A Gap-bridging App to Recover the Broken BodyMind Connection using Sensory Wisdom

Melanie Portman, Cate Zoltan, Matthew Zoltan
Undoapp.com
hey@undoapp.com

Alex Norta
Pro bono private volunteer
alex.norta@gmail.com

Abstract—The purpose of this paper is to present Undo, a fourteen-chapter meditation app based on the life work of Matthew Zoltan. Trauma and stress are part of the experience we have of living in a modern society. That experience is one of increasing physical/psychological instability, confusion and fragmentation. It is an experience in which the mind finds itself divided and dissociated from the body, resulting in anxiety, fear, depression and chronic pain. But instead of being separate and opposing, the mind is embodied, bodymind is a unity that defines the very core of our existence. To resolve their distress, people are seeking help by tuning into one of the many online meditation apps. All offer mental relaxation or mind training techniques that find their origins mostly in the practice of mindfulness or in Buddhism and other religious approaches. However, there is a gap in the status quo of these apps. They have overlooked the bodymind disconnect, failing to understand two important details: that disconnection is the underlying cause of all distress; and that the innate healing force within the body can be activated naturally to re-connect and overcome all distress. Thus, the objective of the Undo app is to help the user to re-connect body and mind and resolve distress. The user is educated about cultural and social influences as well as about a multitude of other issues and their destabilising effects on the human body. The user is guided through natural meditation, effecting the bodymind re-connect. This is a process of feeling deep into the sensory capacities of the body, beneath the influence of thought. A fully embodied person knows to enjoy possibilities in life unknown to those suffering the bodymind disconnect. Essentially, the Undo app presents fundamental understandings of human function not widely known, yet vital for navigating effectively every aspect of life[1].

Index Terms—Meditation, body, mind, bodymind, healing, mobile app

I. INTRODUCTION

The natural healing force within each of us is the greatest force in getting well. Hippocrates (c. 460 - 370 BC).

Rarely is it reflected upon that the mind in its natural state is embodied, that body and mind are one. For body and mind to be one there needs to be what scientists define as interoception, an awareness of subtle sensory signals originating within the body [6]. In his book The Body Keeps the Score [20], van der Kolk, a leading psychiatrist who has spent his life researching the effects of trauma in the body, describes how stress, trauma, physical pain or other adverse influences block and shut down sensory – bodily – information; and when such information is chronically shut down a person may encounter stress, anxiety, depression and chronic pain, conditions that result in dissociation. Bodily awareness is not only essential for a sense of well-being, the greater that awareness, the greater our capability to live our life at its full potential [20].

Stress, trauma and chronic pain are facts of life, their effects felt by everyone, as the World Health Organisation (WHO) affirms, worldwide the problem of chronic ailments is increasing exponentially (2022)[2].

A research paper by Vigo et al also verifies that globally the incidence of mental illness is increasing [22]. Giddens, known for his view of modern society, raises a number of questions about the influences of today's high risk, fast paced, globalised culture. He was one of the first sociologists to determine that modern day life is inherently destabilising. Disembodiment, he asserts, is a consequence of disruptions to our ontological sense of being, experienced by everyone in every day stressful life situations [9]. Beliefs and ideas are imposed on individuals constantly by media, culture, society and family. Individuals then tend to reaffirm such belief systems for themselves, failing to understand that their otherwise perfectly functioning and capable human body is adversely and continuously impacted on by these various thought systems.

Clearly, people are feeling the distress and are seeking solutions. Mindfulness and Buddhist/religious meditation apps are positioned as solutions, and they are growing in popularity. Some of the most popular apps include: Calm (2022)[3] – offers guided meditations for reducing stress, improving focus, self-

---

[1]Disclaimer: Not everybody will always heal a serious physical or mental condition when they use the Undo app, in the same way that not everybody will always succeed in healing a mental or a physical condition, even with the help of the many orthodox and alternative therapies. Undo, however, provides users with the education to take responsibility for the role they play in their own lives and for the actions they take to help improve their condition. Some conditions cannot be healed. In these cases Undo encourages the user to embrace and live with that condition, whatever it is, rather than to resist the discomfort, which will only result in suffering. Undo acknowledges that it can be very painful to embrace and live with a serious condition and some users may need additional support and guidance to help them through the more challenging aspects of their healing process.

[2]As reported by WHO in September 2022, Noncommunicable diseases (NCDs) kill 41 million people each year, equivalent to 74% of all deaths globally. Cardiovascular diseases account for most NCD deaths, or 17.9 million people annually, followed by cancers (9.3 million), chronic respiratory diseases (4.1 million), and diabetes (2.0 million including kidney disease deaths caused by diabetes). These four groups of diseases account for over 80% of all premature NCD deaths (https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases. Accessed November 2022)

[3]Calm app, (2022), Find Your Calm - Sleep more. Stress less. Live better. Accessed November 2022, www.calm.com

improvement and better sleep.

Waking Up (2022)[4] – offers a "New Operating System for Your Mind". It invites prospective users to "Open the door to a deeper understanding of yourself – with guided meditations and insights for living a more examined life".

Meditopia (2022)[5] – a mindfulness meditation app that claims to be "the most used mental wellness coach in non-English speaking countries". The app offers more than one thousand meditations on stress, anxiety, sleep and more.

Headspace (2022)[6] – claims to advance the field of mindfulness meditation on their product through clinically validated research. Similar to the other apps, the focus is on stress relief, improved concentration, and better sleep.

Thus, the state of the art sees a proliferation of meditation apps. According to Purser, in 2019, Mindfulness was a four billion dollar industry (14 June, 2019)[7]. Although, mindfulness will acknowledge its Buddhist meditation origins, it has become a meditation technology that has been transformed into a secular tool for self-help. It has become a technique that could be used for any purpose: to de-stress and relax, to think positively, to find calm before sleep, to develop more concentration[8]. For the past decade, Buddhist, mindfulness, and other forms of meditation have been widely promoted as a personal and social panacea, yet, there is a gap in the state of the art pertaining to the status quo of health and wellness. For example, Nehring and Frawley [17] have expressed concerns that the mindfulness movement shows many characteristics of a craze or a trend, whereas Van Dam et al caution that mindfulness has not been without criticism. Misinformation and poor methodology in mindfulness practice may "lead public consumers to be harmed, misled, and disappointed" [21].

Furthermore, the state of the art shows that meditation needs have increased exponentially. Due to a perceived state of inner psychological conflict and turmoil, people turn to conventional mental health approaches, yet these fail to resolve the discontent. Meditation apps also fail to fill the void. The apps are defective in two important respects: a) the biological source of all physical and mental/emotional ailment is overlooked, i.e. the shut down of sensory information; b) as a consequence, the bodymind disconnection is not taken into account. This bodymind disconnection is the root cause of all physical and mental distress. Therefore, a meditation app ought to guide the user through the process of reconnection

---

[4]Waking Up app, A New Operating System for Your Mind, accessed November 2022 https://wakingup.com

[5]Meditopia Mission Statement, accessed November 2022 https://meditopia.com/en/about

[6]Headspace meditation app – Guided Meditation and Mindfulness – The Headsapce App. Accessed November 2022, https://www.headspace.com/headspace-meditation-app

[7]From Purser's point, "Mindfulness has been oversold and commodified, reduced to a technique for just about any instrumental purpose" cited in The Guardian, accessed 23 May, 2020, https://www.theguardian.com/lifeandstyle/2019/jun/14/the-Mindfulness-conspiracy-capitalist-spirituality

[8]Purser, R., 14 June 2019, The Mindfulness conspiracy, The Guardian, Accessed November 2020, https://www.theguardian.com/lifeandstyle/2019/jun/14/the-Mindfulness-conspiracy-capitalist-spirituality

or reintegration of the bodymind, rather than offering a tool to fit a particular purpose, to temporarily find more calm or to destress. Reintegration resolves distress and enables the experiential discovery that a person is sufficient and complete just as they are. By demystifying and normalising meditation, the Undo app offers essential benefits that are accessible to everyone, regardless of their cultural background, whether secular, religious or other. Thus, this white paper fills the gap by posing the question: how to design a meditation app with experiential and educational content that enables a user to recover from a broken bodymind connection. To establish a distinction of concerns, we investigate the following sub-questions: What self-discovery process does the app guide the individual through? What alternative, acceptable view of an individual's condition does the app introduce? What significant healing change occurs in the app user and continues to strengthen and evolve?

To demonstrate the feasibility of our approach, we present the Undo app that functions as a means of life navigation for users. Throughout our discussion we draw on texts from philosophy, psychology and sociology as well as on texts of leading authors in other fields of expertise to help illuminate our human condition and the effect it has on life.

Section II describes the current state of affairs and presents a running case for the use of conventional meditation apps, showing the challenges and shortcomings of the status quo. Preliminaries and presuppositions are also presented. Section III illustrates the content of the Undo app, the process of app user self-discovery, outlining the compounding effect of the layered Undo approach to re-connection and the user flow of each Undo chapter. Section IV introduces an acceptable alternative view to an individual's presumed flawed condition and describes the conceptual process of re-connection that a user experiences through the Undo app. Section V describes the significant healing and change that occurs and evolves in the app user. Section VI shows detailed case studies of the socio-technical use of the Undo app. Section VII concludes this white paper and presents future work. Appendix A presents a short biography of Matthew Zoltan, the creator of the Undo approach. Appendix B outlines a brief exposition of Zoltan's approach towards reconnection. Appendix C presents an analysis of responses provided by participants of the six-week qualitative user case study. Appendix D provides a Roadmap of Future Development.

II. THE CURRENT STATE OF AFFAIRS

We discuss the current state of affairs. Section II has three parts. Section II-A provides an explanation for people's motivation for self-discovery. Section II-B presents a mindfulness meditation running case, illuminating the state of affairs and illustrating the challenges and shortcomings of current meditation apps. Section II-C proffers a list of preliminaries and presuppositions to help explain frameworks and concepts relevant to this white paper.

A. A Motivation for Self-discovery

For the most part people find themselves to be a unified or embodied mind/body, for the simple reason that from within our bodies we experience a sense of presence in the world. Laing, [13] (p. 67) who in the sixties challenged the psychiatric orthodoxy, understood the significance of embodiment, as he writes, "In ordinary circumstances, to the extent that one feels one's body to be alive, real, and substantial, one feels oneself alive, real, and substantial". Be that as it may, the realities of day-to-day life tend to shape our experiences, the way we think and the way we live our lives. Increasingly, people are suffering from trauma caused by natural catastrophes, accidents, financial loss, domestic abuse, childhood neglect, war, displacement and other occurrences, causing people to feel overwhelmed and confused. In stressful situations like this, the mind/self tends to lose touch with its roots in the body and it disconnects or dissociates from the body. When we dissociate, as van de Kolk has observed, "our senses become muffled and we no longer feel fully alive" [20] (p. 91). In stressful circumstances like these that we all experience, we no longer feel our sense of presence in the world.

In addition to the personal stress everyone experiences, our social world is irrevocably characterised by competing, and often conflicting systems of ideas, meanings and understandings. The embedded beliefs, values and norms of our social system are constantly imposed on and internalised by individuals. Giddens, who has researched societies and the human world, asserts that in conditions of stress the splitting of the self from the body is common. From his view, disembodiment is a central feature of "disruptions felt in ontological security experienced by everyone living in tensionful situations of daily life" [9] (pp. 59-60). It is noteworthy to mention that socially embedded beliefs originate from outside the direct/inner sense experience of the body. It therefore follows that when the way we think about ourselves and about the world in which we live originates from outside sources, those thoughts are learned. These imposed thoughts deprive us of knowing and understanding what is going on inside of ourselves. The consequences are dire: socially imposed beliefs lead people to develop ideas of self-judgement. Self-judgement in turn leads to feelings of lack or emptiness. From those feelings arise a perceived need or desire to improve or better the self.

It is suffice to note that the prevalence of mental health disorders is increasing globally. According to Ritchie and Roser [19] one in ten people live with a mental health problem, yet, as they have observed, mental health disorders are widely underreported, suggesting that numbers are far greater. Vigo et al [22] also assert that the incidences of mental health disorders are rising worldwide with considerable consequences to human well-being, human rights, social structures and economic soundness. Like Ritchie and Roser [19] Vigo et al state that the global magnitude of mental illness is widely underestimated [22] (p. 171). These and the above points will be discussed in more detail in the sections that follow.

There is little doubt, people are seeking solutions to their problems. People are turning to mindfulness meditation apps and other self-help tools to find resolution.

B. Running Case

We discuss a typical meditation experience as is proffered by most meditation apps. As the number of people downloading meditation apps increases exponentially, dozens more apps come on the market. Peeyush[9] estimates that the meditation market in the US alone in 2020 was worth USD\$1.21 billion.

Often, people turn to a meditation app to seek specific solutions to specific problems. For example, a person may want to overcome anxiety, to stress less, find calm and improve concentration or to sleep better. Meditopia[10], Calm[11], Headspace[12], and Waking Up[13] are some of the most popular examples of apps offering individuals solutions to overcome such problems.

We seek to show that meditation apps create further confusion within an already confused user, achieving neither the desired goal of long-term calm, better sleep, more focus nor the Undo objective of bodymind reconnection and self-discovery.
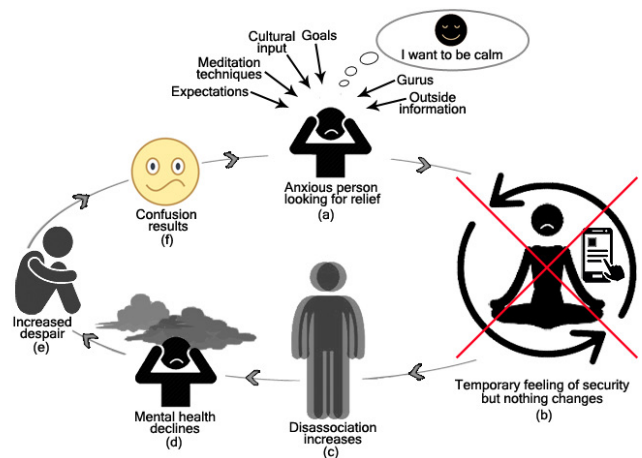

Fig. 1. Depicting a typical meditation experience.

Figure 1, Depicting a typical meditation experience, shows a stressed/distressed individual who seeks a solution. The alphabetical values a) to g) describe the experience of an individual seeking a solution to his stress by doing a body scan meditation. We name the individual Tom. Tom decides to try a body scan meditation to help reduce his stress. Much like other

[9]Singh, Peeyush, 2020, Unhooking the Drama: Meditation App Statistics to Know in 2020, Appinventiv, accessed November 2022, https://appinventiv.com/blog/meditation-app-statistics/

[10]Meditopia app (2022) Meditation, Sleep, Mindfulness. Accessed November 2022, https://meditopia.com/

[11]Calm app (2022) The Number One App for Meditation and Sleep. Accessed November 2022, https://www.calm.com/

[12]Headspace app (2022) Guided Meditation and Mindfulness – The Headsapce Meditation App. Accessed November 2022, https://www.headspace.com/headspace-meditation-app

[13]Waking Up app (2022) A New Operating System for Your Mind. Accessed November 2022 https://wakingup.com

meditation techniques, a body-scan meditation is a thought-based meditation. That is, the user listens to instructions and responds accordingly. In the body scan meditation the user is encouraged to focus on or mentally scan certain body parts, usually starting at the tip of the toes and finishing at the crown of the head.

a. This is Tom. He has family, work commitments, debts and bills. Due to the COVID-19 pandemic and other factors there is a world economic crisis and Tom's job is at risk. Tom suffers from stress and anxiety and is unable to relax. There is a lot of tension in his body, causing him pain and now he has reached a point of despondency. He wants to release the tension in his body and calm his mind. On a mindfulness website Tom has read that chronic stress and trauma is held in the body and in the brain. He has read that a body scan meditation is a body awareness practice and good for stress relief and focus[14]. He decides to try a twenty-minute body scan meditation.

b. Tom has understood that the app's function is to coach the user to pay attention to bodily sensations in a gradual succession, from the end of the toes to the top of the head. He is instructed to sit comfortably, to breathe in through the nose and out through the mouth, to stay present and notice the sensations as he mentally scans each body part. He feels empowered – he is taking appropriate action to help himself. He is confident that he will resolve his anxiety, as suggested, by staying present with and by breathing into the sensations as he feels them.

c. Tom listens to the instructions meticulously, focussing on the sensations in his toes, his foot, his shins, and his thighs. He is unaware that he is diverted from feeling from within the sensations of his body as they would arise naturally, without instruction, and as they feel before changing them by the effect of how he thinks about them. Instead, due to the inherent, imposed psychology of the body scan technique, Tom develops an imaginary unification between 'his mental sense of self' and that of 'his body'.

d. At this point Tom is ten minutes into the meditation and he is told to focus on the sensations in his chest. Tom continues to follow instructions and to apply these to himself.

e. Fifteen minutes have passed and Tom is instructed to focus on the tips of his fingers. He finds it difficult to stay on track.

f. Towards the end of the meditation Tom is asked to focus on his shoulder and his neck. He finds himself increasingly incapable of listening to the instructions; he is distracted by his own thoughts, by sensations in other parts of his body and by the sound of birds or other noises outside.

g. Finally, Tom is instructed to focus on the crown of his head. Tom might think that the meditation has worked for him, as expected. However, there is another perspective framing his experience. Being highly focused on receiving instructions, it has not been possible for him to have had any real or untainted experience of bodily sensations, as they would arise naturally. He has been unable to discern or directly sense where in his body might be the most intensively felt sensations, to then feel from within these and for as long as it takes for these to resolve. Furthermore, he may feel like a failure because he did not achieve more calm. Also, as refocussing his thinking only distracted him from the troubles and worries he had to begin with, these are still there, and he soon finds himself in reaction to them once again.

Tom has completed the body scan meditation and returned to point a) – He is a stressed and anxious person looking for more calm. Tom has had no lasting or actual significant benefit from the meditation, for it has not been possible for him to re-integrate his body with his mental sense of self or to experience any form of self-discovery or other significant recovery. The instructions, that Tom followed conscientiously, have robbed him of the opportunity to feel into the sensations in his body from within as they would arise naturally, without outside intervention.

Merleau-Ponty [16], a leading academic in post-war France who is best known for his influential study of the phenomenology of bodily being, has observed that to experience self-discovery, or self-consciousness as he calls it, it is necessary to experience the union of bodymind. This union is not "a question of a fact experienced passively but of a fact taken up" [16] (p. 99). The body scan meditation is a fact experienced passively. That is to say, the body scan is not an experience originating from the body. Merleau-Ponty understands unification or re-connection of bodymind to be a bodily experience that cannot be achieved via a thought process. To 'take up a fact' refers to an inner experience that originates in the body. "To be a consciousness, or rather *to be an experience* [italics as in the original] is to have an inner communication with the world, the body, and others, to be with them rather than beside them" [16] (p. 99). Or, as Zoltan has observed, sensory communication from within our bodies and with the world outside occurs before any thought-description of that sensory information arises. Sensory communication is only possible as part of the lived experience and is generated from and determined simultaneously by stimuli from within our bodies and stimuli from the outside world. Sensory communication does not occur by passively observing our surroundings nor is it determined by points of views, contributing to creating our disconnected experience. Sensory communication is a bodily experience of sensory self-awareness – the body sensorily aware of itself[15].

Effectively, as Merleau-Ponty has established, unification or re-connection of bodymind necessitates an encounter with

---

[14]Scott, E. 2020, Very well mind. Accessed November 2020, https://www.verywellmind.com/body-scan-meditation-why-and-how-3144782

[15]Zoltan, M., 2022, What causes Dissociation? An Interview with Mathew Zoltan, accessed November 2022 https://www.bitchute.com/video/1hOg7SEX3fsn/

the body that moves beneath all objective thought. That re-discovery of the sense of self, as an experience, as an immediate presence to the body, the self, others and to the world occurs at the very moment the experience takes place, but is lost in the next moment of thought's description of it [16] (p. 99).

As Merleau-Ponty [16] seeks to show, all evidence of knowing comes only from within the senses. It follows that, and in practice, objective thought is as contra-productive to sense experience as it is to self-discovery. To feel from within the physical sensations of the body, beneath all thought, as sensations arise naturally, is the means for actual and immediate self-discovery. The function and purpose of the Undo app is to guide the user through that process of feeling from within towards self-discovery.

C. Preliminaries and Presuppositions

This section informs the reader about the core concepts relevant to the Undo meditation app approach. The approach is based on the premise of bodymind disconnection or dissociation. When this dissociation happens, people feel numb, a sense of being separate from themselves, yet they still experience physical pain and mental distress. That pain and distress is held in the body in the form of tension. The Undo approach is to help users reconnect the bodymind. The key to re-connection is to feel into those bodily sensations that are at the root of the pain/distress. This is a process of self-discovery and connectedness.

The three key concepts, bodymind disconnection/dissociation, held tension in the body and felt bodily sensations are relevant to the Undo approach and are explained below.

1) Dissociation: Dissociation in essence is the result of trauma [20] (p. 66). Trauma is what Van der Kolk [20] (p. 21) terms "an overwhelming experience that affects our innermost sensations and our relationship to our physical reality - the core of who we are". Trauma is a complex condition that causes people to lose contact with their bodies. They are cut off from the origin of their bodily sensations and when cut off from their bodies, they lose that living connection with the life that they are. A person thus may feel their sensations in their body but there is a lack of body awareness and they no longer are able to sense or communicate what is going on in their bodies [20] (p. 21).

Investigating more deeply, Van der Kolk [20] (p. 53) notes that trauma affects the entire human organism - body, mind and brain,

"the result may be confusion and agitation, or it may be emotional detachment, often accompanied by out-of-body experiences - the feeling you're watching yourself from far away... trauma makes people feel like either some body else, or like no body. In order to overcome trauma, you need help to get back in touch with your body, with your Self. Only by getting in touch with your body, by connecting viscerally with your self, can you regain a sense of who you are." [20] (p. 249.

The key feature of the Undo app is to help users get in touch with that deep visceral feeling of their bodies, to understand what they as a body are communicating, to become one bodymind and to thus regain their sense of self.

2) Held tension in the body: One very neglected dimension of the human experience is the felt sensations in the body. Stress and trauma, whether from the past or recently experienced, affect all systems in the body [20] (p. 53). Stress is stored as tension in the body's tissues. That tension frequently triggers other conditions and people end up with a wide range of physical problems. They may have tight shoulders, back pain, a weak stomach, headaches, and so forth. Or their immune system may be compromised and they develop more serious conditions, including chronic fatigue, fibromyalgia and other autoimmune problems. After trauma, Van der Kolk [20] (p. 53) emphasises, "the world is experienced with a different nervous system".

That tension manifests itself in particular parts of the body, in a particular form. For example, the tension in the neck and the shoulders is frequently linked to tension headaches and migraines. The Undo app has a *Body Tension Translator* (BTT) that a user may access from anywhere in the app that links particular mental stresses and trauma to its associated muscle tensions, and vice versa. Figure 2, Undo app's *Body Tension Translator*, presents two screenshots of the *Body Tension Translator*. The image on the left shows a portion of the list of body parts a user may access, and that on the right a portion of the list of mental and physical affliction descriptions.

3) The Undo approach to meditation - felt sensations: In summary, all stress produces tensions and all tensions produce sensations in our bodies. Undo refers to these as felt sensations. For example, I may have experienced the loss of a close family member and I feel sad. When I feel sad, I may feel an ache or a heaviness in the chest, or a lump in the throat. I have body awareness because I am able to sense what is going on in my body. That is the life I am.

In contrast, when I think about how I may feel, without having that bodily connection, without feeling that ache or heaviness, then I have no bodily awareness and I merely think what life ought to be. I may for example think I feel sad. That thought process then shapes the way I see and experience my life, whether or not it has to do with the life that I am.

By comparing sensing with cognitive thinking, we can see these are two entirely different approaches for living. One is nature based, lived from the inside-out, from and within my body. The other is externally based, from the outside-in, from outside my body.

