into this section followed by limitations and future research.

## **Identifying and Exploring the Mind-Body Connection**

Findings in the current study discussed experiences of both physical and psychological difficulties associated with COVID-19. Due to the dominance of the biomedical model in western society, information on physical symptoms are readily available through media, health websites and medical settings. The theme “Difficulties Coping with COVID-19”, outlines difficulties with COVID -19, but also discusses individuals’ experiences with both physical symptoms and psychological symptoms -which were discussed just as frequently. This alludes to the fact that experiencing psychological symptoms including anxiety, PTSD, depression, mood changes and difficult emotions such as loneliness, is also having a significant impact on people’s lives during this time. Furthermore, there were discussion threads within Facebook groups that discussed the link between physical and psychological symptomology, with participants discussing how physical COVID symptoms have contributed to anxiety, depression and negative feelings as well as COVID related anxiety contributing to physical symptoms such as hair loss, heart palpitations, shakiness and shortness of breath. This finding demonstrates people discussing the mind body connection.

According to St. Marie and Talebkah (2019) the mind body connection consists of our thoughts, feelings, beliefs, and attitudes interrelating with our biological functioning. It encompasses the ways social, emotional, and behavioural components influence physical health and vice versa. The mind body connection is not a novel concept in medicinal history. With the introduction of the biomedical model in the 17<sup>th</sup> century, western medicine introduced the idea that the mind and body are two distinct entities – comparing the body to a machine, with reparable and replaceable parts and no connection to the mind. Prior to this period however, the mind body connection took precedence in medicine globally (Hart, 2016). This biomedical

framework undeniably set the foundation for advancement in allopathic medicine such as surgery and pharmaceuticals. Although in doing so, focus and scientific inquiry into humans' thoughts, emotions and behaviour was given less attention and often downplayed as less important to the health and wellbeing of humans. For example, when addressing chronic pain, nonpharmacologic, non-invasive treatments including mindfulness, are available, involve no toxic side effects and have proven efficacy in the treatment of chronic pain. Although this form of treatment is prescribed very little by health professionals (Raymond et al, 2018). Regardless of the dominant medicinal model of the past 300 years, recently, this viewpoint has gradually changed with scientific demonstrations of the complex interrelation between the mind and body and human's innate ability to heal. This is supported by extensive research investigating into both physical and mental benefits of mind body practises including mindfulness, meditation, and yoga (Cyr, 2019). These include improvements in both physical and psychological symptomology such as sleep disorders, eating disorders, trauma related psychopathology, cancer, and improvements in pain perception (Cutright et al, 2019; Cyr, 2019; Sollgruber et al, 2018). Regarding the current investigation, individuals discussed experiences of using mindfulness for both physical and psychological issues relating to COVID and how mindfulness has contributed to relieve both physical and psychological symptoms. These experiences are in alignment with previous literature discussed above. Possible implications of these findings include the need for major health organisations to include psychological symptomology and the relationship between physical and psychological symptoms in their disclosure of COVID-19 symptoms. This may ease peoples worries about the physical and psychological symptoms that are not included on health websites such as WHO and CDC.

## **Exploring Online Social Support During COVID-19**

The theme of “Connectedness” provides understanding of how people are using Facebook support groups to share experiences, resources, and suggestions for the purpose of helping others and seeking support during COVID-19. For the purpose of this study I focused on the ways people connected using suggestions and resources relating to mindfulness. This paragraph discusses current findings and links to past literature on the benefits of online social support with a focus on mindfulness related information. This paragraph also explores the role mindfulness plays on altruism, empathy and compassion as demonstrated in mindfulness related groups in the current study.