That that I am is my body, my felt sensations. Only I know that that my body communicates. Thus the key to self-discovery and to a whole and interconnected self is bodymind re-connection. It is in sinking beneath the disassociated dual state of 'awareness of sensations' into the embodied felt sensation of and within the body itself that self-discovery and re-connection then takes place. That is the internally originating, inward turned meditation of the Undo approach.
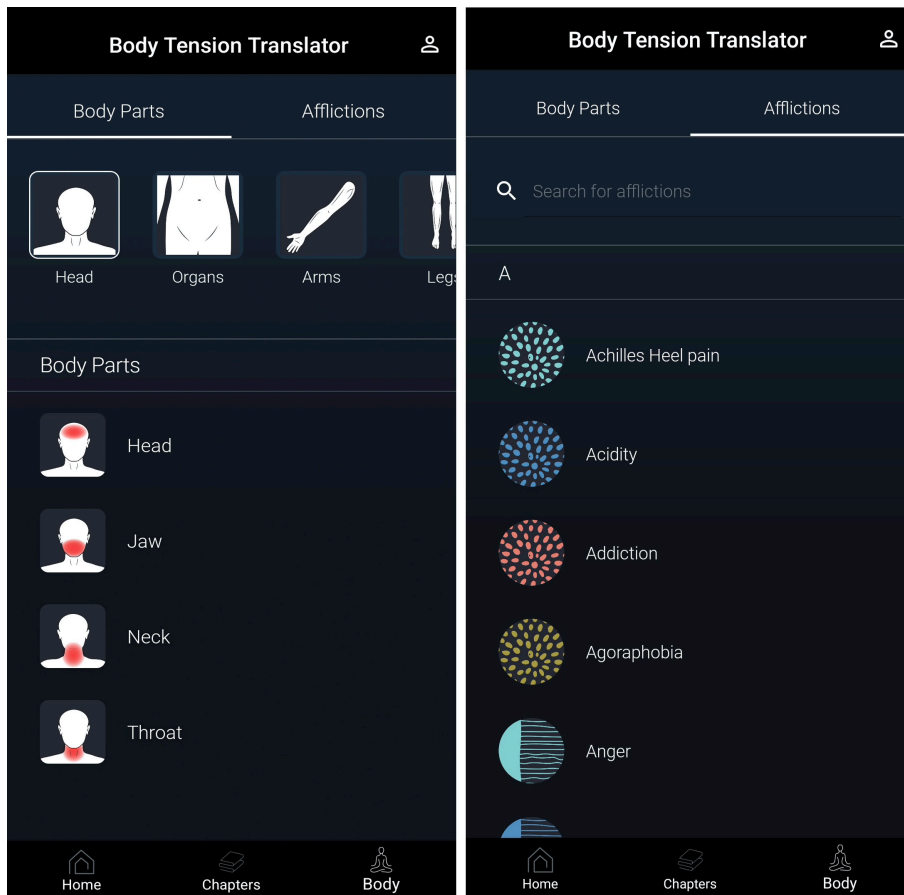
Fig. 2. Undo app's Body Tension Translator.

To feel into our bodily sensations and then live guided from within them. Bodymind re-connection ends the separated or disassociated state of self-consciousness or the process of self-thought. That is what the Undo app is all about.

III. THE UNDO APP - FROM DISCONNECTION TO RE-CONNECTION

We describe the Undo app-user re-connection and self-discovery process that is based on the fact that our bodies are the source of all our experiences. We are born into this world as living, sensory beings, and we live in this world through and as our bodies. This is our natural state before thought is superimposed. When we are only our bodies, we are only that, and we are connected. Drawing on literature from philosophy and psychology, we discuss the significance of re-association and the return to bodily origins. We then summarise Undo's approach to re-connection that is presented in three parts.

Section III-A delineates Undo's multi-layered approach towards re-connection and self-knowledge. Section III-B explains the Undo app structure and user flow of each Undo chapter. Section III-C provides an overview of the Undo app content that includes the educational material of Undo. The content of each app chapter is briefly summarised. All content is narrated by its creator and founder Matthew Zoltan.

Caught up between the extremes of stressful and/or traumatic personal experiences and the abstracting beliefs and influences of our social world, our attention further captivated by a proliferation of new technologies, we tend to overlook the primordial function by which we make sense of the world: the sensorimotor structures and capacities of our human body and its extraordinary ability to self-regulate.

Over billions of years our bodies have evolved in delicate symbiosis within the interacting systems of our natural environment. The body is an ecological product of nature; we are the body; we therefore are wholly biology, wholly nature. The nature of nature is to perpetually repair itself and return itself towards its most optimal natural and whole state of existence. Our faculty to think, to feel, to know and be aware are all faculties of the body, for it is the body that causes the activity of feeling and thought. The body then, does what a body does, if not obstructed by outside-in intervention. It then perpetually activates the return to wholeness. In order to be healthy in bodymind, we have to learn to feel again and that is the focus of the Undo app.

Thus, we live in the world and we experience the world through our bodies. Our relations with ourselves, with others as well as within the wider world of social relations all have

their origins in bodily experiences. This is an important point that is supported by Merleau-Ponty [16]. As he states, our bodily sensations actualise all physical and mental processes; the mind or the intellect can only theorise and visualise [16] (p. 167), "I understand the other person through my body, just as I perceive 'things' through my body" [16] (p. 192). He notes that his body transforms "his mimicry [his thought] of sleep into actual sleep" [16] (p. 192). Merleau-Ponty declares that our bodies are at the core of all experiences and communication. The sensations originating from our bodies enable feelings, perceptions, concepts, propositions, communications and all other thought processes [16] (p. 190). The body knows what to do, it has all the intelligence needed to survive. As Merleau-Ponty asserts, "Our view of man will remain superficial so long as we do not return to this [bodily] origin, so long as we do not rediscover the primordial silence beneath the noise of words, and so long as we do not describe the gesture that breaks this silence" [16] (p. 190).

For Merleau-Ponty [16] (p. 190), thought or intellect is the gesture that 'breaks the silence' of bodily knowing and speech or language is 'the noise' that prevents us from rediscovering our bodily origins. When our experiences of self, others and of the world are distorted by such intellectualist interpretations, we tend not to look within ourselves, within our own inner experiences for answers, we tend to not look for the sensory origins of those thought-based feelings and processes [16] (p. 190). Further, when there is too much 'noise' or when other intellectualist interpretations occur, we disconnect from our bodies. Merleau-Ponty [16] (p. 390) is convinced that bodily self-knowledge is at the root of all our experiences and reflections about our existence. Self-knowledge, he claims, is attained not through an inference of an idea, "but through direct contact with that existence" [16] (p. 391), through the direct contact of our bodies. According to Merleau-Ponty [16] (p. 391), the mind does not exist, because "If it is the mind that places itself in the world, then that mind is not in the world and self-positing is an illusion". It follows that when as a body we are in the world - as opposed to an illusory, mental state of being in the world - we experience the reality of our existence, and as part of the world. When we are our bodies, we are guided by the activity of our sensations, and not by the activity of thought. By way of illustration, we know a tree because we have the sensation of vision. If we have the thought of seeing a tree, it is only the idea of seeing a tree. But we could not have this idea if we did not have the sensation of vision [16] (p. 394).

Laing [14] too is interested in the bodymind relation. In his book The Divided Self [14] (p.19) he points out that our current technical vocabulary - words such as body and mind, soma and psyche, physical and psychological - alludes to a state of disruption between body and self. As a psychiatrist he has observed that individuals may 'split or dissociate' when there are perceived threats to the person's sense of ontological security [14] (p. 42). Emotional states such as anxiety, fear and depression are all aspects of ontological insecurities [14] (p. 42). In the absence of such a basic sense of security,

individuals may come to experience themselves as "split into a mind and a body" and in this situation, the person will usually identify more closely with the thought processes of the mind [14] (p. 65). Being so focussed on thought processes, the individual then struggles to form relations to him or herself, to others and to the world, a state Laing [14] (p. 19) describes as "man in isolation from the other and the world", where the individual no longer experiences "his own being as real, alive, and whole" [14] (p.19) in the body.

Therefore, to heal from stress and trauma it will be necessary to reconnect with our sensations in the body. It requires feeling into our body within a quiet meditation and feeling the sensations that arise naturally, of their own accord. Only then will it be possible to receive deeper insights about our body's innate ability to maintain a sense of reconnection within the otherwise bodymind divide. To create space for this kind of understanding, it will also be necessary to question and negate all beliefs and points of view that we may have acquired, for thought and belief systems are powerful forms of self-obstruction. Thought is a dilemma that prevents bodily self-understanding, a point that is discussed in more detail in Section IV. To feel and sense exactly as we are re-activates the natural healing process within the body/self. Feeling and sensing is a process of re-connection, re-association, re-sensitisation, embodiment and self-discovery. The Undo-app operates on this basis.

Accordingly, to heal from stress and trauma is to reconnect; to re-associate bodymind; to experience the existence of this world; to relate to others and the world around; to discover an innate awareness of our inner sensory-based feelings; to return to our bodily origins and learn about what is going on inside, to then live as a body sensorily aware of itself. The focus of the Undo app is to educate the user about the process that led to dissociation and to then guide the person through the approach of re-association, bringing about fulfilment of life.

A. Meditation - The Undo Approach to Re-connection

No matter the cause of dissociation, in order to be healthy in bodymind, as Zoltan[16] states, we have to heal disconnected states of thinking and learn to feel again. We therefore will need to learn to sink beneath the superficiality of disconnected thinking into the deeper felt sense of our physical body, and learn to live from that sense. When the body is left to manage on its own, the body knows what to do, without outside intervention. The body has all the intelligence needed to survive and thrive.

The function and purpose of the Undo app is to guide the user through the process of re-association and self-discovery. Re-association is a multi-layered approach towards bodily reconnection and self-knowledge. Only when re-connected can we experience ourselves as we truly are and be in the world. In the Undo approach, to meditate is to feel into our bodies, to then realise our natural state of always feeling from

---

[16]Zoltan, M., 2022, What causes Dissociation? An Interview with Mathew Zoltan, accessed November 2022 https://www.bitchute.com/video/1hOg7SEX3fsn/

7

within ourselves as a body. We allow sensations of pain and distress to arise exactly as they are, without resisting them, analysing them or thinking about them. When we stay with those sensations without resisting them, they re-integrate and the tension/distress will dissipate. Only then will it be possible to receive deeper insights about our body's innate ability to self-regulate and to maintain a sense of basic unity.

Figure 3 outlines the layered process of re-connection and we use Tom to provide an example of an individual experiencing the layered process of bodymind reconnection:

- The first step is to **Find the feeling/sensation of mild tension, distress or pain in the body** - Tom is stressed and anxious. He is under pressure to work more, to pay bills and to find more family time. Tom feels tension in his body. He has mild back pain. Tom finds a quiet spot to sit still physically and settles into his meditation. He allows his feelings and sensations to arise as they will arise naturally.
- **Keep feeling it at its source, in the body** - Following the guided app meditation, Tom is not resisting or reacting to the feelings in his body, he simply feels into his sensations. At this point, he may come to understand, the source of the tension and distress he feels is within himself, "here it is within me".
- **Don't try to change it or achieve anything** - Tom continues to meditate. He sits quietly and simply allows his feelings and sensations to be there. As he goes deeper into his meditation, he feels more deeply into his feelings and sensations.
  After a while, more intense sensations arise in different parts of Tom's body: his left knee aches, his thigh muscles are tight and he feels a throbbing in his lower back. Not wanting to do anything about the discomfort, not wanting it to be different, he opens himself up to whatever there is to feel. Tom now feels his stress at its source, in his body. By not resisting his pain, he is now in full contact with the physical sense of himself.
- **Get on with your life and hold the feeling within you** - When he is ready, Tom ends the meditation and gets on with his life. He continues to hold the feelings of tension, distress and pain at its source, within his body, remaining connected to the physical sense of himself. Remaining connected is 'meditation in action'.
- **Don't act out the feeling - just feel it** - Tom is now giving his condition the correct attention. He understands that he can be irate and lack concentration, due to stress, but he is no longer acting out his irritability. He simply feels into the sensations of his body. By feeling fully from within the tension and distress of his condition, he is able to connect to the physical sense of himself, removing his need to outwardly express this. This is the process of bodymind integration.
- **Don't react, judge, deny or avoid it - just allow it to be there** - Tom returns to the Undo active meditations and the 'undo the effects of the last few hours' meditation

in Chapter 0 *Welcome to Undo* throughout the day to help him remain connected within himself. So long as Tom feels into his body, he no longer feels the need to react, judge, deny or avoid his distress. He no longer feels the urge to blame others or outside circumstances for his condition, he simply allows his feelings to be there.
- **Understanding that pain or distress in the body are effects from life. Remain calm and accept the process of these** - After experiencing for himself the impact of the meditations and working through the Undo chapters, including the active meditations, Tom comes to understand that major and minor life events, belief systems, expectations and so forth, are affecting his body, causing sensations of tension, distress and pain. He remains calm and accepts the process of feeling into his condition.
- **As memories recover, or clarity returns, you can identify the problem or cause** - As Tom feels into his body, his clarity improves and at times, he remembers previously forgotten stressful experiences. These memories help him to understand his own condition and the underlying causes of the difficulties he faces in day to day life.
- **Bodymind integration occurs and dissociation dissolves** - The deeper Tom feels into his condition, throughout the day, the more he integrates his bodymind. Tom is now able to attain and maintain a connected life.
- **Now healing and change can and will continue to occur** - Tom now lives from his senses and is guided in his decisions and actions by the way he feels in his body. Because he is feeling all of the sensations in his body, he is activating the natural healing process on an ongoing basis. As a result, healing and change can and will occur. Tom finally experiences his own being as connected and whole.

Below, we discuss the structure and user flow of a chapter, illuminating the path a user might take when navigating through a chapter.

B. Education and Training - The Structure and User Flow of Each Chapter

The Undo app has fourteen core chapters. Each chapter provides education and training for users, active meditations and deep meditations. Section III-B explains the structure and user flow of each chapter that is delineated in Figure 4, Representation of the structure and flow of an Undo chapter. In Figure 5, Visual image of the structure and flow of an Undo chapter, a screenshot from the app shows visually the flow of an Undo chapter.

All chapters – with the exception of Chapter 0 *Welcome to Undo* and Chapter 1 *Reconnect* - are based on the same structure and flow, allowing users to easily explore and navigate the app content. The content can be read or listened to. Or users may like to listen to the audio and read the text at the same time - it is entirely optional.

To the left of Figure 4 is a vertical bar called Chapter X, indicating that each chapter has the same structure and
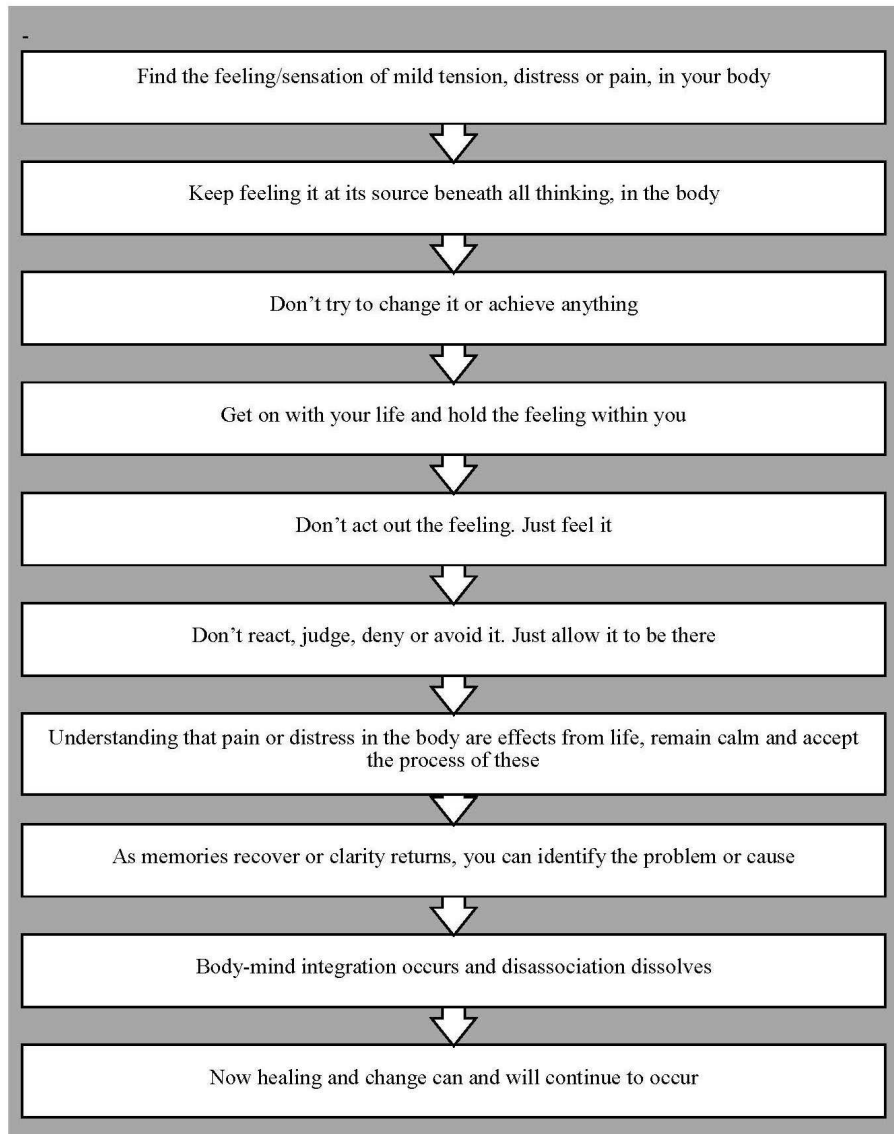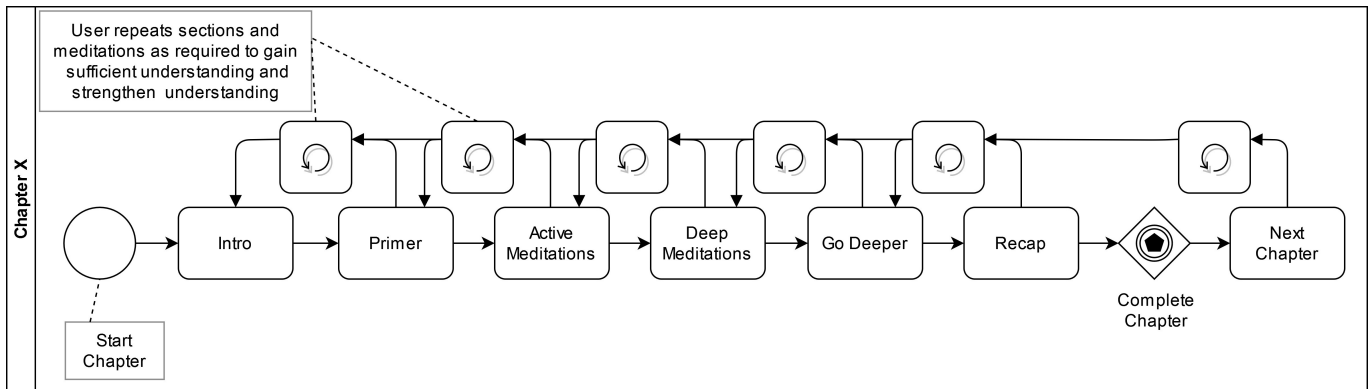
Fig. 3. The layered process of reconnection.

Fig. 4. Representation of the structure and user flow of an Undo chapter.

app user flow process. The small rectangles, squares and circles inside the large rectangle refer to the app content. The empty circle inside the large rectangle, to the left of the seven rounded rectangles, denotes the beginning of a chapter. The rounded rectangles to the right of the empty circle then represent the concrete steps a user takes when progressing through a chapter. The six squares with the feedback-circle arrows located above the seven rectangles indicate that a user can revisit a module previously completed. The diamond icon to the right of the figure, located between rectangles six and seven, denotes the completion of a chapter. Finally, the two rectangles, one located in the top left corner, and one below the empty circle, contain explanatory text about the icons they link in with.

The six rounded rectangles located horizontally across the middle of the figure designate the content of the chapters. All chapters - with the exception of Chapter 0 *Welcome to Undo* and Chapter 1 *Reconnect* - have six parts. They begin with a brief **Introduction** about the content. Then users may answer questions to assist them to monitor their progress as they work their way through the app. This is followed by the **Primer**, a preliminary discussion about a topic relevant to that chapter.

The primer is followed by **Active Meditations** that users may like to implement throughout their day. All active meditations have a practical element to them and are based on physically feeling from within a sensation. The active meditations allow users to further explore and reinforce their understandings of the chapter topic. There is also a reference to the *Body Tension Translator* where users may find further information about the link between the distress they may be experiencing and the specific body part that holds the stress. The *Body Tension Translator* has additional 'body-connect' meditations that guide users through the self-healing process of each body part and its related mental or physical ailment.

The active meditations are followed by a **Deep Meditation**. Users are encouraged to find a quiet space to sit. They are then guided through the process of feeling into the sensations in their bodies as they arise, naturally. Users may sit for five, twenty or forty minutes. However, they are not limited to these time frames, users are encouraged to continue to meditate for as long as they feel they need to.

Go Deeper provides a more in-depth discussion of the chapter topic. The narrator recapitulates the substance of the content and helps clarify any problems, struggles or obstacles a user may experience.

The **Recap** encourages users to reflect on any discoveries or understandings they may have made and changes they may have experienced. Users may keep track of their progress by answering a set of questions related to the questions included in the introduction. The recap is important because discoveries and change may be subtle at first, and therefore missed. Here, the user is also supported to keep meditating, as needed, and to be receptive of daily triggers and stimulations in life that help make change happen. In addition, users may turn on app notifications to receive up to five aphorisms a day. The aphorisms inspire thinking beyond limitations learned and internalised throughout life.

Users are furthermore encouraged to take their time with each chapter, to not rush through the entire app content. They therefore may like to review sections and repeat the various meditations throughout their day. Repeating these meditations as often as needed enables absorption for deeper understandings of the content, in turn enabling deeper transformation.

Finally, the user is ready to move to the **Next Chapter**. Each chapter builds on the previously completed chapter. However, once users have completed chapters, they may tune into any chapter in any order to practice an active or body-connect meditation (in the *Body Tension Translator*) or a deep meditation or they may like to review the content.

In Figure 5 can be seen the chapter title, Maturing Your Meditation, beneath which are tabs enabling access to the Introduction, Primer, Meditations (containing both active and deep meditations) Go Deeper and Recap sections. The remaining aspects of the chapter content that are shown in Figure 5 are discussed in Section VI-D.

Essentially, the Undo approach is designed to assist the user in the process of re-association. The approach focussing on bodily origins, is also an educational and training course that helps users navigate every aspect of their lives. In the following section we list the content of the fourteen chapter topics that are all based on Zoltan's understandings about life and its impact on the human body and demeanour.

C. The Undo Chapters - Content

We provide a brief overview of the Undo app content. It is important to note, content is updated frequently. New content will usually elaborate on previous topics, with key points linked to an active meditation, bringing these points more to life for the user, as a lived experience that raises their knowledge to new levels of understandings.
The chapter topics are as follows:

Welcome to Undo - is an introductory chapter that outlines - briefly - Undo's bodily or sensory approach to meditation and life, and the key points of difference of this approach. The introduction also explains how to make the most of the information in the app.

Reconnect - This chapter prepares the user for the journey ahead by introducing basic themes and concepts. To go from disconnection to re-connection is to re-sensitise the body and discover how our bodies actualise our realities.

Reactions - Reactions are the result of beliefs, biases and unresolved painful experiences. Beliefs and biases are thought-based behaviours impacting on a person's ability to respond sensitively and intelligently to day to day life experiences. Understanding the mechanics of reaction is crucial to navigating and resolving all disturbances in life.

Feeling - There is a significant distinction to be made between a feeling and an emotion. These two are not the same. In order to sense and know what and who we are, it is essential to know how to differentiate between a feeling and an emotion. Are we guided by the feelings and sensations in our bodies, or do we think our feelings?
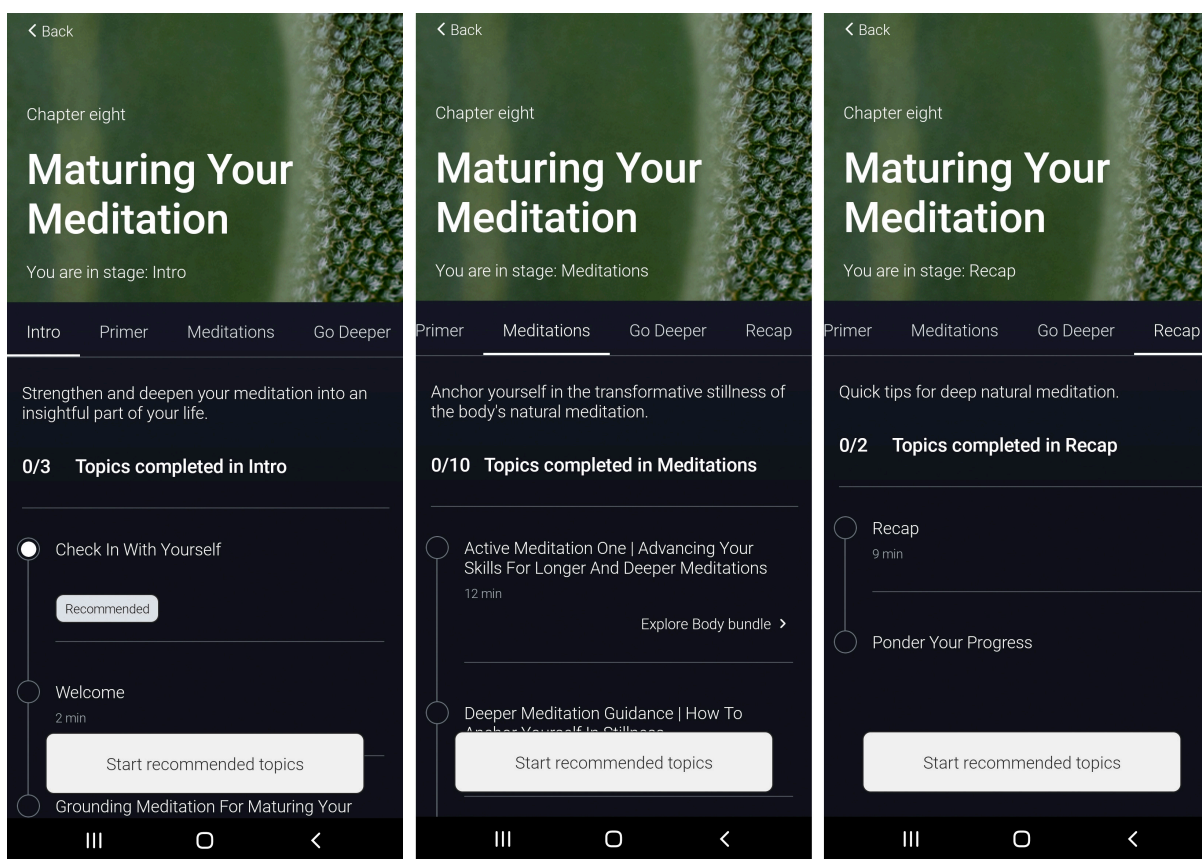
Fig. 5. Visual image of the structure and flow of an Undo chapter.

Senses - To sense is a lived experience. What and how we feel determines greatly our sense of our physical selves, our sense of ontological security in life, and our degree of feeling alive, real and well. No matter how hard we try, our clever thinking cannot provide the fulfillment and connectivity that is readily and only available to us through our senses.

Natural Intelligence - Natural intelligence is a whole body, sense-based intelligence that precedes and surpasses all thinking. To awaken to our own innate, natural inner intelligence, it is necessary to question and negate all imposed and adopted ideas we might have, to question and negate all ideas we might think are innately our own. Natural intelligence is to experience life as unique and distinctive as it really is known to each of us via our senses, all collaborating with one another, and throughout our whole body.

Beliefs - Belief is pretending to ourselves to know something without evidence or proof. Belief is false knowledge that creates the illusion of knowing. If we know, we do not require belief – we know. When we admit to not knowing, we open ourselves to the discovery of the new, of the yet unknown. We open ourselves to an unlimited source and potential of natural genius.

Judgement - Judgement causes self-dislike. Judgement prevents us from experiencing ourselves as we really are, untainted by that judgement. If we don't experience ourselves as we really are, how can we know what we truly feel? How can we know whether we like or dislike what we are? We cannot. We therefore can only experience the condition in which we find ourselves to know ourselves as we are.

Maturing Your Meditation - Natural meditation is an absolute necessity, and not a luxury. Natural meditation allows us to feel deep from within the feelings and sensations in the body. The quality of how we feel and think determines the quality and potential of every aspect of our lives. Once we know how to take care of this fundamental part of us, we will recover effortlessly from all effects life may have had and may have on us. We will be ready to face anything, afresh, each day.

BodyMind - are one. To divide our focus and awareness of ourselves into separate parts, such as a body and a mind, to then make ourselves oblivious to the existence of any one of these parts of us is our only real problem. This is what is known as 'dissociation'. It is the root and cause of all problems. Dissociation leads us to believe in that that does not exist.

The Significance of Pain - Pain and its expression thereof is not here to harm, but to protect and heal. All pain, physical and psychological, originates as a physical sensation in the body, presenting an opportunity for us to gain an understanding of ourselves. When felt only as a sensation, before a thought

reaction occurs, pain is usually tolerable and even brings relief when experienced in this pure, unadulterated state.

The Significance of Illness - Illness is essentially a process of healing that purges the body of the harmful influences of dissociative thinking, that allows for recovery of our healthy, corrected and whole state of being. To reject illness, to view illness as something to overcome, to fear or avoid is a misunderstanding that may cause harm. Illness is not a defect to be rid of, it is a natural and essential innate corrective inner process. Discomfort and disease is a force of nature to keep us true to ourselves.

The Mind Myth - This chapter exposes one indoctrination that for generations has slipped under the radar of intelligent enquiry, the idea that we have a mind. All activity we credit to mind or spirit is purely live physical mechanics. Only when we fail to understand the greater, complex functions of the body, we may think there is this mind. This is the most inhibiting of all beliefs.

Stop Harming Yourself - If we can't stop harming ourselves we have no chance of stopping others from harming us. This chapter offers an approach to recognising, understanding and ending self-harm, empowering us towards self-reliance, sustainable health and the maturity required to address and end violence for us all and end violence inflicted on the Earth itself.

IV. THE ACCEPTABLE, ALTERNATIVE VIEW OF AN INDIVIDUAL'S CONDITION

We begin by questioning, what the individual might perceive as his or her flawed condition. We then present an approach towards re-association.

Section IV-A establishes that the phenomena of dissociation, disembodiment or desensitisation, in all its various behavioural/psychological states has been well documented, and affects millions of people, worldwide. Dissociation manifests itself in physical/mental distress. We discuss briefly the predominantly Western - though mostly universal - dualistic body/mind approach to treating pain and the confusion this may cause. To show that physical/emotional distress is likely also the result of social factors, we discuss the way dissociation occurs not only in response to encounters with overwhelming and traumatic experiences - whether these are the result of childhood trauma, war experiences or a traffic accident - but also in response to our unnatural, human created conditions in which we live.

Section IV-B stresses that pain, anxiety, depression, and other physical/mental conditions affect vast numbers of people. We draw attention to the rise of the self-development industry and cite recent statistics about the global economic impact of mental health disorders.

Section IV-C outlines the Undo approach, an acceptable, alternative view of physical/mental distress. This is the view the Undo app introduces.

Section IV-D shows the conceptual process of Undo app user progress. A primary function of the app is to help the user approach and process the dilemmas discussed in Section IV-A and Section IV-B.

A. Causes and Conditions of Physical and Mental Distress

As Vrancken [23] points out, there are many schools of thought about pain. It is beyond the scope of this white paper to discuss these various schools of thought. For our purpose, we hold that pain, whether its origins are physical or emotional, means sensation, and that emotional behaviour and suffering in reaction to pain is more or less a common experience of everyone's life. The issue under discussion is Western medicine's understanding of pain, which has been and still is predominantly dualistic. Doctors treat physical pain (the body) and psychologists mental (the mind). "In this pragmatic approach", Vrancken writes, "pain is seen as something inside the body that has to be eradicated, as an agent of suffering," but this outlook, he continues, "reflects neglect of the person, the only one through whom pain can speak [within] the 'lived in body'" [23] (p. 440). Vrancken declares that that dualistic approach has sought to bridge the gap between the biological/physical body (soma) and the mind (psyche). Soma and psyche are interconnected, yet in the mainstream approach to and treatment of pain, these are presented as two separate entities. The physician treats the physical pain and when the pain persists, the psychologist is consulted, yet the integration of the two different approaches has proven to be difficult. "The physician 'is not a psychologist' while the psychologist leaves the 'somatic aspects' to the physician" [23] (p. 440). Vrancken affirms that the patient is torn between the two views, somatic and psychological, while "his confusion grows" [23] (p. 440).

In their paper Transcending the Dualisms, Bendelow and Williams [2] also contend that Western belief presents a somewhat slanted, limited view of pain. Pain is considered predominantly a medical problem, yet "Pain is never the sole creation of our anatomy and physiology. It emerges only at the intersection of bodies, minds and culture" (Morris cited in Bendelow and Williams, [2] (p. 140). Like Vrancken [23], Bendelow and Williams [2] ascertain that pain is both physical and emotional. Pain is a sensation triggered by the activation of primary nerve fibres and at the same time it is mediated by emotional/cultural factors. From this view point, the bodymind divide has no validation. Bendelow and Williams [2] argue that within the medico-psychological field, the privileging of the sensation of physical pain over emotion is limiting and reductionist. Only when pain can be recognised as a lived and embodied experience will it "offer a way out of the strait jacket of traditional dualistic thinking and point the way towards a phenomenological approach to pain as a lived and embodied physical-, emotional- and existential experience" [2] (p. 147). Furthermore, similar to "any other experiential mode, pain cannot simply be reduced to these immediate sensory qualities, rather, it is ultimately a matter of being-in-the-world" [2] (p.148). Bendelow and Williams [2] draw particular attention to the cultural narratives of pain, whereby views and beliefs play a significant role in shaping pain behaviour. The physical sensation of pain is very real but culturally is mostly thought

of as something to be treated and eradicated. That there may be other underlying causes of or reasons for pain is not usually considered as a realistic possibility.

Culturally established views and beliefs play a significant part in shaping human behaviour, affecting our lives and impacting on our bodies. It therefore is particularly important to examine the phenomenon of pain within the context of everyday living conditions in our socially shaped world. We draw on Hannah Arendt [1], an influential political philosopher of the 1950s, to illuminate - briefly - that our world of human thought is formed and influenced by the activity of humans, and that the artifice of this human world separates human existence from the natural, biological world, often resulting in a disparity causing further disconnection and pain.

Arendt [1] has observed that humans are forever creating their own, self-made, artificial world that has nothing whatsoever to do with the conditions of the Earth. In her book The Human Condition [1] Arendt makes a distinction between the human condition and human nature. The human condition is concerned primarily with the study of human action. It "is the sum total of human activities and capabilities" [1] (p. 9). These include the ideological interpretations, social and political complexities and other structures of the world at large, and today's ubiquitous presence of the online world.

Human nature in contrast "is the motor of biological life which man shares with other living things and which forever retains the cyclical movement of nature" [1] (p. 114). Arendt [1] underscores the obvious, yet largely ignored fact that the natural conditions of the earth are quintessential to all biological life, including that of humans. Human nature is the living, sensory nature of our bodies, yet our knowledge about human nature has shifted focus to more theocentric, ideological and other points of views. Accordingly, the question about the inexplicable nature of man is frequently understood within the framework of theology and that "explains why attempts to define human nature almost invariably end with some construction of a deity" [1] (p. 11).

Humans thus have created a disparity between the artifice of their human created world and the biological nature of their world. "The human artifice of the world separates human existence from all mere animal environment, but life itself is outside this artificial world, and through life man remains related to all other living organisms" [1] (p. 2). Arendt proclaims that inside this artificial world of human action human self-made conditions assert immense conditioning power over individuals, "People are conditioned beings because everything they come in contact with turns immediately into a condition of their existence" [1] (p. 9).

In this human created world, everything is decided on and taken care of by what Arendt defines as a "gigantic, nationwide administration of housekeeping" [1] (p. 28). Everything is "economically organised into the facsimile of one superhuman family [and] is what we call 'society'" [1] (p. 28). Notably, in this age of mass society, where masses are defined by their large size, the anonymous workforce and the lack of social interaction, the individual's natural existence and autonomy is threatened by bureaucratic administration, totalitarian forms of domination, the manipulation of public opinion, and by the institutionalisation of terror and violence. Further and inevitably, that dichotomy between human action and the earthly nature of human existence has led to a split between what people do and what the human body wants and needs, those necessities of life that humans and animals have in common. This is an age, Arendt proclaims, "where isolation and loneliness have eroded all spontaneous forms of life, where loneliness has assumed its most extreme and antihuman form" [1] (p. 59).

Arendt propounds that we will always live under the conditions of the Earth and that these earthly conditions - life itself – "never conditions us absolutely" [1] (p. 29). It is only our own self-made, artificial conditions – such as belief systems and human-made environments – that may condition us absolutely.

The artifice of the human condition has nothing to do with human nature and cannot be used for the understanding of human nature. The only possible way to understand human nature is to return to the natural state of ourselves and to feel that within the body. Without the conditioning influence of thought, our human nature is receptive and responsive to the ever changing conditions of the Earth. Thus human nature is a direct and physical experience based in the sensory capabilities of the body.

Arendt's [1] perspective is a valid mainstream view of the 'industrialised mass society' and remains relevant today. Almost eighty years after Arendt's publication, our modern society still consists of individuals, groups, organisations and governments. Further, today many are moving towards a new paradigm of an information based network society and mass media has become a continuation of the problems Arendt introduced. As Deuze ascertains, we live in "an age of big data, algorithmic culture, artificial intelligence, global platform governance, streaming media, and mass self-communication" (in McQuail and Deuze [5] (p. ix)).

According to Deuze, there are two fundamental assumptions underlying the world of mass media: One, the media has become a pervasive and ubiquitous part of people's everyday lived experience on a global scale. Two, mass media is another coercive force in today's culture. Most issues and challenges individuals face today, to a significant degree, are interpreted through media experiences (Deuze in McQuail and Deuze [5] (p. ix)). Mass media control thus has become the new human condition. The global proliferation of electronic mass media culture captures people's attention every waking moment every day. News updates, Facebook posts, twitter, app alerts, digital marketing, zooming, gaming, streaming, and virtual reality impact on our lives everywhere, wherever in the world we are. Mass media saturation has resulted in digital media overuse and addiction issues [5]. McQuail [5] (p. 447) points out, although the Internet offers a wealth of valuable resources that benefits users, "excessive media use has often been viewed as harmful and unhealthy, leading to addiction, dissociation from reality, reduced social contacts, diversion from education and

displacement of more worthwhile activities" [5] (p. 447).

Table I, Meta-level frameworks, summarises society's meta-level frameworks as discussed above, the trauma types these might produce and the effects these traumas have on the individual.

Table I consists of six columns. Column one, to the left, lists the two core meta-level institutions that constitute a society: a mass society that has politically set paradigms and the religious structured society that is made up of a diversity of belief systems as well as a set paradigms.

Columns two, three, four and five outline the four conditioning trauma types - social/administrative, technological, physical and psychological - trauma may be caused by one or by all of the four conditioning types.

Column two illuminates the conditioning forces of the social/administrative trauma type. Institutional domination, for example, may cause predicaments and divide in individuals due to coercive collectivism, political unrest, ideological disunity and so forth. The second administrative trauma type is caused by religious influence. The moral authority of a religion may sway a person's perceptions, suppress his or her thoughts and feelings and confine the individual to rigidly structured ways of life.

Column three lists the technological influences that may lead to trauma. The ubiquitous nature of mass media, advertising, twitter, Facebook, videos, gaming and so forth has caused significant concern about the misuse of social media platforms, gaming apps and addiction issues.

Column four highlights the physical trauma types that may occur as a result of institutional violence. War or refugee experiences have the potential to cause chronic pain and mental distress. Other physical trauma types may result because of natural catastrophes, also causing chronic pain and mental distress.

Column five indicates the psychological trauma types that may occur as a consequence of a war or a refugee experience; or psychological trauma may be the result of a dysfunctional family life, of childhood neglect, of psychological and/or physical abuse and similar.

Column six illustrates the effects all these trauma types have on the individual. The effects are twofold, physical and psychological.

The physical impact of trauma manifests itself as physical tension in the body that often finds its expression in pain. If unresolved and if the level of tension or pain in the body is ongoing and severe, it is likely that a person will experience chronic pain and illness.

The primary psychological effect is dissociation that may range from mild to severe. Dissociation manifests itself in a plethora of symptoms. These include anxiety, depression, anger, an inability to know the self, a sense of ontological insecurity, feelings of failure, of lack and a general frustration with life. These symptoms express harmfully into the affected person's life as well as the lives of those around them.

Zoltan asserts that dissociation can be arrested only when we reconnect with ourselves as a singular sensory body and reconnect as part of nature (a body) with the natural world[17].

B. The Public Health and Economic Burden of Mental Health Problems

Without question, everyone grows up and lives in difficult conditions. These are external factors that influence people about the way they think and feel, about themselves and about the world at large. Owing to the unnaturalness of such factors, these are causing immense distress and pain in millions of individuals.

In 2016 WHO focussed its attention on the massive public health and economic burden of mental health problems [3]. Their investigation established that people in all societies worldwide are affected by depression and anxiety disorders. WHO summarises the scale of the problem as follows: "Across the 36 largest countries in the world, in the absence of scaled-up treatment, it is projected that more than 12 billion days of lost productivity (equivalent to more than 50 million years of work) are attributable to depression and anxiety disorders every year, at an estimated cost of US$925 billion. Assuming the same distribution of costs across lower-income and higher-income countries holds for all other countries (representing 20% of the world's population), the global cost per year is US$1·15 trillion" [3].

In their June 2022 World Mental Health Report, WHO cites 2010 data from a World Economic Forum report, in which it was calculated that the cost to the world economy of a broadly defined set of mental health conditions was approximately USD$2.5 trillion, combining lost economic productivity (USD$ 1.7 trillion) and direct costs of care (USD$0.8 trillion). This total cost was projected to rise to USD$6 trillion by 2030 alongside increased social costs[18].

Further, the figures above do not take into account the influence of the COVID-19 pandemic on mental health. In a 2020 report published in QJM: An International Journal of Medicine, Cullen et al [4] predict a substantial rise of new cases of anxiety and depression worldwide as the result of the pandemic, with some individuals expected to experience post-traumatic stress disorder. WHO supports this prediction, stating that, "Among its many impacts, the COVID-19 pandemic has created a global crisis for mental health, fuelling short- and long-term stresses and undermining the mental health of millions. For example, estimates put the rise in both anxiety and depressive disorders at more than 25% during the first year of the pandemic. At the same time, mental health services have been severely disrupted and the treatment gap for mental health

---

[17]Zoltan, M., 2022, What causes Dissociation? An Interview with Mathew Zoltan, accessed November 2022 https://www.bitchute.com/video/1hOg7SEX3fsn/

[18]Bloom DE, Cafiero ET, Jané-Llopis E, Abrahams-Gessel S, Bloom LR, Fathima S, et al. The global economic burden of noncommunicable diseases. Geneva: World Economic Forum; 2011 (http://www3.weforum.org/docs/WEF_Harvard_HE_GlobalEconomicBurdenNonCommunicableDiseases_2011.pdf, accessed November 2022.

Meta level frameworks	Trauma types				Effects on the individual
	Social / Administrative	Technological	Physical	Psychological	
Political Society Orthodox Dogmatic Set paradigms	Issues include: Societal expectations and sanctions -demand and pressure on individuals to conform regardless of their ability to do so Ideological divide Coerced collectivism Manipulation of public opinion Institutionalization of terror and violence Political unrest	Issues include: Pervasive technology such as mobile phones, gaming apps and programs, social media Ubiquitous screens Advertising, information and mis-information	Issues include: Any physical injury suffered as a result of War experiences Domestic violence Assaults Bullying Other physical trauma types suffered as a result of Natural catastrophes Traffic accidents Sport games Falls And so forth	Issues include: Any form of mental distress suffered as a result of War experiences Refugee experiences Religious influence Societal influence Dysfunctional family life Childhood trauma Neglect Psychological abuse in the workplace and at home	Self-conditioning Physical distress: Manifests itself as tension and pain in the body often resulting in chronic illness Mental distress: Dissociation - mild to severe Feelings of failure and inadequacies Stress, anxiety. depression Isolation and loneliness An inability to know oneself, to find true expression, or to relate to others Desire for 'self improvement'
Theological Society Religious world views Orthodox Dogmatic Set paradigms	Differing world views Factionalism and fragmentation between different religious groups Expectations to conform				

TABLE I
META-LEVEL FRAMEWORKS, TRAUMA TYPES AND THEIR EFFECTS ON THE INDIVIDUAL.

conditions has widened"[19]. The climbing numbers of mental health issues indicates discrepancies between our current ways of life and those factors that contribute to a healthy sense of well-being.

The considerable increase in mental health issues has resulted in a growing demand for wellness and personal development programmes[20] that have given rise to the self-improvement industry. The psychologist Niels Eék defines 'self-improvement' as follows: "Self-improvement is about consciously identifying and developing one or more facets of your life. From the perspective of an entrepreneur, self-improvement will often entail some sort of mental training but can mean anything from practising stress management to valuable goal-setting. Professionals are often keen to learn things like time-management techniques (for better prioritising tasks) and increasing productivity without compromising mental wellbeing" (Eék, cited in Uță[21]).

Such interpretations and what we know about the needs and wants of our living natural bodies are incompatible, thus, inconceivable to almalgamate. Yet, according to Grand View Research Inc.[22] the global personal development market is anticipated to reach USD$67.02 billion by 2030. Thus, between 2022 and 2030 the market is expected to expand at a compound annual growth rate of 5.5%, indicating that people, for whatever reasons, regard themselves to be inadequate or not 'good enough'. The growing self-development market indicates that people perceive there is a need to 'improve' or 'change' themselves.

Over the past twenty years, the Western world has also seen an unprecedented demand for meditation application programmes. LaRosa [12], President of Marketdata LLC, ascertains that scientific studies are beginning to show that meditation yields improvements, particularly for stress-related conditions and doctors are now promoting meditation. According to information on Statista[23], "Revenue in the Meditation Apps segment is projected to reach US$3.71 billion in 2022, and show a compound annual growth rate of 13.71%, resulting in a projected market volume of US$7.06 billion by 2027."

LaRosa [12] cautions that there are too "many so-called 'experts' now peddling a variety of online [therapies], 'masterminds', 'academies', 'universities' and coaching services". The vast choice of online self-development programmes makes it difficult for consumers to identify legitimate, competent

[19]World mental health report: transforming mental health for all. Geneva: World Health Organization; 2022, p xiv. Licence: CC BY-NC-SA 3.0 IGO. https://www.who.int/publications/i/item/9789240049338, accessed November 2022

[20]Also referred to as self-improvement.

[21]Uță, Iulia-Cristina, 2020, The self-improvement market is estimated to grow to $13.2 billion by 2022, Brand Minds. Accessed November 2022, https://brandminds.live/the-self-improvement-industry-is-estimated-to-grow-to-13-2-billion-by-2022/

[22]Grandview (no author), 2022, Personal Development Market Size, Share and Trends Analysis Report By Instrument (Books, e-Platforms, Personal Coaching/Training), By Focus Area, By Region, And Segment Forecasts, 2022 - 2030, accessed September 2022, https://www.grandviewresearch.com/industry-analysis/personal-development-market

[23]Statista 2022, Meditation Apps - Worldwide, accessed September 2022, https://www.statista.com/outlook/dmo/digital-health/digital-fitness-well-being/digital-fitness-well-being-apps/meditation-apps/worldwide

experts to help with their distress. Importantly, the majority of consumers will be unaware that the way to 'take back control of their lives' is to re-sensitise their bodies "so that they can live with the natural flow of feeling and feel secure and complete in their bodies," as Van Der Kolk ascertains [20] (p. 92). The Undo App shows users how to live as that living, natural, sensory body.

C. The Acceptable, Alternative Undo App Approach

In this section, we present an acceptable, alternative approach to mental/physical health, based on the Undo app content. Essentially, there is another aspect to dissociation. This is the one Zoltan[24] concentrates on, the possibility that dissociation and its associated behaviours may be a response to overwhelming experiences. As Van Der Kolk states, "Dissociation is the essence of trauma" [20] (p.66). For example, Van de Kolk [20] names aggression, depression, severe anxiety, obsessions, and compulsions as behaviours resulting from intense distress. These all are behaviours indicative of dissociation.

Porges [18] asserts that mental illness may be a consequence of not respecting the body's own biological responses. He explicates that feelings are greatly influenced by social interactions and that the bidirectional neural feedback between body and brain is diminished when a person fails to filter visceral feelings over time [18] (p. 219). People suffering from anxiety, depression, aggression and so forth tend to desensitise; they lose their ability to feel from within the sensations arising from their body, those bodily capacities of self-regulation. The inability to feel from within bodily sensations is most likely one of the main reasons people find themselves in that disembodied, dissociated state of anxiety, depression, aggression, and other distressful conditions.

Yet, it is possible for an individual to break free of the above discussed limiting and confusing influences and release all physical/mental dysfunction, to re-integrate body and mind. Breaking free is achieved not through outside intervention but inwardly, by feeling deeply, from within the sensory capacities of the body. This is known as interoception, "the awareness of our subtle, sensory, body based feelings" [20] (p. 87). This is a powerful lived experience of bodymind re-connection and re-integration that is at the core of the Undo approach. This approach has to be discovered beneath the level of thought and behaviour, from within our own felt sense of being. This act of feeling and sensing is central to our natural, biological experience of living life.

Figure 6 presents the Undo app user experience flowchart. The flowchart shows the steps taken in the bodymind re-connection process that triggers the body's own self-healing process. In Figure 6, we revisit Tom from earlier sections.

The User experience flowchart sets out the Undo successive, progressive process of re-connection. It starts in the top left circle with the arrows pointing to the right. Tom begins with the understanding that, when in conformity with the social

[24]Zoltan, M., 2022, What causes Dissociation? An Interview with Mathew Zoltan, accessed November 2022 https://www.bitchute.com/video/1hOg7SEX3fsn/

conditions in which he lives and based on any overwhelming life experiences, up to this point, he is in exactly the condition he should expect to be – isolated, anxious, distressed, in physical/mental pain, desensitised and disconnected.

Tom accepts, these are not problems to be fixed or to be made to disappear. He is perfectly fine as he is and does not need to change or improve anything about himself. He has further understood that self-improvement or self-development is not something that can be achieved but is a belief or an idea about how someone could or should be. These are culturally constructed beliefs that cause further confusion and distress about the way Tom might feel about himself.