Previous literature has outlined that social support groups provide many benefits in times of stress. Along with reducing the impact of a stressful event, online social support can increase empathy, provide knowledge and understanding, help with emotional coping and improve both physical and mental health and wellbeing (Cohen, 1988; Gilmour et al, 2020; Munn-Giddings & McVicar, 2007). Through Facebook support groups, participants in the current study were able to connect with one another during COVID-19. By discussing experiences with mindfulness and suggesting tools such as mindfulness to cope with COVID, participants received the benefits of online social support as presented by previous literature discussed above. The findings in the current study demonstrates that Facebook provides a platform for individuals to easily communicate, share relatable experiences with COVID and mindfulness and gain more knowledge and understanding on these topics. This consequently resulted in many participants expressing gratitude for this support, often expressing a sense of relief to hear similar experiences with COVID and that mindfulness has been helpful to others during this experience. This may have contributed to a decrease in loneliness, depression and anxiety and an increase in

sense of control and overall wellbeing according to previous studies (Barak et al, 2008; Gilmour et al, 2020).

The findings in the current study also demonstrates kindness, empathy and compassion which is highlighted in the theme of “Connectedness”. Results showed participants in mindfulness groups, offering words of support encompassing words of acknowledgement, encouragement, reassurance and understanding to those suffering with the repercussions of COVID. Referring to past literature, investigations into the role mindfulness plays with supportive communication indicate that through the direct influence mindfulness has on regulating, controlling, and managing cognitive-affective resources, mindfulness is predicted to indirectly influence supportive communication using these cognitive affective resources. These resources include both active listening and empathy (Baumeister & Masicampo, 2010). This prediction is supported by Jones, Bodie and Hughes (2016), who found facets of mindfulness, including observing, describing and non-judging, to increase levels of empathy and active listening. Jones et al (2016), concluded that paying attention to one’s own sensations may contribute to this finding because in doing so, the listener is attune to the situation and the other person which play pivotal roles during active and supportive listening (Bodie, Vickery & Gearhart, 2012). Furthermore being nonreactive and having non judgement – both key elements of mindfulness - may contribute to findings of empathy as it allows the ability to attend to the suffering of another while allowing distance from difficult emotions (Wallmark, Safarzadeh, Daukantaite & Maddux, 2013). These findings are further supported by Greason & Cashwell (2011) who found increased levels of empathy and compassion in participants who score high on mindfulness.

In line with findings indicating associations with empathy and compassion is recent research investigating the link between mindfulness and altruism. Altruism is defined as “a motivational state with the ultimate goal of increasing another’s welfare” (Batson and Shaw, 1991). Research indicates a correlation between altruistic orientation and mindfulness meditation (Wallmark, et al, 2013). A recent study demonstrated this through willingness to donate, with subjects who were exposed to mindfulness training donating 2.61 times higher than those who did not (Iwamoto, Alexander, Torres, Irwin, Christakis & Nishi, 2020). The mindfulness processes of attention and acceptance also appear to influence this altruistic behaviour (Cameron & Fredrickson, 2015). However, a recent meta-analysis conducted by Kreplin, Farias and Brazil (2018), questions these findings, highlighting biases and theoretical issues in past studies in this area including: being introduced to the meditation teacher, type of control group used and participants expectations and beliefs regarding meditation practise. Further research is needed in this area, addressing these problems.

Past findings on the link between mindfulness and empathy, compassion, and altruism support findings in the present study, with the identification of the theme of “Connectedness” in mindfulness related Facebook groups demonstrating altruism and support for others. Implications of this finding include that mindfulness may benefit during stressful events such as COVID-19 by increasing prosocial behaviour, resulting in improved wellbeing.

### **The Role of Mindfulness in Navigating the Stress of COVID-19**

The current study investigated into individuals’ experiences of the stress resulting from COVID-19 and the role mindfulness plays in navigating this stress. Results found the identification of the theme “Using Mindfulness to Cope with COVID-19”. Due to the core aims of the study, this theme was an expected finding amongst the data. I decided to further divide this

theme into subthemes that were prominent within the data. Subthemes included: Acceptance, Present Moment Awareness and Attention and Awareness. Although mindfulness practise incorporates many different facets, data pertaining to the subthemes above were identified most often and included in the current study.