Tom now acknowledges there is nothing wrong with him. He is not inadequate, a failure, or lacking in any way. He does not need outside intervention because he knows that his physical pain and mental distress is his body's call for attention. His physical pain and mental distress are sensations and feelings in his body and are there to heal, not to harm. Tom will experience that once he accepts and embraces himself exactly as he is, in his current condition of physical pain, anxiety and distress, he will develop a healthy relationship with himself, in exactly the condition he is in. To accept and embrace that condition, Tom is guided to pay attention to his body and to feel deep from within the sensory capacities of his body. Feeling from within our own physical sensations as they arise is to respond correctly to the body's call for attention. Feeling stimulates the natural healing process within the body, thus awakening Tom's own innate and fulfilling sense of himself and that of the world around.

Finally, towards the end of the process, Tom will come to understand that by accepting and feeling from within the condition in which he finds himself, he will develop, understand and appreciate himself in great depth. That this will always be a process of sensing ourselves, from within and as the body. This is the process of self-discovery. Thus, that process cannot be triggered from outside, external factors. It cannot be brought about by other influences, whether these are mindfulness meditation apps, self-development programmes, meditation techniques or other forms of intervention. That process can be experienced only when originating from within our bodies.

In its dissociated state the body is shut off from the world by thinking about ourselves and identifying ourselves with that thought-based obsession or view. When sensations arise, when these are felt in meditation or felt in daily life, at that very moment, the body opens up to itself and to the world and the thought process is quieted, so long as we are feeling. Feeling both activates and is the process of bodymind integration that evolves into an ongoing and empowering process of self-healing and self-discovery.

D. The Conceptual Process of Reconnection

In this section we explain the approach the Undo app employs to inform the user about the points raised throughout this white paper. Our ontological sense of self is inextricably tied up with the body. The body itself is self-governed by
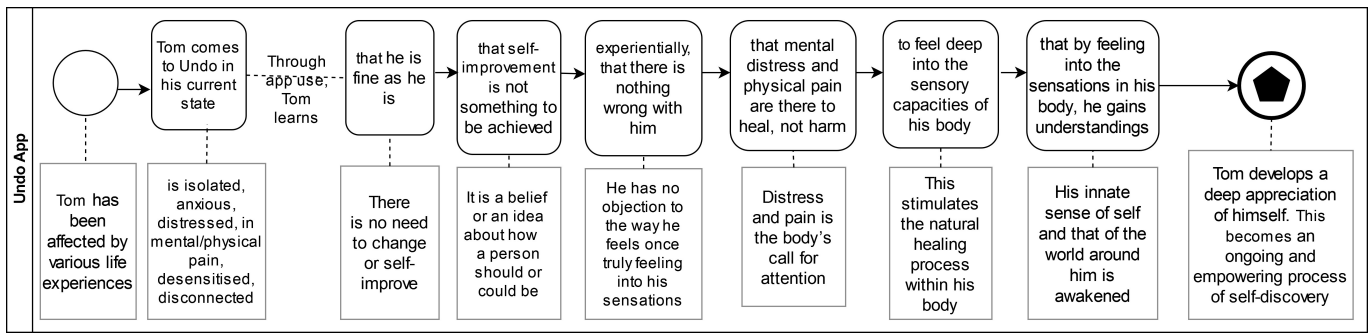
Fig. 6. User experience flowchart.

a complex communication system made up of a nervous system, an endocrine system, and other organs and energetic systems, all functioning beyond conscious control. Put differently, the mind is embodied. Mind and body are one. In normal circumstances, in the embodied state, as Laing writes, "that one feels one's body to be alive, real and substantial, one feels oneself alive, real and substantial" [13] (p. 66). In natural circumstances and in our natural state, life is lived through the biological, sensory receptivity of the body. In these circumstances, the body will heal an emotional injury in the same way it will heal a physical injury, naturally with no intervention at all, and beyond the understanding of conscious thought. This is because an emotional injury exists as tension or pain or stress in the tissues of the body in the same way as a physical injury, essentially demonstrating emotional or physical injury to be one and the same thing manifesting and expressing itself in two ways.

When a person finds him or herself in a state of disembodiment or dissociation, he or she will be stressed, anxious, angry, depressed, traumatised. Dissociation is one way of not being oneself. As a consequence, as van der Kolk asserts, "the stressed or traumatised person has trouble sensing what is going on in their bodies" [20] (p. 95). When a person no longer senses, the facts of life, as they present themselves to a traumatised person, become distorted by his or her memories. The 'realities of life' are experienced through the interpretations and perceptions of thought-based structures that the person invents for the purpose of protecting him or herself from what he or she finds too painful to face or feel. Immediately the body is prevented from healing those effects of life. These then accumulate in the body in the form of various degrees of tension, causing pain, illness and blocks in the body and from then on, blocks to related life experiences.

The function of the Undo app, thus, is to guide the user towards bodymind integration and connection. When a person experiences such association and embodiment, he or she will overcome his or her mental distress and heal his or her physical pain effortlessly and together as one bodymind. Users, who may have found it difficult to understand what exactly is going on within themselves and the world outside, will gain awareness about their own state. They will understand their

behaviours, as well as the social forces that have shaped their lives and the dissociating impact these have on their bodies and on the way they think. The app does not achieve this by offering a prescription or fixed techniques to follow, because the application of a technique is not something that corresponds to the biological sensory life of the human body. Fixed interventions would result in a modified ideal, another belief, that is another thought-based intervention responsible for disassociating from our biological intelligence.

The Undo app instead helps users to become aware of the sensory life of their bodies. That sensory life can only be experienced by reuniting within and as our own bodies. To reunite within our bodies is to reconnect with our own life, beneath conscious thought, beneath language, techniques and ideas. By feeling into the sensations within our bodies, we reactivate and support our biological intelligence and overcome pain, anxiety and depression, enabling the recovery of our innate sense of our real, authentic self, for and from ourselves.

Figure 7, Conceptual process of progress flowchart, represents the content of the first four of fourteen Undo chapters. The remaining ten chapters are listed in Section III. The flowchart shows the conceptual process towards re-connection the user experiences as he or she progresses through the chapters. A screenshot showing these chapter tiles as they appear in the app is presented in Figure 8, Visual image of the first four Undo app chapter tiles. Each chapter addresses one specific topic. That topic consists of many subtopics. Each topic leads from one level of understanding to the next, in successive order, reinforcing understandings as one insight builds on another.

The chart in Figure 7 begins with Chapter 0 *Welcome to Undo*. Tom, in his current condition of anxiety and depression starts the course by listening to the Primer - top left circle. At this point Tom does not know anything about the innate sensory approach to life. Chapter 0 introduces the basics of the Undo approach.

Tom learns that the source of his distress is in the body. He learns that the distress can be felt throughout his body as a primary and true sensory experience of himself. He learns further that he can allow himself to feel those sensations without
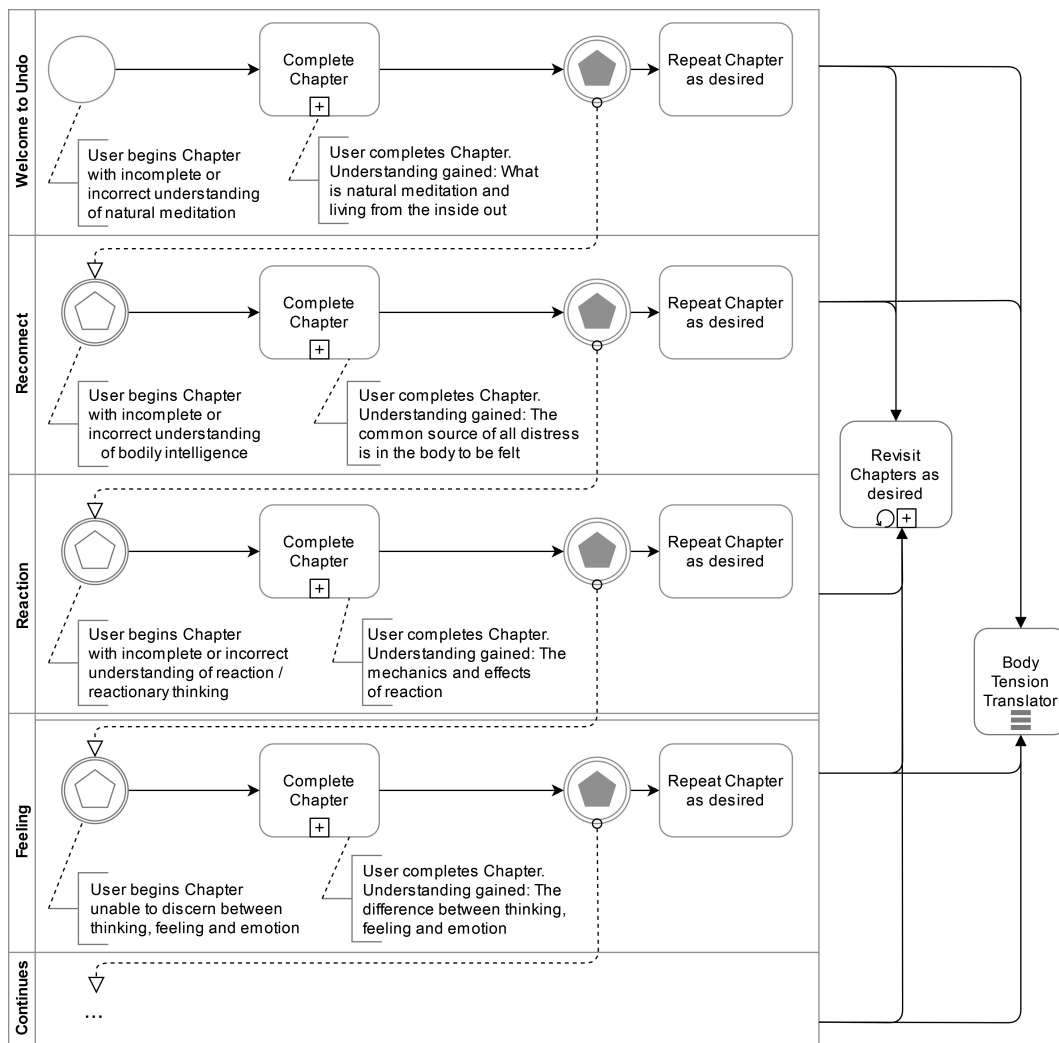
Fig. 7. The conceptual process of progress.

reacting to them or being overwhelmed by his condition, and without suffering. Tom is encouraged to start his first quiet meditation. He is guided into feeling from within his physical sensations. He completes the meditation as needed, in his own time.

All chapters have links to related body parts in the *Body Tension Translator*. Here Tom may look up which part of his body holds the most tension or pain. Then he may like to do one of the related body-connect meditation specific for that body part.

All chapters have guided deep meditations, and all chapters - with the exception of Chapter 0 *Welcome to Undo* and Chapter 1 *Reconnect* - also have guided active meditations. The deep meditations help Tom deepen his understanding about himself and apply what he has learned about that particular topic to everyday life. The active meditations encourage Tom to feel into his body as he goes about life. Tom is encouraged to listen to the chapter content and repeat any of the meditations as many times as desired.

When Tom is ready, he progresses to Chapter 1 *Reconnect*. Tom is encouraged to realise himself as one whole living organism, a self-governing sensitive body that feels, remembers, knows and thinks, and that he is part of the natural world. In this chapter, Tom learns to differentiate between thinking and sensing.

The topic of Chapter 2 is *Reactions*. Here, Tom learns to distinguish between 'a healthy and informative physical reaction' and harmful and confusing 'reactionary thinking'. When Tom has completed this chapter - again by listening to the meditations, by feeling from within the sensory experience of his body, and then by repeating the guided active, deep or body-connect meditations as often as desired - he will have an awareness of the mechanics and effects of reactionary thought on his body and in life.

The topic of Chapter 3 is *Feeling*. This chapter clarifies the confusions related to feeling, emotion and thinking. Tom learns that only feeling is a live physical function, that to feel is to sense, connect, and to be real, alive and substantial.
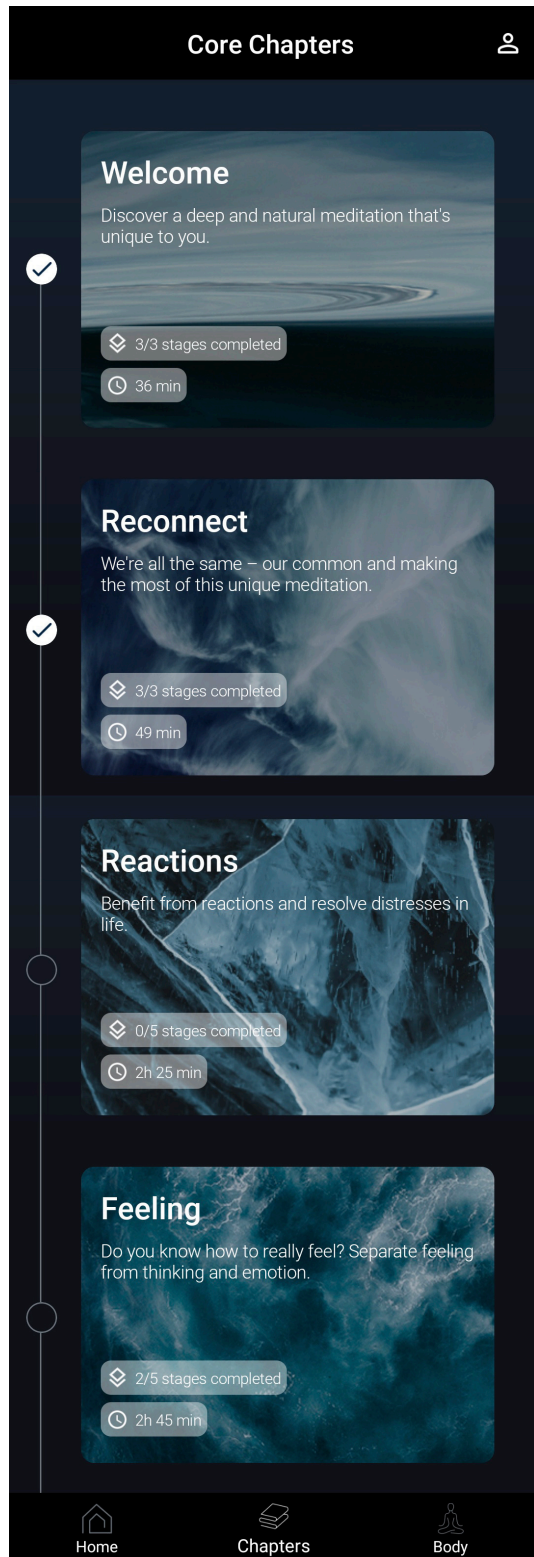
Fig. 8. Visual image of the first four Undo app chapter tiles.

Tom learns that thinking distorts and prolongs a sensation (a feeling), creating what we know as emotion. He learns that emotion is thought induced, and that emotion and thinking prolongs distress and suffering. Feeling, in contrast, is a purely physical response that ends the distress. With this confusion clarified, Tom's approach to life changes.

By moving slowly, yet progressively, from one chapter to the next, at first in successive order, then in any order, and by feeling from within the physical sensations of his body, as well as by applying the active and body-connect meditations to everyday life, Tom begins to re-sensitise. He gradually gains awareness of and about his condition and the forces that shape that condition. At the end of the course Tom understands that real life is lived outside the artifice of the human condition, outside the artifice of all belief systems and all thought structures. Life is not what we think we are, life is what we are, that is our living sensory bodies. This real, unadulterated life, is also related to all other living organisms. Therefore, the 'real self', the 'real person' is already there, within and known in and as the felt sense of our human bodies.

V. RE-SENSITISATION

We show the developments that occur and evolve through the use of the Undo app. Thus, this section discusses in more detail the Undo approach. Users of the Undo app learn to integrate or re-associate body and mind. The significance of re-association or integration can be seen once it is understood that integration/association stimulates significant healing and change.

Section V-A recaps important points discussed in Section IV and then focusses on the link between dissociation and the tension held in the body. Section V-B explains the re-sensitisation process that is at the core of the Undo approach. Section V-C shows the evolving path of change and re-association in the app user. Section V-D illustrates the meditation that stimulates re-sensitisation and subsequent change, integration/association and embodied self-awareness.

A. Stress and Tension in the Body

As was discussed in Section IV, our human conditioned world is comprised of thought structures, world views, belief systems, empirical formulae, technological domination and of ideals, dreams and fantasies. The effect of that world's unreal reality upon human existence is felt and received as a conditioning force [1]. Arendt [1] makes a clear distinction between the human condition and human nature. The human condition is the world as is imagined and created by humans, whereas human nature is the biological life that we are. As a consequence of living in a world of self-constructed conditions almost every one of us will experience at some stage in our lives what Giddens calls 'disembodiment' [9] (pp. 56-63). That is, we will experience mild to severe degrees of dissociation, partly due to a rupture from that biological life that we are.

Dissociation manifests itself in the body in the form of tension [20]. Stress, anxiety, depression and so forth arise from the tension held in our bodies. That tension causes many

19

sensations in our bodies that we can feel; they are part of life. When intolerable or painful tensions are held in the body unnecessarily, over time, they almost certainly lead to a plethora of physical and mental distresses, ailments and illnesses [18]; [20]. When the pain persists we may become numb to our sensations, and we no longer feel what is going on in our bodies [20] (p. 214). Numbing, as Van der Kolk [20] (p. 274) has observed, may make life more tolerable, but we lose awareness about what is going on inside of ourselves. When we lose awareness of our inner sense of self, we lose awareness of that life that we are.

The key to change, therefore, is twofold. One, is to re-sensitise to what is going on within our bodies, to get to know ourselves, to re-gain awareness within that life that we are. The outcome of that process is re-association. Two, in the context of our human conditioned world, we need to learn to recognise the triggers that cause de-sensitisation and dissociation. Then we need to learn to re-sensitise. To re-sensitise on an ongoing basis, we simply feel the origin of our reactions within our body. To think about outside triggers continues our reactions and nothing changes. In a re-sensitised, liberated state of being we know to operate healthily and responsibly in this life that we are.

B. The Undo Approach - Re-sensitisation

It therefore follows that re-sensitisation begins the healing process, a process known as sensory body awareness or interoception[25]. Increasingly, the science of neurobiology and psychology is recognising the link between sensory body awareness and physical/mental health (cf. [8]; [11]; [18]; [20]). Merleau-Ponty [16] has long recognised the importance of body awareness, "My body is the place or, rather, the very actuality of the phenomenon of expression. My body is the general instrument of my 'understanding'" [16] (p. 244). Gendlin [8], a philosopher-psychologist of the 1950s/1960s, also understood the body not only as a source of information that is felt from the inside, but also as an integral part of the wider world of which we all are a part: "When I use the word 'body', I mean more than the physical machine. Not only do you physically live the circumstances around you but (...) your physically felt body is in fact part of a gigantic system of here and other places, now and other times, you and other people – in fact, the whole universe. This sense of being bodily alive in a vast system is the body as it is felt from inside" [8].

Gendlin [8] demonstrated that the potential to achieve lasting physical/mental change was linked to a person's ability to feel the issues that had brought him or her to therapy from within a nonverbal 'bodily orienting sense', "only your body knows your problems and where their cruxes lie" [8] (p. 11). Gendlin taught a skill called 'Focusing'. Focusing "is

a process in which you make contact with a special kind of internal bodily awareness. I call this awareness a *felt sense* [italics as in the original]" [8] (p. 10)[26]. Gendlin's use of the word 'Focusing' is ambiguous. For him, 'Focusing' is not the thought-based act of concentration, it is the all-important inner bodily act of sensing. Focusing is what he calls the *felt sense* of our own body awareness [8] (p.10). Gendlin has shown that when we sense from within our bodies, there is a physical change in the body, a "felt shift", a person feels that shift and the problem seems different. When that shift is not felt in the body, the problem remains the same [8] (p. 11)[27].

Van der Kolk [20] is one of many contemporary health professionals who also declares the development of sensory awareness a critical element of trauma recovery, "our sense of ourselves is anchored in a vital connection with our bodies" [20] (p. 274-275). That is, our sense of ourselves is the body. Further, he states, we cannot truly know ourselves, "unless we can feel and interpret our physical sensations; we need to register and act on these sensations to navigate safely through life" [20] (p. 274). Porges [18] too proclaims, "The world of trauma is primarily about bodily responses and reactions" [18] (p. 217). It follows, the more we know to feel and interpret our bodily sensations, the greater the potential to release the stress, the anxiety, the depression, the trauma and live the life that we are.

Thus, re-sensitisation is at the core of the Undo approach. Re-sensitisation begins the healing process and also, self-understanding, regardless of healing. The function of the Undo app, then, is to guide the user back into his or her subtle, sensory, internal body states. Every step is one of self-understanding and healing. That process of self-understanding and healing is dependent on that inner process of feeling all sensations within the body that is us. To re-sensitise means to feel into the sensations within our own bodies. Those feelings are experienced as sensations, ranging from mild to intense. That act of feeling from within, into whatever sensations arise, stimulates and triggers what Van der Kolk [20] refers to as interoception [20] (pp. 97-98). Interoception, that awareness of sensory feelings, triggers an alert and a response throughout the whole body, involving more or less the whole body, as well as more or less parts and functions of the body - depending on whether the trauma is far reaching and deeply penetrating or whether it is more minor and localised [28]. That bodily process

---

[25]According to Khalsa and Lapidus (2016) interoception is an inner, multifaceted process that encompasses both conscious and non-conscious levels of information mapping. Essentially, interoception is an organic, automatic moment by moment sensory mapping of the body's internal landscape. That mapping gives rise to urges, feelings, drives and emotional experiences. Re-sensitisation occurs when there is bodily awareness of those urges, feelings, drives and emotional experiences.

[26]Gendlin's [8] writing has its own vocabulary. Thus he spells Focusing deliberately with a capital F and one s to distinguish Focusing from 'focussing', that usually is understood as a central point of attention. Gendlin's use of 'Focusing' refers to the way in which a problem is at first unclear and confused but then, though sensing, becomes clear and self-evident.

[27]To avoid misunderstandings, the Undo approach avoids using the word 'Focusing'. In the gaining of our sense of ourselves as the body we are, we refer to the act of 'sensing' or 're-sensitisation'. It is important to note that the Undo approach is not based on methods, skills or techniques. Instead, Undo informs a user about the destabilising, de-sensitising influences of our human constructed world and then guides the user through the natural, physical process of re-sensitisation.

[28]Zoltan, M., 2022, What causes Dissociation? An Interview with Mathew Zoltan, accessed November 2022 https://www.bitchute.com/video/1hOg7SEX3fsn/

progresses from the first, original felt sensation through a myriad of felt sensations, including feeling from within all the locked-in painful sensations, feeling from within all sensations until all tension and memory is released.

As Porges [18] affirms, when we avoid that act of feeling from within our more intolerable sensations, the tension remains trapped in the body, indefinitely, left to manifest itself as physical illness or mental distress. Porges points out "that the world we live in focuses so much on cognitive functioning without an integration of our cognitions with our bodily experiences, and that this leads to a type of dissociation that is occupying a significant percentage of everyone's lives." [18] (p. 168). Thus, "not respecting the body's own responses and filtering visceral feelings, over time, may contribute to illness" [18] (p. 218). Consequently, the objective of feeling deeply from within our physical sensations is not to focus on cognitive functioning but to stimulate and trigger the body's own physiological tendency to maintain internal stability or homeostasis. The maintenance of homeostasis is the body's own natural healing response to its environment. Undo's body-based user focussed inside-out process enables in this way self-understanding and healing and thus is distinct to the outside-in thought- or technique-based approaches of other meditation apps.

C. The Evolving Path of Change and Re-Association in the App User

In this section we explain developments that occur and evolve when a person uses the Undo app. Figure 9, Developments that occur and evolve through the use of Undo, illustrates the outcome of a preliminary Undo case study. It depicts the most important aspects of change and healing that occur in the app user during the process of re-sensitisation. Also indicated in Figure 9 are the long-term changes that may occur with continued use of the Undo app as a result of re-association. The results of the case study are discussed in Section VI.

Figure 9 illustrates the changes the Undo app user may expect to experience. The boxes are colour-coded to show different levels and experiences of transition. Developments denoted as short-term changes were reported by participants of the preliminary Undo case study. Developments denoted as long-term changes with continued use are changes that occur as a result of re-association. These are changes that a user may experience with continued use of the Undo app and integration of the Undo approach to meditation into their daily active life. The arrows pointing to the various boxes indicate the interrelated nature of change. It is important to note that within the process of re-sensitisation different users will experience different changes at different times. Change will not necessarily take place in the same order as shown in the figure. Also, the figure shows only the most important shifts, users can and will experience many other and often subtle forms of transition. It is important to note that re-association takes time. Some users will progress quickly to different levels of association, whereas others will need to

allow themselves more time, depending on their degree of pain or distress[29].

The colour-coded boxes are as follows: The grey box at the top of the figure corresponds to the use of the Undo app that leads to the subsequent forms of change. The blue box below the grey box indicates an awareness of the life they are that the user will experience as they work through the chapters of the Undo app.