A fundamental component of mindfulness is acceptance. Participants in the current study often discussed how they used acceptance to help them cope with the difficulties associated with COVID. Past literature looking at the role acceptance plays in the stress response has indicated decreases in stress and increases in wellbeing (Ford et al, 2018). Participants in the current study discussed accepting difficult emotions such as loneliness and fear. Acceptance of the current circumstances in general, as well as associated anxiety was also frequently discussed. In line with past research, a possible implication is that participants demonstrating acceptance in the current study may be decreasing their own stress levels and increasing over all wellbeing (Casio et al, 2015; Ford et al, 2018). Furthermore, according to Umucu and Lee, (2020) acceptance is classified as an active or adaptive coping mechanism and participants demonstrated this in the current findings. The use of adaptive coping mechanisms have also been shown to benefit wellbeing and decrease stress levels.

Another mindfulness facet that is fundamental to practise, includes present moment awareness. Being aware of the present moment underlies many other aspects of mindfulness processes including acceptance, attention and awareness to breath and bodily sensations as being in the present moment is essential while partaking in these processes. Findings in the present study demonstrated participants were using present moment awareness to cope with the physical and emotional struggles they were having during this time. By doing so, participants were actively trying to improve wellbeing by shifting focus from all the stressors of the pandemic to

what was occurring in the present moment. Due to human's capacity to produce emotions by thought alone, it is important to be aware of thoughts occurring and the effect those thoughts can have on your wellbeing (Sapolsky, 2004). In turn, present moment awareness directs thoughts away from pandemic related stressors to what is happening in the present moment including awareness of breath and our five senses. According to Cutright et al, (2019), participants who have been doing this are decreasing stress levels and increasing wellbeing. By thinking about a stressful event, you are essentially reliving that event twice and engaging in the stress response twice. The brain cannot tell the difference (Sapolsky, 2004).

Results from the current study also demonstrated the subtheme of "Attention and Awareness" in which participants showed an understanding of where they were focusing their attention and also awareness of negative input both from their environment and their own thinking. Participants identified that excessive exposure to COVID related media and conversations was having a negative impact, demonstrating a key component to mindfulness, awareness. These results are in line with past literature investigating into the negative effects COVID-19 media exposure can have on well-being including increased anxiety and depressive symptomology (Shevlin et al, 2020). Furthermore, participants demonstrated awareness of excessive COVID related conversations and the importance of reducing these discussions to improve well-being. Along with the research investigating into effects of media exposure, it can be inferred that excessive exposure to discussions and conversations about COVID may be harmful although further research is needed to form an understanding of the extent these discussions are having an effect. Also, participants showed awareness of their own negative thinking during this time period. Due to the threat COVID-19 poses on individuals, relationships, and society, it is anticipated that peoples thought processes will be dominated by this threat due

to the human predisposition to engage in a negativity bias. This bias serves an important evolutionary purpose to be aware of threats in our environment (Norris, 2019). However, due to the prolonged period COVID is having an effect, these negative thoughts can bring with them chronic exposure to the stress response. Consequently, this can result in negative health outcomes both physically and mentally (Sapolsky, 2004). Mindfulness is demonstrated to be a beneficial tool in combating this negativity bias and awareness of negative thoughts, may be beneficial in reducing the stress response to COVID. In doing this, participants in the current study are reducing the stress response and thus improving overall wellbeing (Kiken & Shook, 2011). In addition to awareness of negative input, participants demonstrated shifting their attention to more positive stimuli and thinking. Participants discussed the importance of gratitude, positive affirmations, focusing on what is going well and what is within their control. While focusing attention to the positive things occurring, participants are helping to relieve anxiety and improve psychological functioning (Macdonald & Olsen, 2019) as well as satisfaction with life (Rash, Matsuba and Prkachin, 2011).

Results in the current study provide further insight into the already well-established literature investigating the many benefits of mindfulness practice. In particular, it highlights that individuals have used mindfulness and particular facets of mindfulness practise to navigate through the variety of stressors involved with the threat of COVID-19. With participants advocating mindfulness practise through their own experiences, they are supporting previous studies that highlight benefits including aspects of mental health (Kriakous et al, 2020), physical health in general (Sollgruber et al, 2018) and more specifically through a global threat such as a pandemic (Esterwood & Saeed, 2020). Due to COVID-19 research being in its infancy, further

research is needed to investigate into the clinical effects' mindfulness has on individuals' experiences with COVID-19.