The three yellow boxes illustrate the three core outcomes of the Undo app use: self-awareness, self-acceptance and bodymind reconnection. Self-awareness and self-acceptance and reconnection are at the source of association and the starting point for the course of change that occurs thereafter.

The pink boxes break down the understandings a user may gain. For example, self-awareness will result in an increased awareness of the physical sensations in the body, an increased awareness of thoughts that arise throughout the day and an increased awareness of behaviours a person may have. Self-acceptance results in less judgement of oneself and of others. Less judgement in turn leads to more empathy, at first towards oneself, then towards others. A reconnection to the sense of self is significant since re-connection is the direct experience of re-sensitisation, that is of being open to feeling more deeply the more painful sensations within the body, rather than avoiding, resisting or fearing those. That act of feeling from within our bodily sensations, of re-connecting, stimulates the natural healing capacities of our own body and re-connects bodymind.

The two grey boxes illuminate two aspects of re-connection. First, how it feels to be ourself, our body. That re-connection of the self/body occurs naturally and effortlessly. Then, as a result of that reconnection, the re-connection to partners, friends, others and to the outer world occurs, even deepens. That reconnection also occurs naturally and effortlessly. That deepening of connection in turn leads to less judgement of others, and more empathy and compassion for other people.

The green boxes highlight the tangible changes that take place as the user progresses through the different stages of transition. Change takes place not necessarily in the order shown in the figure. Importantly, users will recognise for themselves the change in the behaviours they may have had. For example, they may place less emphasis on the thoughts they have. They are less reactive in their responses to the condition in which they find themselves. They are less reactive in their responses with others. They have fewer negative thoughts. Users may also realise that the long-held held tension in the body is gradually being released. Tensions experienced during day-to-day life then become a continual source of guidance. When a person is reconnected, when bodymind is one, all tension is easily felt, processed and released as a

---

[29]Undo acknowledges that some conditions cannot be healed. In these cases Undo encourages the user to embrace that condition, whatever it is, rather than to resist the discomfort that will only result in further suffering. It can be very painful to embrace a serious condition and some users may need additional support to help them through the more challenging aspects of their re-sensitisation experience.
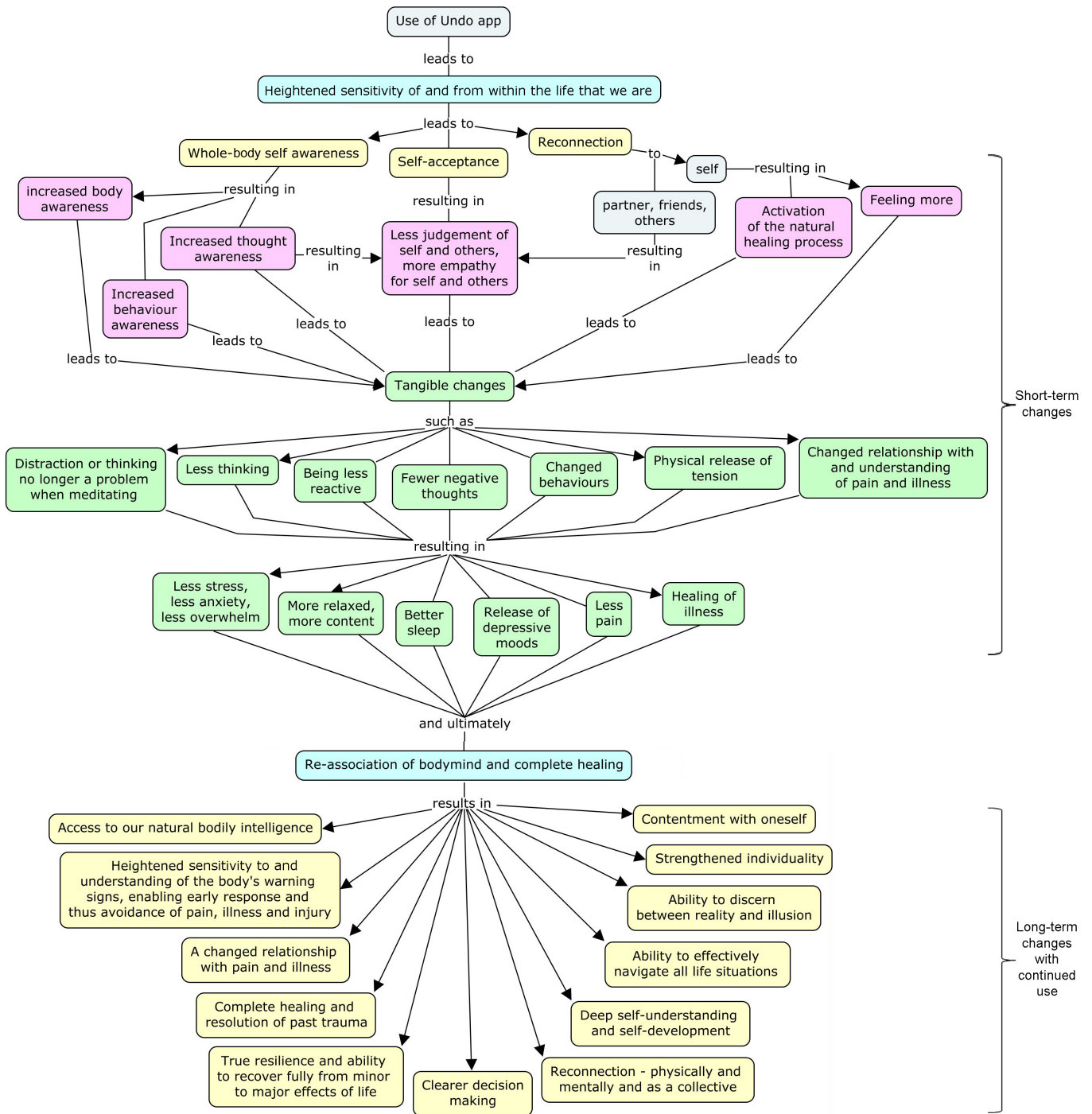
Fig. 9. Developments that occur and evolve through the use of Undo.

natural, acceptable part of the process of life. The outcome of the Undo experience is palpable for everyone: When our bodymind is at discord, we are in physical/mental pain, and we are disconnected. When physical pain or mental distress caused by discord lessens and dissolves, the body heals. That is the outcome of the Undo approach. Users experience less stress and anxiety. Their depressive moods dissolve. They sleep better. They feel more relaxed and are more content, more alive.

The blue box below the green boxes projects the expected outcome of the Undo app: the state of integration, of body-mind association. The associated individual will experience a state of embodied self-awareness that includes and is not disconnected from the body. The body/self is the life that they are.

Finally, the yellow boxes under the blue box project outcomes of re-association that a user may experience. However, for most us, we live a conditioned life, under the conditions of our human condition. To free the body/self from the effects of that conditioned life, from the life that we are not, is to return to the sensations in our bodies. Merleau-Ponty [20] (p. 67) emphasises throughout his book, our sense of self can be understood only through the senses, even though "every single thing, whether good or bad, is squeezed in from outside". And so we must learn to feel deep within our physical sensations, even within those that cause discomfort and pain. Discomfort and pain is part of life. Discomfort and pain is not our enemy but another essential aspect of bodily intelligence, and a guide for life and survival.

Only I, the individual, can experience my sensations, only I know that I am because only through my senses I experience and understand that I am. I know I exist only because I experience every day the live sensations within my body. There is no form of authority, no religion and no scientific method that can know the experience of my sensations.

When in a healthy and associated state, our senses are totally and unreservedly receptive. Our senses react to all kinds of stimuli, whether we are talking to others, reading a book, eating food, watching a film, working at a job, working out problems. Our senses pick up and guide us away from all that is harmful and towards all that is healthy and helpful for us. Our senses know how to turn everything to our own optimal health, enabling us to navigate life to our own good, safely and effectively - and that is our own innate, inborn, natural intelligence. These are the reasons that we must learn to tune into our senses.

D. The Undo Approach to Meditation

The Undo approach to meditation is re-sensitisation. The etymology of the word meditation is from Latin meditatus. That means to think things over quietly, to reflect and contemplate. That highlights, there are two entirely different types of meditation in this world: The outward turned thought-based and the inward turned sense-based. The outward thought-based meditation is useful for working out mechanical and other abstract problems. It cannot be used to know the self. To 'meditate upon the self' is to think about the self. To think about the self distracts from feeling, knowing I exist[30].

The Undo approach to meditation thus is the entirely inward turned sense-based approach, that is beneath the level of thought. For Undo, to meditate is to feel from within our bodily sensations as they arise. That sense-based approach stimulates re-sensitisation, integration/association and embodied self-awareness - and subsequent change within the user. Using the Undo approach, the act of meditation enables such re-sensitisation/re-association. An important function of the app is to guide the user through that meditation of re-sensitisation.

Figure 10, The Undo approach to meditation, below depicts the process of re-sensitisation as experienced by the Undo app user. The arrows pointing from left to right and from right to left plot the progression of the meditation. In the Undo meditation there is no achieving, because there is nothing to achieve, nothing to gain, to better, to realise. The meditation is a purely physical experience, permitting the user to settle into the living organism they are, into the body, to allow his or her sensations to arise and to feel and process or to fill with these. There is no time frame given for the meditation. It ends when the individual feels ready to finish.

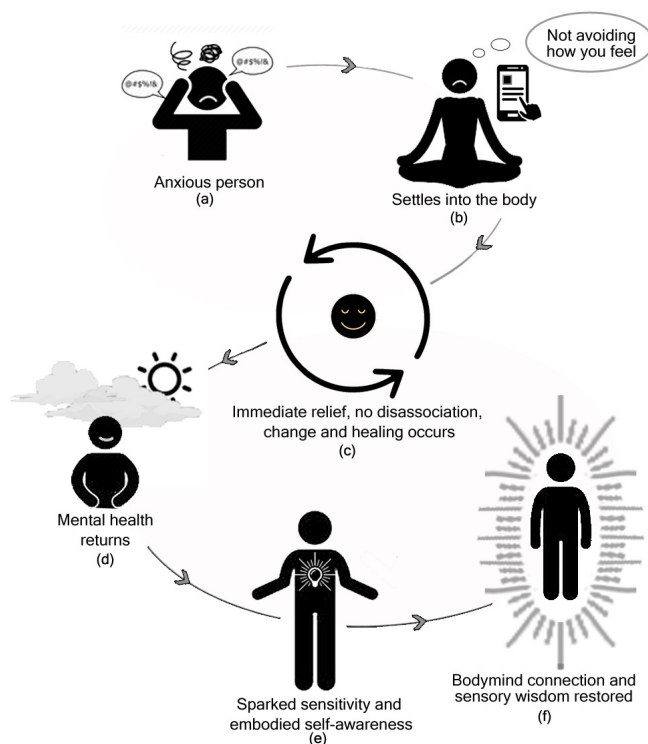
Fig. 10. The Undo approach to meditation.

The person depicted in Figure 10 above represents Tom, whom we first met in Section II.

[30]The app chapter Welcome to Undo explains the distinction between the two meditation approaches in more detail.

a. Tom feels stressed, anxious and agitated. He wants to try the Undo meditation.

b. Tom tunes into the app on his phone. He finds a quiet place and begins a meditation. Following the narrated guidance, he settles into his body and allows his feelings and sensations to arise. He does not resist his feelings, or try to achieve, improve or change anything.

c. Tom experiences immediate relief from his condition as he physically feels from within his sensations as these are. Tom begins to integrate mind into body, enabling change and healing to occur naturally and of its own accord.

d. As Tom feels into his sensations, as he lets them be, his stress naturally releases. At the same time he comes to accept himself exactly as he is, in whatever condition he is in. His mental health returns.

e. Tom has activated whole body self-awareness. Tom now understands how to experience life and his sense of himself as a living human being within the felt sensations of his tangible body-self and through his senses. He has felt from within the deeper feelings of himself without judgement and without resisting his more intolerable sensations. Tom has come to experience himself as he is.

f. The natural outcome of the meditation is re-connection. Tom has re-associated mind into body and restored his sensory wisdom. Tom ends his meditation and starts to live life with more sensitivity and awareness. And as he continues to practice the Undo meditation, throughout the day and throughout the weeks, without judging himself or others, and without trying to achieve anything, he begins to live life through and as his body, from his own felt sensations. He begins to develop a more solid sense of himself. Tom understands himself better and is also better able to relate to others. Tom the body, meditation and his sensory interconnection with the world are re-established as one and the same. Tom is on his way to recovering his natural state of being. He is realising his wholeness and sense of oneness with the world. Tom has also managed to easily integrate meditation into his daily active life.

VI. Evaluation

A summary of the preliminary case study that first was mentioned in Section V, commences this section. We draw on that study to evaluate the function of the Undo app that essentially is a sensory embodiment app. Its function and purpose is to guide users through the sensory process of bodymind re-connection and re-integration. The focal point of this white paper has been the sensory process of bodymind re-connection and re-integration. As has been discussed throughout this paper, an experience of our bodies is the basis from which we develop all sense of ontological security, a sense of being, of "realness, aliveness, autonomy and self-identity", as is defined by Laing [14] (p. 42).

The body is the focal point from which we develop that feeling of being alive, whole and well. When we disconnect from our bodies, we no longer feel well or ontologically secure,

and we may withdraw and develop a magnitude of physical and/or mental health problems (cf. [8]; [14]; [18]; [20]). As has been established by Gendlin [8], Laing [14], Porges [18] and Van der Kolk [20], bodymind integration is essential to physical/mental wellbeing.

To restate, bodymind integration achieves two significant outcomes: One, integration transforms the inner relationship we have with our pain or distress and it transforms simultaneously our outer experience of life itself, that experience of feeling alive, whole and well.

Two, importantly and often unrecognised, the process of integration stimulates the body's own natural healing capacity to release the unresolved trauma that is held in the body in the form of tension. Bodymind re-connection is the precondition that equips us to regulate, tolerate and even recover from the daily overwhelming affects that life throws at us all. When body and mind integrate, we also see a reduction in other conditions. Feelings of distress, physical pain, stress, anxiety, insomnia, depression and so forth dissipate. And so the return to bodily origins is crucial to the process of achieving and maintaining physical/mental wholeness.

To investigate the effectiveness of the app, particularly in regard to the expected results, we conducted a preliminary qualitative study. Ten participants applied the understandings and meditation of the Undo app to their real-life situation over a period of six weeks. The participants were interviewed about their perceived mental and physical condition prior to commencing the study and again after the six weeks. The principal purpose of the investigation was to provide insight into the Undo app user experience. The questions asked were designed to provide empirical and anecdotal information about the user experience, specifically in response to the three research questions presented in Section I: What alternative, acceptable view of an individual's condition does the app introduce? What self-discovery process does the app guide the individual through? What significant healing change occurs and continues to strengthen and evolve in the app user?

First, Section VI-A details the participants who took part in the study. Section VI-B describes the methodology used for the study. Section VI-C analyses the answers to the interview and provides the results of the study. Section VI-D puts forward the app validation discussion. Section VI-E outlines open issues and future work.

A. Study Participants

It is not our intention to represent the general public in large statistical terms or to conduct a scholarly study. We therefore recruited a small sample of sixteen participants through a snowball sampling technique. The aim was to gain an insight of user experience. Of the sixteen participants, ten - eight females and two males - completed the study. Participant age varied, with three aged between 21 and 30 years, one aged between 31 to 40 years, three aged between 41 to 50 years, two aged between 51 to 60 years and one aged between 61 to 70 years. Four participants were of European origin and six Australian. Participants had different occupations. One was

a marketing professional, one a business owner, two were teachers, one a consultant, one a student, one a shop assistant, one an office worker, one a naturopath/dietician and one an environmental officer.

B. Study Methodology

We used a qualitative research method. The study was predicated on the assumption that participants would meditate daily. The participants were given a range of related pre- and post-study questions in the form of unstructured interviews. The interviews were conducted over the phone or via Skype and recorded for later transcription.

Participants were provided with guidelines for the duration of the study. These included the use of the Undo app for a minimum of five days per week for a minimum of five minutes per use, totalling a minimum of 25 minutes use per week. Participants were also requested to keep a daily log of use.

The study duration was six weeks, at the end of which users were again interviewed. This time they answered the post-study questions. The post-study questions were designed to identify and consider changes in the users that may have occurred in response to issues raised in the pre-study interviews.

In order to identify common themes and results, a thematic analysis was conducted on the post-study interviews. The resulting report is presented in Appendix C. The results are summarised in Section VI-C.

C. Results

All ten final participants met the guideline criteria in terms of minimum time spent using the app. All reported that they had moved through the content more or less sequentially. Thereafter, most revisited topics they found interesting or useful. The majority of participants did not move through all of the chapters in the six weeks. Those that did, reported rushing through the last chapters to ensure they would complete these before the trial ended.

The user experience is described as follows: For many, the app trial was the beginning of a journey of becoming more self-aware. Participants began to learn of the importance of 'checking in' and listening to what was going on internally, particularly in relation to their thinking and body sensations.

After a few weeks, participants began to notice the first changes. They developed an increased awareness of their thoughts. They were more able to 'catch themselves' thinking obstructive thoughts and understood how to bring this thinking to an end, finding acceptance in the body they are. Some participant responses are.

- It took me a while to get my head around that the body and mind are one. You are taught that the body is one and the mind is another.
- When I was doing other meditation methods, I was thinking of not thinking. But when I did the Undo meditation I was able to release all the thoughts that were in my mind because of the fact that I was feeling my body and when I finished the meditation I was feeling really, really good.

- There is more acceptance. You grow up with this belief that you have to be or act a certain way, but this is me, this is who I am and this is how I feel and that's OK, so actually I have felt a big shift in that.
- I was able to focus on myself and not focus on anything else for a moment. That sometimes helped me calm down and find out what was really important in that moment.

Prior to the study, participants were asked to identify issues they were struggling with. For example, they were asked, were they content with themselves, with their lives. Did they feel something was missing in their lives. Was there something they would want to change, about themselves, about their lives.

The ten participants stated different concerns and problems for each question. The post-study responses to the same questions revealed eight key themes, underscoring changes and/or benefits experienced by the participants when using the app.

Users experienced:

1. A greater level of self-acceptance – Just over half of the participants reported a greater level of self-acceptance. For some, this was the most important benefit gained from using the app.
2. Feeling more relaxed and content – Since using the app, most participants reported feeling more 'relaxed' and more content. The term 'relaxed' meant different things to different participants. For some, to relax meant something physical, to sleep better for example. For others to relax meant to feel less stressed on a day to day basis, to feel less anxious. For others yet, it implied a more general, relaxed attitude to life – a feeling of letting go of troublesome thoughts or of having more trust that things are going to be okay.
3. Being more present – The majority of participants reported a definite reduction in the amount or frequency of negative thoughts during the six week study period.
4. Feeling more focussed and less distracted – All but one of the participants said they felt that they were better able to focus on tasks at hand and less likely to be distracted.
5. Feeling more rational, less reactive – Half of the participants reported that they felt they were being less reactive to their external world. For several, the simple act of making time and space for themselves had resulted in them feeling less stressed and better able to take a step back. They felt more empowered to reflect on their lives with more positivity.
6. Feeling better able to take care of identified issues – These refer to the issues and difficulties the participants had outlined in the pre-study interviews. All but one participant reported some level of improvement in their relationship to their issues and difficulties. The one participant who reported that things were 'much the same' noted later in the interview that she was responding differently to stress. For some, the change was profound: "These (feeling an inability to integrate the seemingly contradictory academic and spiritual aspects

of the participant's nature and her feeling that she lacked creativity) have both been ongoing concerns for a long time now and now they're gone. It doesn't make sense to even think about myself in those ways anymore and I feel that when things don't make sense anymore that signifies there has been a profound shift."

7. Taking time for themselves/focussing on themselves – Almost half of the participants stated that by taking part in the study and making time for the meditation also gave them time for themselves, time that they had previously denied for themselves.

8. Seeing other people's perspectives better, having more compassion for others – After the study period a number of the participants noted an improved ability to see and understand other people's perspectives and to have more compassion for them.

D. Validation Discussion

As the number of people seeking online self-help is increasing, so is the popularity of meditation apps. To validate the Undo app, this section compares features of the Undo app with the same features of other meditation apps. We selected four popular meditation apps for our comparison analysis. The goal is to identify technical strengths and limitations of the Undo app. The validation discussion has two parts.

Section VI-D1 identifies important app features and investigates the question, do meditation apps work? Section VI-D2 discusses the results of our app feature comparison analysis in more detail. Note, our analysis is purely hypothetical and considers only a few parameters. It is not our intention to draw reliable statistical conclusions. Instead, we aim to appraise important app features in terms of user preferences and current market expectations so that we may identify issues and future opportunities for the Undo app.

1) Meditation App Efficacy and Features: In this section, we draw on the research of Howells et al [10], Gál et al [7] and Mani et al [15] to investigate the challenge of assessing app functionality and efficacy. They used the MARS (multidimensional mobile app rating scale) model to determine the most important features of a quality app. We identified eleven core features that we used for our comparison analysis in Section VI-D2.

Mani et al [15] may have been among the first to express concerns that beyond Apple App Store star ratings and user reviews, little information was available to help users determine the quality and efficacy of 'health intervention' based apps, including meditation apps. Further, the star ratings and reviews were based mostly on the number of downloads and testimonials, not on empirical evidence.

According to Mani et al [15] it is essential that health intervention apps contain high-quality content that results in positive outcomes for users. It therefore is imperative to assess the quality of an app before evaluating efficacy. They used the MARS model to conduct a meta-analysis of approximately 700 meditation apps. The MARS rating scale lists content, training and education in wellness, performance and functionality, guided meditations, and app aesthetics as important features of a quality app. Mani et al used these to assess the 700 apps for quality and performance [15].

Mani et al [15] conclude that while most meditation-based apps claim to be wellness apps, only four percent of the apps reviewed provided training and education. Even though most apps achieved an acceptable median MARS score, very few scored high, indicating that the quality of the apps was less than satisfactory. Further, as they noted, even though multidimensional app rating scales can be used to evaluate the quality and many other features of existing apps, MARS cannot be used to evaluate the efficacy of apps [15]. It is difficult to assess changes in app user behaviour. Mani et al [15] stress that the lack of evidence for meditation apps efficacy is an issue that needs to be addressed.

Howells et al [10] too express concerns that the self-help related app industry appears to not have an empirical basis for efficacy. They have determined that app induced changes in behaviour are not sufficiently supported by research. Howells et al [10] (p. 7) acknowledge that although it is conceivable that meditation-based apps could be beneficial, it is equally possible that these apps not only are ineffective but may actually be causing harm. Despite that possibility, individuals using self-help apps may experience some degree of improvement in well-being, simply because they are motivated to become happier. That is the placebo-effect principle [10] (p. 7).

In a more recent meta-analysis of meditation app efficacy Gál et al [7] ascertain that the meditation app marketplace continues to be characterised by high availability and low evidence base, with many apps promoting approaches and exercises lacking evidence or developed without clinical expertise. Further, many apps provide incorrect information and are engaged in dishonest advertising [7]. Gál et al's [7] study confirms the results of Mani et al [15] and Howells et al [10]. They too found "small to moderate effect sizes for online mindfulness interventions in improving stress and mental health" [7]. Their findings are summarised as follows: Results indicated significant small or medium effects of mindfulness apps compared to control conditions for perceived stress, symptoms of depression and anxiety, life satisfaction, quality of life, burnout, psychological well-being and positive and negative affect. Heterogeneity was generally low, though often with large confidence intervals. Effects maintained at follow-up for anxiety symptoms, stress and quality of life, but not for depressive symptoms. Nonetheless, owing to the small number of studies reporting follow-up assessments, conclusion about the long-term utility of mindfulness meditation apps cannot be drawn. Although, the obtained effects sizes are close to the tentative cut-off point (0.24) for clinically relevant effects proposed by Cuijpers et al (in Gál et al [7]), prediction intervals of the interventions effect generally included zero, suggesting that future studies could also yield non-significant effects. There was no evidence of small study effects in the case of anxiety, depression and stress [7].

In the same way that other apps do not have an empirical basis for the effectiveness of their approach, Undo too is not

in a position to provide empirical evidence for app efficacy. Further, it is not our objective to apply a multi-dimensional app rating method to measure the performance of Undo, but to determine open issues and future work for Undo. In the following we conduct an app feature comparison analysis.

2) App Feature Comparison Analysis: We now compare the Undo app features with the same features of four other apps. We used Calm, Headspace, Meditopia and Waking Up. The purpose of the comparison analysis is to identify the Undo app's strengths and weaknesses, in order to identify future opportunities for improvement, but also to determine the purpose and function of each app, and to highlight the gap in the state of the art.

The comparison analysis has three parts. The first part quotes the mission statements of all five apps, again to highlight the gap in the state of the art. The second part explains the function and purpose of the eleven app features selected for our comparison analysis. The third part compares the performance of the Undo app with the performance of the other four meditation apps. We then analyse features to determine future work for Undo.