### **Growth Through Trauma**

Unfortunately, hardship and trauma are a part of the human experience. It is how we view these experiences that result in different psychological and physical health outcomes. Findings in the current study explored how mindfulness is used during COVID -19 and the theme of “Looking at the Bigger Picture” was identified within the data. While trying to navigate the threat COVID-19 has imposed, participants explored how they could find meaning through these difficult experiences and identified what they can learn from it. Using mindfulness, participants discussed accepting difficult emotions and bringing their awareness to how the situation is affecting them. Through a change of perception, participants demonstrated that these difficult experiences may ultimately result in growth. Understanding the bigger picture of difficult circumstances is rooted in Buddhist teachings where the Buddha aimed to help people take responsibility of their own suffering by understanding the nature of the human experience. Meditation and mindfulness are ways to express this teaching which has been coined as “dhamma” (Khong, 2009). Furthermore, recent literature has begun to investigate post traumatic growth – the study of the positive changes people make due to their hardship and adversity (Joseph, Murphy and Regal, 2012). According to Morrill, Brewer, O’Neill, Lillie, Dees, Carey and Rimer, (2007), post traumatic growth may be psychologically protective during a distressing event, influencing depressive symptomology and impaired quality of life. This finding was demonstrated in a sample of 161 women who had treatment for breast cancer. Results showed that post traumatic growth moderated the effects of post traumatic symptoms, depression, and quality of life. This finding is support by Labelle et al, (2015) who demonstrated MBSR may

facilitate post traumatic growth in a sample of cancer patients, resulting in patients finding a sense of meaning, peacefulness, connectedness and personal growth throughout their experiences with cancer. Stronger relationships, enhanced awareness, increased personal strength, deeper appreciation for life and spiritual enhancement are just a few benefits associated with post traumatic growth. Participants in the current study discussed these bigger picture aspects of the current situation, looking at what they are learning from the situation and finding meaning through their pain. In doing so they may be contributing to feeling the effects of the benefits discussed above although further research is needed in this area.

### **Barriers and Shifting Attitudes Toward Mindfulness**

Two themes in the present study have a focus on barriers and attitudes toward mindfulness. Although, majority of participants shared positive experiences using mindfulness, some shared their own apprehension and scepticism and the acknowledgement that others may feel this way. Furthermore, negative attitudes or disregard for mindfulness by medical professionals was also identified and shared by participants. The two themes of “Apprehension and Scepticism Towards Mindfulness” and “Disregard of Mindfulness by Medical Professionals” both share a common denominator in that there is inconsistency in attitudes towards mindfulness as a therapeutic and alternative tool to traditional western medicine. There is very little research looking into attitudes toward mindfulness practise in general and further research is needed to investigate into these attitudes in the general population. The research that is available has looked into the attitudes of health professionals and students of health professionals with a report by the Mental Health Foundation (2010) finding that that 64% of 250 General practitioners in the United Kingdom would like to be trained in mindfulness and 72% believing MBCT would be useful for their patients in the treatment of mood disorders. Although, 69% of GPs reported they

had never referred patients to MBCT courses for treatment, with only 20% reporting they had access to these courses during their training. This indicates a lack of exposure to mindfulness as a therapeutic tool. Furthermore McKenzie, Hassed and Gear (2012) aimed to compare medical students and psychology students' attitudes towards mindfulness, resulting in psychology students being more likely to recommend or administer mindfulness-based treatment to their patients compared to medical students. Results also showed that when comparing medical students with and without mindfulness exposure resulted in students with exposure being more likely to recommend and administer mindfulness-based treatments. This research, along with the "Be Mindful" report, is in line with the current study that demonstrates individuals' experiences with medical professionals in regard to mindfulness. Current findings showed peoples frustrations with the lack of support, dismissiveness, and disregard when it comes to mindfulness-based interventions by GPs. Possible implications of this include the need for medical students and current medical professionals to have exposure to mindfulness training as well as routine instructions on the efficacy of mindfulness as a clinical intervention. This may result in a more positive attitude towards mindfulness as well as a higher likelihood to recommend, administer or refer mindfulness-based interventions to patients. Also, including more mindfulness training in medical courses may aid in achieving this and fulfilling the clinical potential of mindfulness.