Meditation App Mission Statements

This section quotes the mission statements of all five apps reviewed and highlights the intention underlying each app. The mission statement outlines the company's function, purpose and the focus of their business. Undo's function, purpose and focus is user re-connection. Calm, Headspace, Meditopia and Waking Up's function, purpose and focus respectively is to improve the health and happiness of the world, provide mental wellbeing practices for the user, and to provide a new operating system for the mind.

The five mission statements are as follows:

- Undo – Our mission is to give people the knowledge and power to rediscover and recover their unique individuality, to achieve optimal health and to live a connected and deeply fulfilling life[31].
- Calm – Our mission is to make the world happier and healthier[32].
- Headspace – Headspace was created with the mission to improve the health and happiness of the world[33].
- Meditopia – Our mission - to provide mental wellbeing practices anytime, anywhere for everyone around the world to achieve personal fulfillment[34].
- Waking Up – Waking Up does not seem to have a mission statement, instead we quote the introduction on their website: A new operating system for your mind[35].

---

[31]Undo app (2022) Accessed November 2022 https://www.linkedin.com/company/undo-natural-meditation-app/about/

[32]Calm (2022), Accessed November 2022, https://support.calm.com/hc/en-us/articles/115002474527-Who-we-are

[33]Headspace mission statement. Accessed November 2022 https://www.headspace.com/join-us

[34]Meditopia Mission Statement, accessed November 2022 https://meditopia.com/en/about

[35]Waking Up app, A New Operating System for Your Mind, accessed November 2022 https://wakingup.com

The mission statements help illustrate the gap in the state of the art. All four apps reviewed fail to acknowledge the all important biological source of all physical/emotional ailment or distress - the bodymind disconnect. The focus is to improve health and happiness in the world; to provide mental wellbeing practices; to provide a new operating system for the mind. All four apps overlook the experience of the body and its subsequent shut down of sensory information that is the root and the cause of all physical and mental ailment.

Undo's mission is bodymind reconnection. Re-connection re-awakens the body's sensory capacities, enabling the individual to be in full contact with their physical sensations - with their felt sense of self - and with the realities of life around them.

Meditation App Features

We survey the eleven app features selected from the MARS model for app quality assurance. These features are quality of content, training and education, guided user journey, intuitive user interface, performance and functionality, aesthetics, multi-media features, in-app interactivity, user community, live content and multiple user support. App quality assurance is important because it can address risk or incompatibility issues and other app issues of concern. It can also increase app productivity and performance, and enhance customer experience and satisfaction. It therefore is important to establish the quality of a health intervention app before it is possible to evaluate efficacy [15]; [10]; [7]. App quality is essential to app efficacy.

The eleven app features are reviewed below. The measuring metrics - fully supported, supported or not supported - applied to each feature help evaluate important aspects specific to that feature.

Information (content) quality - refers to the quality of information. Fully supported means the app content and information aligns with the company's mission. The content is consistent in its scope, style and quality. For example, an app with a single author potentially scores higher than an app with multiple authors for information quality. A single author is more likely to present content that is consistent in scope, style and quality. Supported - the app contains information that is relatively consistent, and generally aligned with the company's mission. Not supported - the app does not provide information that is consistent or information that is in alignment with the company's mission.

Educational content (training and education) - provides a platform for learning and training. The educational content teaches the user something useful that they may like to apply in day-to-day life. Fully supported means the app content is predominantly educational. Supported means the app content is somewhat educational. Not supported implies that the app content is not educational.

For an example of Educational content, in Figure 11, Example of educational chapter content, we present two screenshots from the Undo app's Chatper 0 *Welcome to Undo* Primer. On the left is the Primer starting page. From this page, the user has selected the topic 'Welcome to Undo'. This opens the

media player screen from which the user can play the audio recording of the topic and access read-along text. An excerpt of the read-along text showing the educational content within this topic is presented in the image on the right.

Guided user journey - pertains to the order of content within the app. It also pertains to the way the user is guided through the content in a meaningful and beneficial way. The guided user journey is designed to maximise benefit of the content for the user. Fully supported - the app clearly guides the user through the content. There are recommended pathways for the user to follow, at both the micro (app sections) and the macro (whole of app) levels. Where required and available, time frames are indicated for the absorption of content. Supported - the app loosely guides the user through the content. Not supported - the app does not guide the user through the app content. The user randomly selects content they may wish to access.

Key aspects of the Undo app's guided user journey feature are shown in the screenshots presented in Figures 5 and 8. In Figure 5, Visual image of the structure and flow of an Undo chapter, beneath the chapter title 'Maturing Your Meditation' tabs that enable access to the Introduction, Primer, Meditations and Go Deeper sections can be seen. Below these tabs is header text relating to the active section, and a progress bar showing the user how many topics have been completed within that section. Further below this, the topics that make up each section are laid out vertically in sequential order. The small white circles to the left of each topic denote the user's progress within the section – a white dot appears within each circle once a topic has been completed. The 'Begin recommended' button takes users to the next topic recommended for them once they have completed their current module.

In Figure 8, Visual image of the first four Undo app chapter tiles, the same visual cue of white circles containing white dots show the user which of the core chapters have been completed. Thus the user is aware of their progress through the core chapters and which chapters are yet to be completed.

Intuitive user interface - pertains to an app that is user-friendly and is easy to navigate through. The user interacts with the app, without having to think too much about it. Fully supported indicates that the app user-interface can be navigated almost effortlessly. This level of navigation is usually achieved by apps that have been through several rounds of development and user testing, and by apps that have been on the market for several years. Supported signifies that the app is reasonably user-friendly and easy to navigate. Not supported signifies that app navigation is difficult, the app is not user-friendly.

Performance and functionality - refers to different aspects of a software system. Performance evaluates stability, scalability, speed and reliability of the system in production-like environments. Good performance ensures the system operates at appropriate speeds, handles the expected amount of traffic, and responds quickly to user requests. Functionality ensures that each feature of the app works as it was designed. Fully supported signifies that the app is effectively fail-safe in its functionality. It has no bugs, will not crash, and does what the user expects. Again, this level of performance and functionality is usually achieved by apps that have been through several rounds of development and user testing, and by apps that have been on the market for several years. Supported signifies that the app generally functions as expected and has few technical issues that affect use. Not supported signifies that the app may have unexpected technical issues, may have many bugs, and may crash often.

Aesthetics - relates to the visual appeal of the app. It applies to icons, colour scheme, themes, styles and fonts. The aesthetics encourage the user to want to engage with the app. Fully supported signifies that the app is very visually appealing. There is a clear and consistent visible 'brand' throughout the app. Supported signifies that the app is reasonably visually appealing, but the brand theme may not be used consistently. Not supported signifies that the app is not visually appealing. For example, the app graphics may be visually jarring or there may be no consistent brand theme.

Multimedia features - imply different models of content, such as text-based, audio, animation and or video content. Fully supported signifies that the app contains several different models of content, allowing users options in regard to the way they may wish to absorb content. Supported signifies that the app may contain two or more models of content. Not supported signifies that the app supports only one model of content. For example, the app may comprise of written content only.

In-app interactivity - has to do with user engagement and experience. It relates to gamification and other features a user may interact with. An excess of interactive features may distract a user from benefitting from the original purpose of the app. Fully supported signifies that the app contains dedicated content with which the user actively engages and interacts. Users may customise or personalise their experiences with the app. The ability to interact with the content also deepens the user experience and the user subsequently gains more value from the information. The *Body Tension Translator* in the Undo app, shown in Figure 2, is an example of in-app interactivity. Supported signifies that the app may contain some content with which the user may engage with or interact, yet that content may not add particular value for the user. Not supported signifies that the app does not contain interactive content relating to the quality of information.

User community (engagement) - pertains to interactive and non-interactive sources that may not necessarily be part of the app. For example, they may be accessed through the app via links, such as a Facebook page, Instagram, Quora - a question and answer website - or a YouTube channel. Fully supported signifies that the app has a lively and dedicated user community that is supported by the company. In the example of Undo, company representatives play an active role in the user community. They interact with people mostly via social media based platforms. Supported signifies that the app may have a user community but that community may not be well supported by company representatives, or by the users. Not supported signifies that the app does not have a user community.
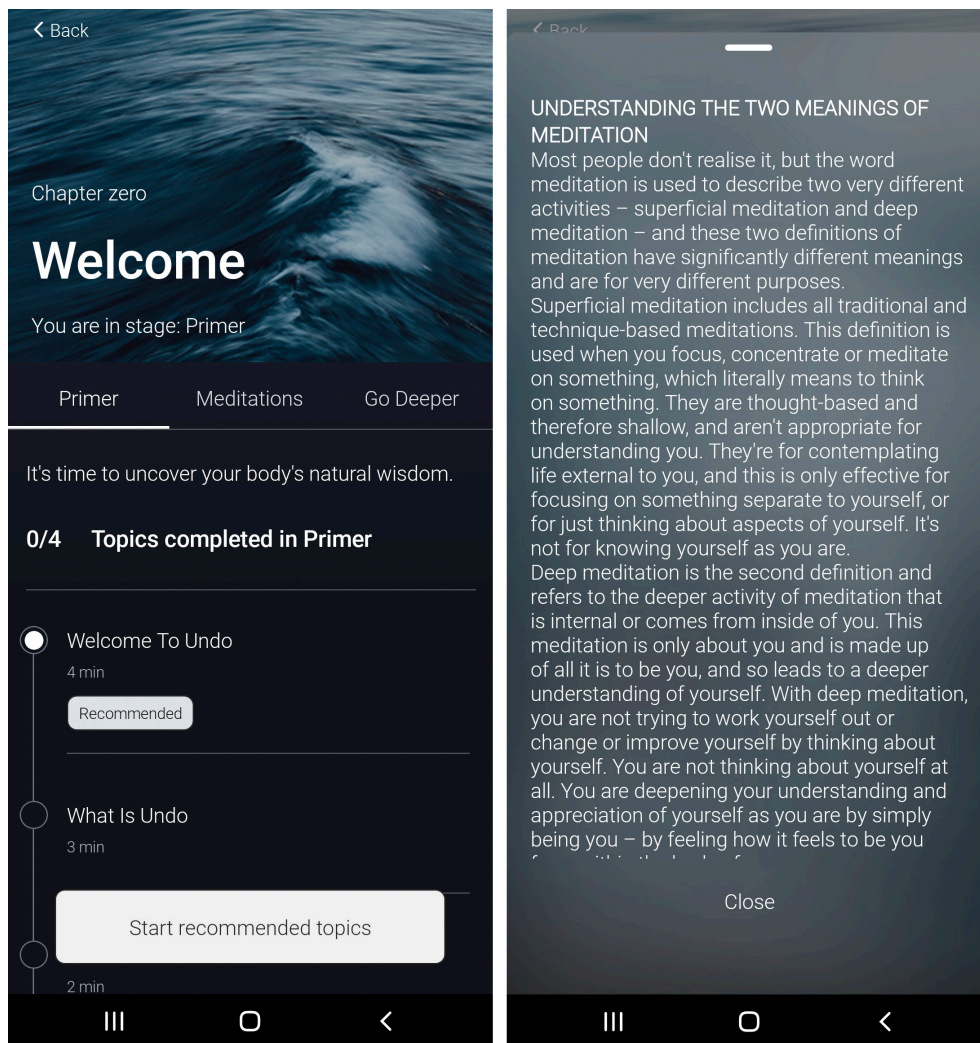
Fig. 11. Example of educational chapter content.

Live content - indicates webinars, Facebook live interactions and notifications about other activities. Fully supported signifies that the app has dedicated sections for live content, such as live webinars. These are run regularly and consistently. Users may access the live content directly from within the app. Supported signifies that the app may include live content but these may not be delivered consistently. Not supported signifies that the app does not include live content.

Multiple language support - is based on the translation of information content into other languages. Fully supported signifies that the app content is available in several languages. Supported signifies that the app content is available in two languages or more. Not supported signifies that the app content has one language only.

App Feature Data Analysis

We outline the methodology used in the app feature data analysis and discusses its results. The Undo technical team rated the eleven Undo app features in terms of whether these are fully supported, supported or not supported. They then used the same methodology for Calm, Headspace, Meditopia and Waking Up and compared the results.

The results and subsequent analysis are shown in Table II to V. The purpose of the data analysis is to identify Undo's strengths, limitations and future issues. Table II shows in what way the eleven features are supported by each of the five apps, omitting user preferences.

Table III separates users into two groups, dedicated and casual. A dedicated user will use the app regularly, whereas a casual user uses the app some times. The weightings assigned to each feature for the different user groups indicates the way some users value certain app features more than others. The app features in turn are divided into two categories – 'must have' and 'nice to have' features. These are shown in Table II to V. Some features, such as Guided user journey, Intuitive user interface and Performance/Functionality are predicted to be 'must have' features by both user groups. Tables IV and V compare app feature results across all five apps, for each of the two user groups (dedicated and casual). Table IV compares the

results of the dedicated user app feature preferences. Table V compares the results of the casual user app feature preferences. Table II Raw scores of features across the five apps, below, rates how well each of the five reviewed apps support a particular app feature, omitting user preferences. These are raw scores which means they are not based on user preferences.

Feature (maximum score = 22)	Calm	Headspace	Meditopia	Undo	Waking Up
Information (content) quality	1.3	1	1.67	2	2
Educational content (training and education)	1.67	1.3	1.3	2	2
Guided user journey	2	1.3	2	1.67	1.3
Intuitive user interface	2	1	2	1.3	1.3
Performance/Functionality	2	1	1.67	1.67	1.3
Aesthetics	2	1.3	1.67	1.3	1
Multimedia features	2	2	2	1	2
In-app interactivity	1	1.67	1.3	2	1
User community (engagement)	2	1.3	1.67	1.3	0.67
Live content (e.g. webinars)	1.3	2	1.3	0.67	1.3
Multiple language support	1.67	1.3	1.67	0	0
Total score	**18.9**	**15.17**	**18.25**	**14.91**	**13.87**

TABLE II
RAW SCORES OF FEATURES ACROSS THE FIVE APPS.

Table II compiles the raw or unweighted data from the eleven selected features for each of the five apps. Each feature was given a rating between 0 and 2. 0 indicates the feature is not supported by the app, 1 the feature is supported and 2 the feature is strongly supported. The Undo technical team applied the same rating criteria across all five apps.

As Table II shows, each feature is scored based on how well each app supports that feature, irrespective whether the feature is a 'must have' or a 'nice to have' feature. To exemplify, Undo received a raw score of 2 for Information (content) quality because the quality of information is high throughout the app. Undo's content is focused on helping users rediscover their own individuality through bodymind re-connection that is in complete alignment with the Undo Mission Statement. Also, Undo has one author that ensures consistency. The content has been written by Zoltan, and is based solely on Zoltan's understandings of the bodymind and the approach he developed to help people re-connect. Content quality and consistency is one of Undo's strengths. Headspace received a score of 1. Headspace has many authors, therefore information scope, style and quality may not always be consistent. Headspace's content is varied, offering different approaches and different techniques throughout. A varied approach may be of benefit or preference to some users but it lacks consistency. Undo received 0 for Multiple language support because multiple language support is something that Undo still needs to develop, whereas Headspace received 1.3. because Headspace currently offers content in five languages, including English.

The comparison results indicate that although Undo achieved scores that were approximately equal to or higher than Headspace and Waking Up for some features, Undo achieved scores lower than Calm and Meditopia for other features. For example, Undo scored equal or higher to other apps for Information (content) quality, Educational content and In-app interactivity but lower for Guided user journey. Undo achieved the same or lower scores for Performance/Functionality; and lower for Aesthetics, Multimedia features, User community (engagement), Live content and Multiple language support. The results give useful insights about those areas where Undo scored low. These are areas that Undo could improve and that are discussed in section VI-E. The maximum total score for each app is 22 points (11 features x 2 points = 22 points). As Table II shows, Undo scored a total of 14.91/22. Compared to Calm's total score of 18.9/22 and Meditopia's 18.25/22, Undo's total score is over three points lower, suggesting improvements in those areas of concern.

Notably, meditation based apps are user-centred apps. It therefore is important to consider also the user when assigning ratings to the app features. There are two groups of users interested in using a meditation app, dedicated and casual. As the names suggest, dedicated users will tune into the app on a regular basis to get the best benefit they can, whereas casual users may just use the app on occasion. These two groups are interested in or prioritise different app features. Based on their anticipated needs and desires, they will privilege some app features over others. In Table III, app features are assigned different weightings, predicted on user preferences.

Feature	Dedicated user weighting	Casual user weighting
Information (content) quality	1.5	1
Educational content (training and education)	1.5	1
Guided user journey	1.5	1.5
Intuitive user interface	1.5	1.5
Performance/Functionality	1.5	1.5
Aesthetics	1	1.5
Multimedia features	1	1.5
In-app interactivity	1	1.5
User community (engagement)	1	1.5
Live content (e.g. webinars)	1	1.5
Multiple language support	1	1

TABLE III
WEIGHTINGS ASSIGNED TO REFLECT DEDICATED AND CASUAL USER FEATURE PRIORITIES.

Table III separates users into two groups, dedicated and casual. It shows which app features each group may prioritise most. Each feature has a rating of 1 or of 1.5, based on whether the feature is predicted to be a 'nice to have' or a 'must have feature. A score of 1 indicates the feature has no weighting, i.e. the feature is 'nice to have', considered non-essential. Whereas

30

a score of 1.5 indicates the feature is weighted, i.e. the feature is a 'must have', considered essential.

In terms of the dedicated users, and assuming that they have good knowledge of app technology, they will be more interested in those app features that are deemed essential. Dedicated users will appreciate the quality of content and the education and training courses. They may value the performance and functionality of the app but be less interested in the 'nice to have' features, such as multimedia and in-app interactivity. Therefore, for the dedicated users content quality, education and functionality are weighted 1.5 points with the predicted 'nice to have' features remaining unweighted.

Whereas casual users may be less interested in quality of content, education and training and more interested in the visual appeal of the app, multimedia, and the in-app interactivity. Therefore, content quality, education and so forth are assigned no weighting, while the remaining features - that we predict are 'must haves' for casual users - are weighted 1.5 points. These features include visual appeal, multimedia and in-app interactivity.

The dedicated user is Undo's target user because this person values the depth of content and the education and training courses that will ultimately result in bodymind re-connection. Given the extent of the Undo content, we cannot rule out that the casual user may too become a dedicated user.

Feature (maximum score = 27)	Calm	Headspace	Meditopia	Undo	Waking Up
Information (content) quality	1.95	1.50	2.51	3.00	3.00
Educational content (training and education)	2.51	1.95	1.95	3.00	3.00
Guided user journey	3.00	1.95	3.00	2.51	1.95
Intuitive user interface	3.00	1.50	3.00	1.95	1.95
Performance/Functionality	3.00	1.50	2.51	2.51	1.95
Aesthetics	2.00	1.30	1.67	1.30	1.00
Multimedia features	2.00	2.00	2.00	1.00	2.00
In-app interactivity	1.00	1.67	1.30	2.00	1.00
User community (engagement)	2.00	1.30	1.67	1.30	0.67
Live content (e.g. webinars)	1.30	2.00	1.30	0.67	1.30
Multiple language support	1.67	1.30	1.67	0	0
Total score	**23.43**	**17.97**	**22.57**	**19.24**	**17.82**

TABLE IV
DEDICATED APP USER FEATURE PREFERENCES.

Next, Table IV, lists the results of the dedicated app user feature preferences across all five apps and compares the scores of the dedicated app user feature preferences across all five apps, taking into account the weightings discussed above, based on whether the feature is predicted to be a 'must have' or a 'nice to have' feature. The table sets the five reviewed apps side by side. Using the raw scores as a basis, the Undo technical team adjusted each score to incorporate the assigned weighting. In terms of the dedicated user, the

maximum total score to be achieved for each app is 27 points (it has 5 weighted features x 3 points and 6 unweighted features x 2 points = 27 points). The row at the bottom of the table summarises the information by showing the total score for each of the five apps. Undo achieved 19.24/27. Compared to Calm's total score of 23.43/27 and Meditopia's 22.57/27. Undo's total score is four points lower, suggesting improvements in some areas.

Overall, the results show that in most areas Undo scores equal to or surpasses Headspace and Waking Up. Compared to these two apps, there are no improvements to be made, therefore there is no need to further compare Undo's dedicated user preferences with those of Headspace and Waking Up.

On the other hand, although in some areas Undo scores equal to or higher than Calm and Meditopia, in other areas Undo scores lower, consequently further consideration is warranted. In terms of the predicted 'must have' features of Information (content) quality and Educational content, Undo scores higher than Calm and Meditopia. Therefore, in relation to these features, there are no improvements to be implemented. In terms of the remaining predicted 'must have' features, the scores suggest that Undo performs equal to Meditopia for Performance/Functionality but slightly lower in all other areas. The Guided user journey, Intuitive user interface and Performance/Functionality (compared to Calm) warrant further attention. In terms of the predicted 'nice to have' features, although Undo scored higher than the other four apps for its In-app interactivity feature (the *Body Tension Translator*), the scores suggest that in all other areas, Undo performs significantly lower than Calm and somewhat lower than Meditopia, suggesting areas that Undo could improve.

Interestingly, the overall position of Undo in relation to the other apps is the same in the dedicated user analysis as it was in the raw score analysis. While Undo is designed for dedicated users, with an emphasis on quality educational content, these two features alone are not enough to significantly shift Undo's rating against the other apps.

Table V, below, gives information about the results of the casual app user feature preferences across all five apps.

Table V compares the scores of the casual app user feature preferences across all five apps, taking into account the assigned weightings. The maximum possible score for the casual user analysis is 30 (8 weighted features x 3 points plus 3 unweighted features x 2 points = 30). The set up of the table is the same as for Table IV. The row at the bottom of the table summarises the information by showing the total score for each of the five apps. Undo achieved 20.38/30. Compared to Calm's total score of 26.09/30 and Meditopia's 25.06/30, Undo's total score is more than five points lower, suggesting improvements in some areas.

Similar to Table IV, the results show that in most areas Undo scores equal to or surpasses Headspace and Waking Up. Compared to these two apps, there are no improvements to be made, therefore there is no need to further compare Undo's casual user preferences with those of Headspace and Waking Up.

Feature (Maximum score = 30)	Calm	Headspace	Meditopia	Undo	Waking Up
Information (content) quality	1.30	1.00	1.67	2.00	2.00
Educational content (training and education)	1.67	1.30	1.30	2.00	2.00
Guided user journey	3.00	1.95	3.00	2.51	1.95
Intuitive user interface	3.00	1.50	3.00	1.95	1.95
Performance/Functionality	3.00	1.50	2.51	2.51	1.95
Aesthetics	3.00	1.95	2.51	1.95	1.50
Multimedia features	3.00	3.00	3.00	1.50	3.00
In-app interactivity	1.50	2.51	1.95	3.00	1.50
User community (engagement)	3.00	1.95	2.51	1.95	1.01
Live content (e.g. webinars)	1.95	3.00	1.95	1.01	1.95
Multiple language support	1.67	1.30	1.67	0	0
Total score	**26.09**	**20.96**	**25.06**	**20.38**	**18.81**

TABLE V
CASUAL APP USER FEATURE PREFERENCES.

On the other hand, even though Undo scores equal to or higher than Calm and Meditopia in some areas, in other areas Undo scores lower, and further consideration is warranted. In terms of the predicted 'nice to have' features, Information (content) quality and Educational content, Undo scores higher than Calm and Meditopia. Therefore there are no improvements to be implemented. In terms of the predicted 'must have' features Guided user journey, Intuitive user interface and Performance/Functionality, compared to Calm and Meditopia, the scores show that Undo performs equal to Meditopia for Performance/Functionality but lower in all other areas. The Guided user journey, Intuitive user interface and Performance/Functionality (compared to Calm) warrant further attention. In terms of the remaining predicted 'must have' features, again Undo scored higher than the other two apps for its In-app interactivity feature, but the scores in all other areas imply that Undo performs significantly lower than Calm and Meditopia, suggesting areas that Undo could improve.

Interestingly, as was the case for the dedicated user analysis, the overall position of Undo in relation to the other apps is the same in the casual user analysis as it was in the raw score analysis. This indicates that while Undo is designed for dedicated users, with an emphasis on quality educational content, sufficient attention has been given to features that are predicted to be 'must have' features for casual users. While Undo retains its overall rating above Headspace and Waking Up, it scores lower than Calm and Meditopia.

E. Open Issues and Future Work

We determine open issues and future work for the Undo app. We discuss the strengths and limitations of the app as identified in Section VI-D and suggest strategies and development approaches for improvement. In Section VI-D, we reveal that the primary strengths of Undo are quality of information (content), educational content (training and education), and in-app interactivity. In relation to all other features, to match the scores of the top-scoring other apps, Undo must improve. We recognise the limitations of the current version of Undo and intend to address these so that Undo's market offering is at least equal to the highest performing apps in the meditation app industry.

In order to determine the direction for future work, we propose to focus on those features for which Undo scored raw scores of less than 1.5. These include Performance/Functionality, Aesthetics, Multimedia features, User community (engagement), Live content and Multiple language support. These form the basis of the visual future Roadmap for Future Development that is presented in Appendix D. These particular features address the needs of both dedicated and casual users, as is described in the two points below.

Dedicated Users

The analysis shows, the Intuitive user interface is of great importance for dedicated users. This feature is important because no matter how good the content quality and educational value, users must be able to easily navigate their way around the app without getting lost or confused, having to consult a manual or having to ask others for help. If app navigation is difficult, it is unlikely the user will persist using the app. To support dedicated users, Undo must ensure that the user interface is intuitive and as user friendly as possible. The Roadmap for Future Development includes Intuitive user interface improvement. Development opportunities for this feature will be made through iterative improvement based on user feedback – that is a process of ongoing improvement in response to user feedback, obtained through surveys, direct user contact and user community interactions.

Another important feature for dedicated users is the Guided user journey. This feature enables users to maximise the benefits they receive from their use of the Undo app. Development opportunities for this feature include an improved user progress system that shows user's progress as they work through the various chapters and modules, the ability for users to make notes and denote favourites within the app, and the ability to personalise their experience, such that content is tailored, based on the user's interaction with Undo.

Casual Users

The remaining features, Aesthetics, Multimedia, User community (engagement) and Live content (e.g. webinars) are considered to mean more to casual users than to dedicated users. Casual users may be less likely - at least initially - to value the quality, consistency and educational value of the content. As casual users are using the app in a more informal, occasional manner, they may overlook the developmental journey the app offers and therefore value the 'lighter' aspects of the app. Undo scored less than 1.5 in the raw scores for all of these features. These too have been added to the Roadmap for Future Development for further attention.

Some of the development opportunities identified for Undo in regard to the features mentioned above, include group meditations. These are live meditation sessions with Undo's au-

thor, Matthew Zoltan, 1on1 discovery sessions with Matthew Zoltan, multi-voice meditations, integration with Apple Health and Google Fit, download content manager, Endo web solution, community assignments for achieving goals and meditation programs for companies (as detailed in the Roadmap for Future Development (cf. Appendix D)).

VII. CONCLUSIONS

This paper presents a fourteen chapter gap-bridging meditation app to help app users recover from the broken bodymind condition. Traumatic events in an individual's life cause body and mind to separate and the individual then operates as more entities than one. That disconnect affects the individual's physical and mental health, relationships and their ability to cope with daily life. The indoctrinations of cultural, social, religious and educational beliefs, as well as addictions to technology and other activities also prevent the human being from integrating body and mind. We use a wide range of literature from philosophy, psychology and psychiatry to explain the phenomena of disconnection and the effects it has on the human body, but also to stress that interoception - sensory wisdom - is the path towards recovery. There exists a proliferation of meditation apps to help people with the stress, anxiety, depression, and the many other disorders a person may experience in their disconnected state, but other apps have largely overlooked the importance of interoception.

As this white paper has sought to show, to heal the effects of life's influences is to recover the sensory experiences of our own living existing body/self. Only through feeling into the sensations of the human body is the individual able to reconnect body and mind, allowing the self-balancing process of nature to take care of physical and mental conditions naturally, without intervention from outside influences. This is something individuals must experience and discover for and within themselves. The Undo approach towards reconnection is illustrated through the running cases, concept maps, and the figures and tables. The white paper describes the education and guidance the app provides to enable users to resolve their disconnection experientially, on an ongoing basis, whenever required, for and within themselves.

With this work we demonstrate that Undo is distinct from other meditation apps because it addresses problems at their origins, in the physical sensations. In giving users the knowledge and power to rediscover and recover their unique individuality, the Undo app enables people to achieve optimal health and live a connected and deeply fulfilling life. This is the outcome of bodymind reconnection.

Our research questions centre on the self-discovery process that the app guides the individual through; the acceptable, alternative view of an individual's condition that the app introduces; the significant change that occurs and continues to strengthen and evolve in the app user and the 'how to' approach of reconnection.

App users learn that everyone is born into this world as a living, sensory being, that we live in this world through the needs of our bodies, before the invention, learning and subsequent imposition of thought, ideas, concepts and belief systems. Such thoughts, ideas, concepts and belief systems, but also traumatic experiences often distort our sense of being, manifesting themselves in the body as muscle tension or as feelings of numbnesss, discord or dissociation. The app introduces users to the primordial function by which we make sense of the world: the sensorimotor structures and capacities of our human body and its extraordinary ability to self-regulate. Essentially, users learn to feel again. They learn to sink beneath the superficiality of disconnected thinking into the deeper felt sense of their physical bodies. They discover how to live from that deeper felt sense of being. Living from felt sensations and through the senses is an empowering process of self-discovery that is simultaneously a process of reconnection. That reconnection is attained through feeling into the sensations in our bodies.

Users learn furthermore that dissociation and its associated behaviours is a natural reaction to distressing or overwhelming experiences. They learn that their stress, anxiety, depression, anger, obsessions and compulsions are behaviours resulting from the intense distress, whether remembered or forgotten, they may have experienced. They come to understand that when living in conformity with the social conditions into which they are born, and based on their overwhelming and distressing life experiences up to this point, they are, through no fault or flaw of their own, as they should expect to be – isolated, anxious, distressed, in physical and mental pain, desensitised and disconnected. Users learn that these are not problems to be fixed or to be made to disappear, rather they are perfectly fine as they are. There is nothing users need to change about themselves, nothing to self-improve. They recognise that self-improvement is not something that can be achieved but that it is an idea or a belief about how an individual could or should be, that puts them in conflict with the way they are. Users learn further that beliefs are culturally constructed, causing more confusion and distress about the way the individual might feel about him or herself. Users conclude, they are not inadequate, a failure, or lacking in any way. The pain and distress they may feel, and any disconnection itself, is the body's call for attention. Pain and distress are feelings or sensations in the body that trigger the healing process to reconnection, they are not there to harm a person. The act of feeling and sensing into our bodies is at the core of our natural, biological experience of living life. When users begin to accept and embrace themselves exactly as they are, in their current condition, they develop a healthy relationship with themselves, in exactly the condition in which they find themselves. Users then develop, understand and appreciate themselves in great depth, instigating a process of significant change within themselves. That process of self-discovery will always be a process of sensing into the body, from deep within. Self-discovery can be experienced only through our bodies. When sensations arise, when these are felt, in that very moment, re-connection occurs within the individual, as well as to others and to the world around. That is the process of bodymind integration that continues

to strengthen and evolve into an ongoing and empowering process of self-healing and self-discovery. Moreover, when life is lived through the biological, sensory perceptions of the body, the body will heal an emotional injury in the same way it will heal a physical injury, naturally with no outside intervention, and beyond conscious thought.

As discussed throughout this paper, we live life through immediate experiences. That is, we either learn and then experience the thought-based life of the human conditioned world and its disconnecting influences or we re-learn to experience the sensory, feeling-based life of unadulterated biological nature, that that we are. That is the process of re-connection and self-discovery. And that is the Undo approach that distinguishes Undo from other apps.

The Undo approach towards reconnection is self-discovery, by feeling into our bodily sensations and by living from that felt-sense. Importantly, self discovery occurs only from within. We cannot know ourselves by applying techniques, such as those offered by other meditation apps and by other outside-in approaches. When the focus is on a technique, we will not feel into our original sensations. We will not process our life experiences from the origin of our bodily sensations, from inside-out. We therefore will never penetrate to the inner nature of our selves. Consequently, we will never know the true nature of ourselves, that that is happening inside, naturally, of its own accord.

In summary, the Undo app guides users through the process of feeling deep into the sensations of the body, into their stress and pain, feelings that individuals usually try to avoid. By feeling deep into our sensations, the healing force of nature is triggered, within our own bodies. Those sensations, arising from within our bodies, are infinitely more significant than any abstraction or interpretation proceeding from that part of our thinking process, because physical sensations are rich in content and allow presence of experience. Accordingly, at the core of the Undo approach is re-connection, a process of re-sensitisation. Re-sensitisation begins the healing process of inner change, self-discovery, wellness, strength and evolution.

As future work we see two lines of development. One, publication in a quality refereed journal is important to the wider recognition of the Undo approach. We therefore aim to achieve scholarly legitimisation. In terms of ensuring scholarly legitimacy, this paper has left many questions unanswered and the data gathered from the small-scale study for this paper is insufficient for the evaluation of scholarly based efficacy and credibility. Another major limitation is that the Undo approach is largely untested outside the framework of the Undo team. Hence, the next step is to approach a research organisation for future research. The rigour of research work within an established research organisation is an important step towards determining the credibility, quality and efficacy of the Undo approach. We hope for the results to then be published in a scholarly journal.

The other line of development is commercially oriented. In terms of market experience, Undo cannot compete with other established meditation apps. Therefore, one aim is to attract investors to facilitate the commercial development of the Undo app. Content-wise, the Undo app has a superior approach to other meditation apps, but we acknowledge the shortcomings and limitations in Undo app feature development, as identified in Section VI. We see future work in all those areas, including Performance/Functionality, Aesthetics, Multimedia features, User community (engagement), Live content and Multiple language support. The Roadmap for Future Development (cf. Appendix D) highlights features we propose for future work and sets out a time frame within which we aim for these features to be added to future versions of the Undo app.

Matthew Zoltan is an author, a public speaker, a natural health practitioner, founder and facilitator of Quiet Retreats and the Co-founder and author of the Undo app. Born in 1960 in Perth, Western Australia, Zoltan left school at the age of fifteen and began working as a sheep shearer and horse breaker in the Australian outback. For the following three years, he lived with and learned about himself from the physical pain caused by the demand of this heavy manual work. This was a fulfilling experience for Zoltan because it allowed him to test the boundaries of his strength and endurance and familiarise himself with the limits of his body. It was this raw and physical experience that revealed to him a sense of himself that was uniquely his – that of a physical body that experienced and consequently evolved through that pain. The pain he felt every day was for him, a feeling with real benefit and substance, but that he only came to fully understand later in life. Although his work was extreme the pain of it made him feel alive and real, and tempered him for life to come.

Thus Zoltan's younger life experience of the natural pains from life was foundational to what eventually, step by step, developed into his unique understanding presented in the Undo app more than 40 years later.

During his teenage years, in the off-season of shearing, Zoltan learned the basics in osteopathy, massage, and the practice of yoga. Working directly with the human body, he recognised within himself a deep sense of vibrancy and vitality that quieted his thought processes. In this he found that he was able to sense layers of distress in the body. He had tapped into and felt an unspoken physical understanding between his own body and others, which when he worked on people, triggered them to heal various ailments and to rejuvenate. This experience increased his interest in the deeper functioning of the human body, as well as the relationship in how mental stresses impact on a person's physical condition.

Throughout his youth, Zoltan had observed that those around him lived their lives according to expectations, and that they had no understanding of themselves outside of these defining expectations. He could not bring himself to live his own life in that way, and therefore recognised the need to understand himself far more deeply and to find another way. Thus at the age of nineteen, drawn to learn more about meditation as a way to achieve this, he attended a course on Yogic ideologies and meditation practices. Within a few months of attending this course, he left the opportunities of a successful family enterprise behind and naïvely embraced the life of a celibate monk.

For seven years, Zoltan studied and taught Yogic philosophies and meditations, living the life of a yogi monk in the Mount Abu Yogic university, Rajasthan, India, and ashrams in various other cities across Australia and Asia. He later worked as a trouble-shooter and as a facilitator of conflict resolution within the Yogic order, travelling to different ashrams using his natural abilities in this area. His time as a monk exposed him to knowledge, skills and direct experiences that are unavailable in the usual disciplines of the study of the human condition and of life. During his time in the Yogic order, Zoltan began to understand for and from himself the influences at play within life as a whole and the effect these have on the individual and on society.

It was during his years as a monk that Zoltan had the first of many extreme experiences of living with a division between the mind and body. This came as a result of conditioning himself daily with various mental and spiritual practices, studies, and rigid puritanical disciplines to divert the energy of natural urges.

Over time, whilst he was self-imposing these doctrines in meditations and in life, Zoltan was also acutely conscious of his deeper physicality – and that something was changing in him. It was during long periods of sitting still for days at a time that all abstract and mental practices would fall away, leaving him with nothing more than the basic sensation of his physical self. Included in these basic sensations, Zoltan also discovered that as sensations of physical pain built up and then dissipated within his body, this would repeatedly unlock thoughts that then formed into clear expressions of previously unresolved memories of his life. Over time it became clear to Zoltan that this release of pain during meditation was also the release of information held in those pains – those physical sensations. He discovered the release of pain was actually the release of the unresolved harmful effects from life that were stored in his body, and by now being released, they were also remembered cognitively.

Following these events of feeling and resolving his pain, many physical or habitual mental conditions would also cease to reoccur from that point on. Repeatedly living this experience, Zoltan came to understand that thinking is a bodily function that is intimately physical rather than separate and abstract - that the existence of a mind or soul is entirely dependent on thought and imagination. The idea of mind, spirit or soul was revealed, to him, to be a total illusion. Thus the entire foundation of his life as a monk was exposed to be entirely without substance and collapsed.

From this newfound understanding, Zoltan began to challenge the doctrines and hierarchy of the Yogic University and Ashrams. As a result, others in the order were exposed to his realisations, triggering their own questioning process. Zoltan was subsequently removed from his position of influence and eventually asked to leave. He returned to Perth Australia, aged 27, where he opened a massage and healing clinic.

The advantage to Zoltan and the significance to the Undo app of his time spent as a monk, was the unheard of understandings that he gained. He had come to understand the significance of pain, how memory is stored as information and tensions held in the body, and how disassociation from trauma can be healed. During the early years in his clinic, he developed ways to integrate his unique understandings into his massage and healing. Two years later, he published the first book of his findings on the interconnection of mind-body pain and memory, findings he had first discovered for himself as a monk and that were now being confirmed as relevant for the

healing of others.

Zoltan continued working as a massage therapist, osteopath and counsellor, treating many hundreds of patients. It became clear and was established for him many hundreds of times over that distortions and tensions, and even deeper layers of trauma that were held in the body's tissues, occurred due to the unresolved effects of their life experiences and their resulting harmful or confused thinking patterns. After treating many people with the same muscular distortions and tensions, particular patterns repeatedly revealed themselves. Distinct unresolved concerns or traumas had manifested themselves as recurring illness or physical pain in specific areas in the human body. That is, pain manifested in each specific location for reasons pertaining to the action, expression and purpose of that muscle, organ or limb in the human being's life. Zoltan had discovered the connection between the effects of life and the tensions, pain or illness stored in the body. He had discovered what had been overlooked in all therapies until then; that a person's mental and physical health are one integral condition. With this unique insight into the human body, his results were unprecedented. People's previously unhealable physical conditions now healed, simultaneously resolving the associated mental distress that the person had been suffering, and vice versa. For the next 20 years he successfully treated some 30,000 people with his approach.

Zoltan's direct experience of and interest in his pain throughout his life, and his subsequent discovery of the correct and healthy approach to pain had been transformational, thus it was only natural for him to help his clients learn to approach their pain in the same healthy way that he discovered had worked for himself. That is, to feel into the pain from within the pain itself without any intention of being rid of it to allow the pain to release itself. This is the natural meditation of the body Zoltan had stumbled on. As he can attest, this approach reveals continuous (non-spiritual and non-belief based) factual meaning in the physical reality of everyday life.

Trialing his meditation approach in 210+ meditation retreats with clients suffering dissociation, he has demonstrated his approach to be the only meditation that enables reconnection and the healing of dissociated trauma. Conversely, from his extensive investigation and experience of all forms of meditation over a 45 year period, he has found that the traditional mind-based (thought-based) meditations (as opposed to his body-based meditation) actually cause and increase dissociation. He has found that only when we are disassociated from the felt sense of ourselves, do we feel lost or flounder in the mental states of meaningless beliefs and searching.

Many experts understand the nature and characteristics of trauma and dissociation, but Zoltan does not know of any that know how it can be cured. His unique body-first approach to meditation has proven effective for reintegrating the broken state of a person suffering a disconnected, dissociated body-mind. He has found its healing is achieved through deeply feeling (not thinking about) the deeper sensations of underlying pain and disturbances held in the body. Thus allowing and achieving reconnection and relief of underlying unrealised pain and trauma as a natural process of the body healing itself. Zoltan's body-based meditation integrates mind and body, curing dissociation, as evidenced by the healing that has resulted in the people he has worked with.

His line of enquiry today is a phenomenological activity of clarification about the human condition, a critique of thought and ideas with a practicable approach for a solution. Zoltan has a unique ability to talk about things that people find difficult to understand, giving insights of depth about the power of body sensing. Those insights are the result of his own real, lived experience of that that can be derived only from the sensory wisdom of the living body, self.

At the core of the Undo app is the process of body-mind self-understanding and re-connection. The app content is based on the life work of Matthew Zoltan, who has worked for almost 40 years with people suffering from stress and trauma. To understand Zoltan's work is two-part. Firstly, it is to understand questions about the human condition and to see a person's situation in the context of the wider social circumstances of which we all are a part, circumstances that are inherently destabilising to an individual, often leading to bodymind disconnection. Secondly, it is to see and know how to reconnect these back into one whole and healthy person; one bodymind. The following is a summary of Zoltan's work, where he outlines the concept of dissociation, as he understands it, and describes the circumstances that trigger dissociation and the impact dissociation has on the person as an individual and collectively on society as a whole. He then introduces the sensory bodily approach he uses to help resolve all problems. Sensing, as he says, is a living function of feeling and existing, which is needed to maintain connection to all existence.

Disconnection, a thought-based perception of self

Zoltan understands many of the problems of humanity as being a consequence of stress, of physical and emotional trauma. These problems of humanity ultimately are a consequence of trauma or harm to the individual, including influences of the thought processes, whether religious, political or other ideological thought systems. Experiences of over-thinking and the mis-use of thinking (such as the repetition of personal memories to maintain an idea of self) often lead to an ontological conflict in a person, causing a divide between the sensory life of our bodies and our authentic sense of self. Before the influences and interpretations of thought kick in, in its unadulterated state, our true sense of self is embodied. That is, our sense of self is felt throughout our bodies and as our bodies. It is felt as our primary and true sensory experience of ourselves. In this pure, unadulterated state, by way of our senses, we experience to the full the world in which we live. That experience is all too often overshadowed by our thought processes, and in particular, by our over-use and mis-use of thought. We tend to describe and interpret our primary, sensory experiences – whether these originate from stimulations outside of us or from within us - and transform them into a secondary experience, removed from the reality of our bodies, from the world and life. When we rely too much on the information that comes from the outside of us, when we rely too much on our thought processes, our bodies and what we call the 'mind' - which Zoltan understands is simply the activity of thinking - separate. Then that activity of thought is no longer connected to or grounded in the reality of our bodily experience. We may feel that bodily reality, yet at the same time we may be thinking about something else that is entirely unrelated. Or we may be mentally reacting to and misinterpreting that bodily

experience completely, causing it to only seem unrelated, and so we ignore the guidance it is providing. That divide, in its most extreme form, is incompatible with life as we know it. For what we are ignoring is that everything we know about ourselves and this world in which we live is understood not through the selective interpretations of the intellect but by the means of the physical sensations in the body. And when our thinking or 'mind' operates in isolation to our bodies or in reaction to bodily sensations, then we are no longer grounded in our physical reality and we have trouble sensing, or sensing correctly what is going on in our bodies (Cf. Van der Kolk, 2015, p. 95). In this dissociated state, the internal or external facts of life - as they present themselves to a person experiencing that disconnection - become distorted by that person's imagined perceptions. Life is no longer grounded in and experienced through the primary sensory perceptions but interpreted through the secondary fictitious thought processes.

Almost every person will experience at some stage in their lives to some degree bodymind disconnection. Mild disconnection originates when the normal, balanced individual fails to resolve a problem, and identifies instead with that experience that caused the distress or pain. The person may react to that experience by rejecting that factual experience and wanting that experience or its outcome to be another way. That desire is incongruent with the reality of that experience. We cannot underestimate even the effects of minor unresolved distress or pain, because that too may result in inexplicable fear, or other debilitating behaviours. In other circumstances, the individual may exaggerate the realities of an experience and develop a fixed opinion about the effects of that experience. This too will adversely influence future life experiences.

Zoltan defines dissociations as thought-based perceptions of ourselves that typically result in a distorted sense of self. Over the life span of his work, in the people he has worked with, he has observed varying degrees of dissociation, ranging from mild to severe. From his view, distortions begin at one of two points. The first (1) is an experience of harm that causes distorted self-beliefs. The second point (2) is when a person identifies with a belief system - although distortions may occur at both of these points simultaneously, when the influences occur at both points at the same time.

1: Dissociation occurs when an individual has been deeply and or repeatedly harmed. In order to cope, the person will typically block out the memory of that experience, but the effects remain locked in their bodies, forming part of their self-experience. From then on, how it 'feels to be me', changes, even though the individual may not be able to remember the experience that caused the change. The harm the individual suffered becomes embedded in their bodies in the form of physical tension. That tension changes the way that person feels to be themselves from then on. Because they are dissociated from that harm and the corresponding tension in the body, the individual cannot resolve the problem.

The impact and the extent of the resulting pain or suffering affects the way the individual feels about the

distress and pain they experienced. As a result, the person tends to identify with the sensations associated with that distress and pain, forming a false perception of who they are that is aligned with the previous harm. This reinforces the disconnect between his or her sense of self and the body, and prolongs the effects of any previous harm.

2: Dissociation also occurs when a person identifies with an idea or a belief system, such as a religious doctrine. To identify with an idea is to believe in something that does not exist. An idea is just an empty thought that has no meaning until a person identifies with the idea and personalises it. That idea then becomes part of their identity. This - now personalised and superimposed idea - is so influential that it is now embodied in a person's whole sense of being, changing them emotionally and changing how they think about themselves and the world around. Empty and untrue thoughts are thereby given an irrational, exaggerated importance, exerting meaning and power over individuals that contradict their true self. People generally identify more readily with an idea or a belief system when they have already accumulated a great degree of unresolved pain, associated with distressing experiences. That pain remains embedded in their bodies in the form of tension and they experience a sense of lack or loss. Often, the person then follows belief systems to compensate for the disconnect from their true self, to alleviate or override the pain of bad experiences. Zoltan brings attention to the observable fact that emotionally vulnerable people - people with a weakened or lessened 'sense of self' - in the true sense - are more likely to believe in the dogma of a religious or of other ideologically motivated groups, and to being exploited by these groups.

By way of illustration, dissociation may start with religious indoctrination in childhood. Dogmatic belief systems inculcate standards of achievement on children (and on adults), shaping the formation of their identity. Children in particular are at risk of developing a false identity, before they are mature enough to make their own choices. This pattern of believing in a dogma - in an idea - causes a person to identify with that dogma or idea. Ideologies, whether they are embraced or imposed, alienate people because of the way they identify with the belief system, separating them from their individual bodily experiences and from one another. That identification causes dissociation. What is within us that meets the dogma's standard is acceptable to us but what does not is rejected or hidden, thereby forming two separate aspects of ourselves that are then compounded over time. Ideologies are immensely destructive to our natural sensory state of being, to our sense of wholeness or oneness of self.

Further, when the identification with ideas becomes emotionalised, and therefore exaggerated and unnaturally prolonged, a person's unresolved distressing experiences can escalate into a fixed, protective belief, which happens and which has happened historically. Zoltan alleges that such unresolved

experiences are the underlying driving force for the development of more complex belief systems such as a religious dogma or of other ideologies, encouraging religious leaders who promise salvation from distress and pain. It is only the dissociation from unresolved suffering and pain that propels our intelligence to deteriorate into such complex ideologies in the first place. That deterioration is caused by avoiding feeling into our pain. And so we flee into faith and belief, which Zoltan defines as further variations of dissociation, for when a person follows a religious belief, they disconnect from their natural sensory self-understanding body and the healthiness thereof. They instead identify with the idea and fragment further from their live physical sense of being. They fragment into various degrees of dissociation that is far removed from the healthy reality of their natural bodily sensations. Zoltan attributes the deterioration of a person on an individual level and the collective deterioration of the human species as a whole to the effects of varying degrees of unresolved distress, pain or trauma throughout life. Human problems are the consequence of fleeing the reality of that distress.

For example, people who have been subject to religious indoctrination about their sexuality may hold conflicting feelings about the sexual activity of their bodies. They may feel or hold in their genitals the tension this conflict has caused, and when sexually stimulated, they may experience guilt and shame. Guilt and shame now becomes an added, albeit a false, unresolved, sense of identity, affecting a person's quality of sexual or intimate connection in life. When that person experiences the guilt and shame in his or her body over and over, it distorts their natural feeling of being: I no longer feel me as I naturally am, and when I do, it shames me. To regain full health that person will need to recover from these kinds of unresolved indoctrinations and from the conflict with the natural feelings these cause. Only then will it be possible to release the tensions in their bodies, to re-connect and return to their natural state of being, to then enjoy natural feelings.