In line with these findings is the dominance of the biomedical model in western society. Medical procedures and medication continue to take precedence in medical settings and the consensus of the public continues to follow that psychological disorders are diseases of the brain and are best remedied with pharmacological interventions (Deacon and McKay, 2015). This may contribute to the inconsistent perceptions and attitudes towards mindfulness use as a clinical

intervention (Chan et al, 2006; Deacon, 2013). Lack of awareness, knowledge and understanding regarding the efficacy of mindfulness may be contributing to potential negative attitudes and a lack of confidence to engage in practice due to the precedence the biomedical model holds (Russel et al, 2017). By increasing knowledge and awareness of mindfulness practice in general through media, training and exposure through medical professionals and settings, these negative perceptions, attitudes, and lack of confidence in mindfulness practice may begin to change.

Despite the continued prevalence of negative or indifferent attitudes toward mindfulness practise, the findings in the current study, as demonstrated in the other themes, provide insight into the predominant positive attitudes towards mindfulness. Although, this finding has demonstrated some negative attitudes, most participants indicated they have either had a shift in attitude from negative to positive or showed willingness to try mindfulness despite having no experience.

### **Limitations**

Due to the subjective nature of thematic analysis, the current study included limitations pertaining to this. This project included myself as the sole researcher who collected, coded, and analysed the data, making decisions and justifications regarding the themes identified within the data. Although, these steps were discussed with my supervisor, the thematic analysis process was predominantly carried out by myself. Due to this, my own biases, experiences, and previous research on the topic may have influenced the interpretation of results. Confirmation bias may have come into play during analysis and interpretation of the data, confirming existing literature I had thoroughly researched on the topic as well as my own experiences with mindfulness and COVID-19. The fact I have held the position that mindfulness is a beneficial skill to have, may have contributed to looking at mindfulness related literature in a more positive light. I included a

reflexivity section to give the reader insight on this limitation. Also, according to Attard & Coulson, (2012) there is the limitation that some themes may be over looked due to the limiting nature of thematic analysis, in that there is not enough time to analyse all the data available on Facebook regarding mindfulness and COVID-19. Although data saturation was reached, there is the potential for overlooked information.

Furthermore, data was collected from English speaking online discussion groups. I did not gain insight into where participants were from and cannot assume that the participants generalised to the global population. Due to the groups being English speaking, I recognised majority of participants may have originated from western cultures although this cannot be confirmed. Looking at the cultural differences in people's experiences with mindfulness and COVID-19 may have altered the current study's findings.

Lastly, groups were chosen that were in line with study aims, therefore they consisted of participants who were either actively using mindfulness to cope with the current pandemic or who were in COVID support group seeking and offering advice on ways to cope. Other groups may have encouraged different values and norms around mindfulness and COVID, therefore resulting in different discussions and posts.

### **Future Research**

Considering COVID related literature continues to emerge, psychological literature related to mindfulness and COVID is expected. Based off the current study's conclusions and lack of empirical research on the topics studied during this time frame, suggestions for future research pertaining to this follows.

Future studies may benefit from looking investigating into the efficacy of MBIs such as MBCT, MBSR and ACT in treating both physical and psychological symptoms associated with the COVID-19 pandemic. Although the current study demonstrates the benefits people discussed with using mindfulness, further empirical research is warranted to gain more insight into the extent of these benefits. Furthermore, future research could investigate into the effects particular mindfulness facets such as acceptance, attention and awareness and present moment awareness has on COVID related difficulties. Studies looking at the efficacy of mindfulness both during and after COVID may provide more insight into the field.

The current study also resulted in individuals demonstrating altruism, empathy and compassion towards other groups members. Due to a significant number of these posts being identified in mindfulness related groups, I concluded there may be a link between mindfulness practise and this prosocial behaviour. Although, future research is needed to provide further insight into this and highlight any discrepancies identified by Kreplin et als (2018) meta-analysis on the link between mindfulness and prosocial behaviour. Future research would benefit from looking at the link between mindfulness and prosocial behaviour specifically during the time of COVID-19, while also taking into consideration the biases and theoretical issue identified by Kreplin et al (2018) including: being introduced to the meditation teacher, type of control group used and participants expectations and beliefs regarding meditation practise.

Considering the lack of literature regarding attitudes towards mindfulness, future research on this topic is warranted. The current study reflects that people are still apprehensive to try mindfulness and also demonstrate a lack of understanding on the efficacy of mindfulness as a therapeutic tool. By investigating further into attitudes of the general population, a deeper understanding of how widespread these attitudes are as well as reasoning behind these attitudes

may provide insight into how change can be implemented and how mindfulness practice can live up to its clinical potential.

Lastly, the concept of post traumatic growth has been identified in this study with participants demonstrating they are able to find meaning and growth through COVID-19. Past literature has concluded that post traumatic growth may be psychologically protective during distressing events (Joseph et al, 2012) with benefits demonstrated in cancer patients (Labelle et al, 2015; Morrill et al, 2007). Future research would benefit looking into how post traumatic growth may be psychologically protective during COVID-19.

## **Conclusion**

This thesis has explored the role of mindfulness during the COVID-19 pandemic. Considering the pandemic is still ongoing, research on the topic continues to emerge and the current research has helped gain valuable, new insight into people's experiences during this time. This thesis has identified both physical and psychological difficulties people have been having and explored the way mindfulness practice has had an effect on people during the experience of these difficulties. Through online discussions in Facebook groups, the importance and benefits of social support was highlighted and also contributed to a potential increase in mindfulness use through sharing resources and personal experiences. The current study demonstrated the efficacy of mindfulness through people's experiences of actively engaging in practise to relieve COVID related symptomology and stress. This thesis also resulted in conclusions made regarding the mind-body connection, post traumatic growth, and prosocial behaviour, highlighting the role mindfulness plays in these. Lastly, barriers were identified, indicating implications and future research is needed in the area of attitudes towards mindfulness and incorporating more mindfulness training into medical courses.

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## Appendix A

### *Characteristics of Facebook Groups*

Group Name	Group Aim	Number of Members
COVID-19 Support Group	For people who have or had Covid-19 to share experiences with others.	41,000
COVID-19 Symptoms, Experiences, Questions, Remedies and Sharing	To discuss the different symptoms and experiences people are having while thinking they may be infected by COVID-19.	14,000
COVID-19 Recovered	All people who have recovered after being infected with COVID-19; please share you're experience. It may help the rest of us.	10,000
COVID-19 Survivors and Support	To create a space for those that are living through this diagnosis, have friends and family that are living through it, or people who want first-hand knowledge of what it is like,	27,000
Mindfulness	To share knowledge and ask questions about mindfulness. To help each other reach new levels of scientifically researched knowledge and clinically tested method of meditation.	275

Meditation and Mindfulness.	To share and participate in discussions related to Meditation, Mindfulness, Self-Discovery, Realization, Enlightenment, Buddhism, Mysticism, Energy Cultivation and Conservation, Higher States of Consciousness or perhaps to observe.	98,000
Mindfulness Daily	A group focused on Mindfulness practice.	323
Mindfulness Based Stress Reduction (MBSR).	MBSR is a form of meditating that helps you heal from within and grow. You become awake, you become aware and then you care. Mindfulness posts only.	20,000
Yoga-Health-Mindfulness helping people through COVID-19 together	To bring people together and share our knowledge and expertise. To share any content, you think may be of help to others and feel free to share information/videos/online practices etc. If you have any special skills/knowledge/qualifications or are a practitioner yourself, post your practices here for others to enjoy.	688