Extreme dissociation occurs also when one part of the self is unaware of the other parts of the self. Extreme dissociative disorders are complex and have far reaching effects on every aspect of a person's self-perception. For people suffering from extreme dissociation, life is experienced through imaginary perceptions where the self is encountered as separate entities that are disconnected from one other. Against this background, one or more personalities may play out, whilst another remains fully suppressed and unaware of what is acted out by the other. The reverse also occurs where the individual switches between one disconnected state and another, depending on internal and external pressures. The most damaged states of existence result from extreme and repetitive trauma commencing in early childhood.

Dissociation occurs further, to a lesser degree, when a person fails to understand other people's points of view. For example, religiously indoctrinated persons or persons with spiritual beliefs may not have the ability to differentiate between the dogma of their religion or spiritual ideas and the facts of life. They may defend the ideologies of their

doctrine, failing to see the real-life evidence that may oppose their beliefs. Persons with such biased or fixed opinions tend to develop a form of self-protective behaviour that is resistant to the freely flowing adaptability of the sensory life of their bodies when alone or with others and its ability to continually respond to every moment in life anew.

Zoltan's approach towards re-connection is not based on the historically changing, ever-expanding and often contradictory and complex descriptions, views and diagnoses of the psychiatric method, but on the experience and results of actual healing. From his experience, labelling people, diagnosing them incorrectly and offering ineffective therapies often add to the pain. Complicating the condition weakens the method of the healing approach. It also confounds the sufferer and so the distress and pain persevere. During his life's work Zoltan has consistently demonstrated that after the correct treatment even extreme levels of dissociation are healed, meaning that the individual re-connects body and mind and remains re-connected. That person thus is reintegrated as one being, as opposed to exploring endlessly what a person may suffer from or whether a person is even dissociated. When in this way suffering is alleviated and life quality for the individual returns to normal, unquestionably, something was resolved.

Zoltan is convinced that all degrees of dissociation originate with that first scission between body and sense of self – when our singular identity as a body disconnects into a secondary imagined mind-self identity. Even if the condition is complex, the approach to the resolution of it must be simple and straight forward, or complete recovery will fail to occur. Healing at the deeper level of the current and felt sensations or feelings in the body, rather than trying to heal from the mental emotional surface of a stress, removes the need for the more elaborate analyses and the confusing labelling of the condition. These labels tend to dissociate us further from the actual underlying condition. Whether a person experiences minor or major disconnection, the key to re-connection is to minimise thinking about one's condition and to feel into the feelings of distress or pain within the body. In point of fact, feeling into the body simplifies the entire process of healing.

Essentially, Zoltan predicates that the analytical approach and talk therapy of the medical experts to assess and treat dissociation is a form of overthinking that will not produce the desired results. It will prolong and worsen the condition. Over-analysing and then implementing various forms of therapy demonstrates that experts misunderstand dissociation and therefore do not know how to approach the 'cure'. Zoltan criticises also the widespread use of drugs to suppress symptoms. Drug treatment, including the psychedelic micro-dosing trend, is not a cure. Their usage exacerbates dissociation from the condition. Without being able to feel our condition as it is, not after but before it is chemically altered, we cannot learn or evolve from it, make peace with it or trigger its healing process. For once the feeling we are suffering is changed, we are no longer feeling that which we are at odds with and needing to feel. We are feeling another chemically induced state and have dissociated from the true and original feeling. Suppressing or altering the true feeling of a condition through drug therapy again overrides, prolongs and worsens the problem. Worse yet, drugs prolong self-ignorance. The significance of the unwell state - re-association and self-learning = healing - is completely overlooked and therefore the re-occurrence of the condition, in whatever form it takes next, is more probable.

In summary, to dissociate is to split from the one into the many, from the simplicity of the bodymind into the complexity of the thought process. When we experience simplicity, we feel alive, real and whole, but when we fragment into complexity, we shift into the story, into the various activities of thought and we experience a disconnected, imaginary reaction to our deeper and actual feelings of distress and pain. This is an important point, it epitomises the way the thought processes of the 'mind', the stories we invent, are dissociated from the feeling/sensory capacities of the body that also embody its capacity to heal.

To shift back to simplicity is to not contemplate the imaginative distractions of our 'mind' but to reintegrate with that singular trauma or pain that is located and felt in the body. Over the years, Zoltan has observed that the approach of feeling into the body will help every dissociated person re-associate, regardless of the degree of disconnect. Although, a person who has experienced extreme trauma and subsequent dissociation will need more persistence, time and guidance to achieve reintegration than someone who has experienced mild trauma.

The forming of the second self and its projection onto the world

Zoltan takes as his point of departure the proposition that the bodymind dissociates into a 'second self' when trauma occurs, and that people then collectively project that 'second self' onto the world.

As stated above, that first disconnection from our true singular sense of self is caused by identifying with an idea. That idea becomes personified as a second self, in the form of a mind, a soul, a consciousness or spirit self. That is a second, additional self to all we are - a body.

This thesis may very well be valid, for the consequences are twofold:

A. When we do not understand how the body senses, feels thinks and remembers, or know of its natural inherent intelligence, we invent or imagine a separate idea-entity that we see as responsible for these bodily functions.

B. When we then mistake the on/off activities of thinking to be a separate and permanent 'mind - self' that performs the task of thinking, we imagine a second one of ourselves. We believe we function independently from our bodies. This is the first stage of dissociation, the split from the oneness of ourselves into two. That is the basis for all other personal or social disconnections and conflicts. For example, that disconnect is revealed in the separative nature and dividing effects of religious or cultural beliefs. That divisiveness is the cause of

people dis-identifying with members of their own species, leading to an insensitivity or inability to 'feel', in turn enabling humans to cause excessive and deliberate harm to their own species, without remorse. This defective behavior is unique to one animal in one condition only...the dissociated human animal.

And why this is so, from Zoltan's view, is because we separated ourselves into two. On the one hand, we are a real sensory flesh based body-self, and on the other, we are an unfeeling, unalive thought based imagined self. That, he understands, is the single cause for all personal and social problems. The relatively simple remedy to all human problems, thus is bodily re-sensitisation. And that is the function and purpose of the Undo app.

As Zoltan proclaims, all delusions and confusions in life originate from that belief in a second self. The second self is a notable feature of the 'mind', the mind itself is an 'idea of a self'. All personal or self-ideas essentially alienate, because they are detached or removed from the physical sense of our actual selves. Every time we identify with the 'idea of a self', we dissociate or disconnect from our inner, authentic, whole and singular 'sense of self'. We thereby escape any distress or pain we may feel within that authentic sense of self, forming instead a secondary, imaginary perception of ourselves, departing further - or dissociating more - from the physically evident, felt and known sense of ourselves, departing also from the understanding of our condition known within that sense of self. Fear and avoidance of distress and pain is the original motive for all self-deception, and the catalyst for the formation of an imaginary second idea-self, or mind-self.

It has consequences when we are not tuned into our bodily senses, when we experience ourselves and the world as though we are separate from our bodies. Then our beliefs in religious and social/cultural/political thought systems as well as our general views of the world are based on our conscious and unconscious - habitual - views of ourselves, forming a second imaginary identity or 'mind-self'. That secondary mind/self is the original source of all further delusions and responsible for our projection of our imagined 'duality of self' onto the wider world. Otherwise stated, we experience a dichotomy between our real physical sensory self - that is real because it exists - and an imaginary mind-self - that is not real because it does not exist. That dichotomy extends to religious and other ideological belief systems, for once we have developed an imagined, non-existent-self - beyond the real body self that exists - we automatically repeat and project that dual perception to the external world. We imagine fantasy worlds - worlds that exist beyond the real world - such as heavens, hells and various other fictional places. In some religions, these fictitious places of existence are to be occupied by this second, imaginary mind-self after the real body self has died. Indeed, one of the main functions of our imaginary second self is to envision an imaginary second world or realm or life for the imaginary self to exist pleasantly.

Without that first imagining about other selves we have no basis for other fabrications and would not come up with the second imagining about other worlds. Our living body that we are, as we all know, dies at some stage, in that real world that we know exists. We live in that real world by the way of our physical senses and by the way of our immediate sense of our own life, up to the point where we die. Death means 'end of life' – the end of all feeling or physical sensations and the function as and of one's self.

Zoltan concludes that our original confusions about a second imaginary mind-self result in all confusions we may have about our real-world surroundings. Questions such as 'what is the meaning of life', 'is there eternal life after death', 'do we have past lives', 'do we re-incarnate', 'where do we come from', 'who am I', 'is there more to life than we can sense', or 'what causes life', result from that lost sense of self and a lost sensory connection with the world around. Such unanswerable questions about life arise out of an unnatural and discontented state, caused by dissociating from the uncomfortable factual realities of life. Only in seeking escape from the emptiness of our discontent, caused by the disconnection from our distress and pain, do we ask wrong or inappropriate questions. In the associated state, we sensorily understand the existence of the real body/self and the existence of the real world. We therefore no longer feel the need to ask these kinds of questions. As Zoltan attests, he himself has replaced a thought-based life of perpetual questions with a life of sensory experiences that provides access to the facts of life and perpetual solutions. He stresses, there is no escape from the facts, including the facts of our pain, only the insanity of the varying degrees of dissociation in trying to escape. Unanswerable questions thus are obsolete in light of the complete fulfilment we experience when we live by the way of our senses, when we can be and accept our real, authentic, whole, realised self, in whatever unique condition that may be.

As noted previously, dissociation into an imaginary second mind-self prevents us from feeling into our bodies, obstructing the process of recovering that whole sense of self that is required for self fulfilment. The greater the degree of dissociation, the lesser sense of fulfilment we feel or experience. In short, the more we think the less we are able to feel or sense. The less we feel or sense, the less we live life to the fullest.

Accordingly, every time we identify with a thought - that idea-based mind-self comes into being - we dissociate and at the same time we desensitise from having access to our senses. We sever ourselves from our bodily singular sense of self and from the self-evident and existing facts of life. Only in this disconnected state are we prompted to ask questions about life, and only because we are confused about our own true identity - what and who we are. We can't even begin to imagine the magnitude of the consequences of this kind of thought.

Zoltan underscores the non-existence of the imaginary 'second-self'. The mind is not an organ that exists, it is only an activity of thinking. Mind is no more than the on/off activity of thoughts and ideas. When someone believes the mind exists, in its own right, it gives rise to an imagined sense of permanence, forming a second imaginary immortal self, operating in reverse

and opposition to the body's alive singular mortal sense of self.

Resolving dissociation

Zoltan draws the picture of our human dilemma by presenting in detail in the Undo app a practicable solution to all our problems - re-connection - if we so choose to take the challenge. It entails activating for ourselves the healing of ourselves, to then discover the wholeness of bodymind re-association and reintegration. Zoltan maintains that the real and only effective answer to re-association is to heal the pain and end the personified thinking that caused us to dissociate in the first place. It therefore will be first and foremost necessary to free ourselves of the disparate ideologies that only aid in dissociating us from the reality of ourselves, and from our knowable bodily sensations. To re-connect and to move forward healthily in our lives, we will need to disregard all belief systems and feel into our senses, into the knowledgeable wisdom of our bodies.

Zoltan shows Undo app users how to reunite with their whole singular physical 'sense of self', thereby to be fulfilled and remove the need to ask unanswerable questions about life. His philosophical underpinnings negate all dualistic views of ourselves and recall nature's - the body's - natural healing ability.

Zoltan offers his tried and tested solution to all problems. The solution is to overcome and heal our resistance to the pain, the driving force of all fantasies and escapes, causing us to blot out our present true self. The key is to feel into that pain that cuts us off internally from everything that exists, that pain that creates a resistant identity made up of thought reactions to the realities of our condition. Physically feeling in and throughout the body of me, however it feels, will resolve confusion about my true identity. The individual, I, will discover, there is only one real me. The other, the second imagined me, is made up of my thought reactions, as a result of my denial and avoidance to feel the distress or pain originating within me and trapped deep in my body. Until I feel deeply into my body, into the physical stress and tension, as the sensations arise, finding true contentment within myself and with life as it happens, may not occur.

To remove our tendency to further confuse thought with 'mind-self', we must remove our imagined second-self and the confusion it creates. When we remove our imagined second-self we remove the imagined separations in ourselves and the reactionary thinking - the mental illness or insanity - that comes of this. That in turn removes that that causes us to suffer our pain and our life experiences, leaving our bodyminds intact and whole with our pain as it actually is. 'Suffering' of pain then changes to feelings of relief. We now have the clarity to feel that pain - as painful as it may be - without causing its overwhelming exaggeration and a consequent need to escape by separating into an imagined second self.

By reintegrating with the feelings of our pain, we are able to feel and know our pain as it truly is. That pain and the feeling of it are one. Feeling pain directly in this way activates our body's natural ability to perpetually self-heal, allowing it to recover from the inevitable effects of life as we live it. When felt as it is - before our thought reactions exaggerate the pain and we succumb to overwhelming suffering and misery - pain is felt as a relief, even though the bodily sensations may still be painful, in the body of me. In the absence of reactions, our true, unadulterated and tolerable experience of any distress or pain as it is can come to pass, as can its absorption, decontamination and evolutionary development of the individual. When truly felt as it is, distress and pain, Zoltan claims, is the causation and natural driving force of our development and evolution. Stress on a live organism forces development and evolution, but when that stress induces protective reactions and aversion, denial and imaginary escapisms result. These reactions are the cause of our suffering, not the pain itself. Our bodies are fully equipped to feel and process life, thinking is not. When under the pressure of prolonged distress or pain, thinking reverts to denial and avoidance. It escapes into fantasies and belief systems, or it invents and imposes techniques that alter our natural and necessary state. This causes further dissociation from the reality of our distress and pain. On this basis Zoltan emphasises the need for and the approach to bypass our thought reactions of denial and avoidance.

The key is to meditate, to access the meditation the body does naturally. Natural meditation is to sink deeper, beneath thinking, into the sensations within the body, to then feel the distress or pain in the body and to allow the feeling to dissipate or resolve. Zoltan has discovered this to be the way the body of any animal deals with distress, pain or damage. To feel our pain as part of us and therefore as inter-connected within the whole of our self, whenever pain is present, enables its resolution and thus our overall development and evolution.

Zoltan maintains that any thought-based endeavour of health professionals to help people be rid of their distress, pain and illness is the wrong approach. Reconnection and reintegration with our pain is the only real approach to full recovery. When Zoltan presents his views, he tends to talk about things people already inherently know. They recognise those issues as true either from their own experiences, or they may explore and discover these things anew for themselves. People are encouraged to reconnect with their pain by simply feeling their distress or pain in their bodies, as it is. By feeling the sensations within us - rather than avoiding, ignoring or trying to fix the condition - we activate and trigger the body's own natural healing process. That is nature's way. The body/nature then heals itself, as only the body/nature can and will do, of its own accord, in its own time and in its own way – beyond the comprehension of any thought process.

This is an important point since it follows that I am the body, the body is nature and I am nature. The nature of nature is to perpetually repair itself and gravitate towards and return itself to its most natural and whole state of optimal existence, of being. That is what the body does, naturally, if the body is allowed. To activate that process, to be healthy and whole, we simply have to learn to feel again.

Sensing, a living function of feeling and existence

Zoltan's line of enquiry resists easy classification and methodology. He functions as an independent thinker. His conception of the world is essentially phenomenological; he is interested in questions pertaining to bodily sense perception and the human experience. Sensing, he says, is a living function of feeling and existence. Sensing is the key to the authentic human experience. Zoltan's understandings about the human condition are not based on the study of politics, psychiatry, philosophy and theology. Politics, psychiatry, philosophy or theology cannot know what and how human beings think and know about themselves. Politics deal with social cohesion and personal freedom and are in a constant state of conflict; psychiatry, with its emphasis on genetics and brain chemistry and its demand for verifiable data, belongs to science; philosophy is the academic study of the nature of knowledge and existence, and theology, for the most part, consists of speculations about matters unascertainable to the human intellect, its dogma born from tradition and revelation. Those disciplines know nothing about the significance of feeling. To understand ourselves, we need to feel ourselves, directly. Self-knowledge is not gained from academic or empirical study, logical analysis or received wisdom, but from the in-built mechanics in our bodies: from our sensory systems, our skin, nerves, glands, muscles, organs, hormonal chemistry, brains and so forth; although self-knowledge is not restricted to these systems or functions alone. It depends also upon the body's direct sensory experiences and responses, uncensored by thought, that in turn are generated by the body's own systems.

Knowledge thus flows from the world inside us to the world outside; and knowledge flows simultaneously from the world outside to the world inside. Hunger, for example, is experienced and known at first within, in the body - before we recognise we are hungry. Hunger is first a knowing sense, known by and within our stomach - it is experienced within every sensory receptor throughout our entire being, throughout our whole bodies, our whole selves. In the same way, our sensed knowledge of the world outside flows into us through our skin, by way of our senses, into the world inside us, permeating each and every cell throughout our whole bodies, connecting the entire world outside of us with the entire world inside. Through the faculties of our senses we sense into the greater world inside of us and at the same time into the greater world outside, the world beyond that of our skin. All this happens before thought becomes involved, exposing the small part thought plays in our understandings of life's entirety.

Zoltan's solution thus to all human problems concerning our human condition is self-knowledge, that way of understanding that the body has. That knowledge is intelligible to us all, not from the 'outside in', not from the study of academicism, but through the sensory capacities of the body, from the 'inside out' flow of informative guidance of purely feeling. The body navigates through life differently to the way of the thought processes of the intellect. The intellect in fact does not understand life at all, it merely accepts or rejects information depending on preferences acquired as a result of bodily sensing. To feel hungry or thirsty, for example, are feelings generated from physical sensations, without which the intellect/thought cannot know whether the body is hungry or thirsty. Intellect, thus, is not strictly intelligent or knowing, it is capable only of repeating or interpreting that what the body already knows. The real function of the intellect is restricted to the mechanical details of life, such as following a recipe, for example, driving a car, or reading a map. Via the intellect we can study politics, sciences and other disciplines of interest but we cannot understand the self or experience life, precisely because intellect/thought cannot sense or feel. Thought cannot feel hungry, sad or sense danger. We have to feel hungry, sad or frightened to know we are. When it comes to understanding ourselves, how we feel about ourselves, whether we are cold, happy or angry, or whether we are gaining an immediate sense of others, our environment, and the world outside of us, it is our body that first and foremost senses, feels and knows what these experiences are in relation to itself. Thought cannot do this. It is the body that lives, the body that experiences this world, whereas the intellect, the thought process merely interprets or describes my lived experiences as a secondary process.

Thinking therefore is no more than a mechanical function brought about by the pressure of a sensation arising in the body. Those pressures of living sensations - of felt information in the body - precede thought and give momentum to the mechanical function of thinking. Without the pressures of physical sensations, thinking does not even occur. The body thus is always the first to 'know', thereafter the intellect interprets that which has already been understood sensorily. Intellect is merely the 'thought description' of bodily understanding, it cannot be used as a tool for understanding. Intellect by itself is an unfeeling, dead, mechanical function and therefore only capable of acceptance or rejection of a feeling. It cannot know the living sense of self. Thinking is the secondary interpretation of that which has already been sensed and felt in the body. It is only through inventing and adding the faculties of the intellect to our natural state at a young age that the duality of body/mind was introduced in the first place, together with all the existential worries and uncertainties in life.

Sensing in contrast is a living function of feeling and existence. To sense is 'to know' without confusion, without the need to question meanings of life. Sensing is a primary, direct response of the body, determined by raw undivided facts. We obtain all the understanding we need to survive in this world only when we can be in direct sensory response and connection to the external world, before we have understood on an intellectual level this world in relation to ourselves. All sensory understandings occur before thought kicks in. Thought is not for self-knowledge, thought can only describe what is already known sensorily. Other than using thought for anything beyond superficial or mechanical understandings, thought will only bring elaboration, misinterpretation and confusion into

life.

Zoltan thus presents an alternative, comprehensive approach towards an experience of self-understanding, development, and evolutionary growth. His approach is not based on scientific method, technique or on any other kind of thought structure, but on bodily, sensory experiences of experiential, self-evident facts. Facts we can all know, and actually 'do know sensorily', as our own direct experience of life. That self-understanding sits outside all academic enquiry and outside all other thought based processes. It necessitates an experience, not as we have learned to conceive and describe ideas according to the categories of politics, science, philosophy and received opinion, but as a process of feeling deep into the sensory functions of the human body, as we feel and live our sensations, as they arise, from one moment to the next, in harmony.

APPENDIX C

Report on evaluation of trial of 'Undo' App

Prepared by Dr Gaye Mackenzie

August 2019

INTRODUCTION TO THE STUDY

From 20 June to 1 August 2019 a small preliminary study was conducted to evaluate users experience of using the Undo App. Sixteen participants were recruited for the study through a snowball technique. The group included ten females and six males, half from Australia and half from Europe and ranged in age from 21 to 64.

Prior to using the app, participants took part in a telephone interview where they were asked nine pre study questions related to their beliefs and experience of meditation and their general connection and contentment with their life. They were also asked to identify specific things that they struggled with in their day to day life and if there was something in particular that they would change about themselves. Participants were advised during this pre study interview that a follow up interview would take place after the end of the study period:

> *The things we will be looking for are any changes that you have noticed prior to using and during the time you use the app. The changes we will be focusing on are your general connection and contentment with your life, your general understanding of meditation and your general understanding of pain and illness.*

For the duration of the six week study period participants were asked to use the Undo app a minimum of five days per week for a minimum of five minutes per day or to complete a five minute meditation. Participants were asked to keep a log of their app use.

Ten participants completed the six week Undo trial and the post trial interview. The final study group comprised of eight females and two males, six from Australia and four from Europe. Three of these were aged 20-30, two in the 30-40 age bracket and five were over 40. Post trial interviews were conducted over the telephone and recorded with participant's permission. The recorded interviews were then transcribed and analysed thematically.

All of the final participants met the criteria in terms of minimum time spent using the app and all reported that they moved through the content more or less sequentially and then many revisited topics they found most interesting or useful. The majority of participants did not get through all of the Foundations in the six weeks and most of those who did said they rushed through the last ones to ensure they were finished before the trial ended. Despite these similarities people enjoyed different aspects of the app and its content which impacted on how they used it – some stayed more with the content while others enjoyed the meditations more so did more of that. Two participants said they moved to applying the principles while doing their own meditation towards the end of the study rather than using the app.

The post study interview questions focussed primarily on the changes in participants and their lives as a result of using the app for six weeks, however during the analysis the responses across the questions – and across the participants – also revealed some interesting insights about the participant's experience of engaging with the app and the material. This report is therefore presented in two sections – one on the process and one on the impact that the participants felt the trial with Undo had had on their lives.

A PROCESS – LEARNING TO 'CHECK IN'

Six of the ten participants had some experience of meditation prior to the trial but only three had used a meditation app prior to the trial. For many of the participants the trial was the beginning of a journey of becoming more aware and learning to 'check in' and listen to what was going on internally, both in their mind and their body - which for most were still quite separate processes after only six weeks.

The first s – becoming aware

For a number of participants this was the first time they had done anything like this and the increased awareness of their thoughts generally and the extra day to day reflection that the app exercises triggered brought mixed reactions. A couple of participants noted that at first the awareness made them feel like things had got 'worse' as they were more aware about what happened in their day and what it meant, or they had become more aware of their tendency to overthink. Asked to comment on the frequency of ruminating thoughts one participant provided the following reflection.

> *"I wonder if this has got worse. There were moments where because of what I heard in the app – scenarios where you're faced with things in your day – I was thinking about that a lot more and going back over my day which meant I was aware of negative thoughts or experiences. I felt like I was getting annoyed with people more because of the app but then concluded that I was just thinking about it more and was more aware".*

For this same participant becoming aware of the process that was going on with his thinking was the biggest benefit that he got out of using the app.

> *"I have detected that there is a sequential process in the way that I think and feel and process stuff. I wasn't expecting that to come out of the app use".*

Learning to catch the thoughts

For most of the participants their changes were centred around both having an increased awareness of their thoughts and learning a process for 'catching themselves' and stopping them.

> *"This was the biggest thing I noticed – I catch myself thinking something and remind myself 'No, that's not reality, put that aside'".*

For others who were more experienced with the notion of self awareness, the six weeks served as a reminder to be more conscious of what was happening internally. One participant made the following observation even though he had previously reported not noticing much of a change from using the app.

> *"… it doesn't matter whether the hatred comes from outside or if I am generating it myself, the feeling is the same. I had been familiar with that understanding prior to using the app but it wasn't present like it is now".*

Connecting to the bodymind and pain

Some participants appeared to find it easier to check in to what was happening with their thinking and didn't really understand or connect with the notion of the bodymind. This was evident when participants were asked if they could discern between feeling and thinking and emotion/thought – some expressed that they had difficulty with the concept:

> *"I can't tell the difference. The concept of it did make sense to me but it was hard. This is all very new to me and I hadn't thought about it before. I couldn't tell that each of those separate things were going on. It was all a bit confusing. I was a bit lost".*

> *"It took me a while to get my head around that the body and mind are one. You are taught that the body is one and the mind is another".*

For others it appeared to be the opposite – they didn't reflect as much on their thought processes - things were just 'better' - but appeared to embrace the notion of reconnecting with their body.

> *"I realised I spend too much time in my head and not my body and I had disconnected myself from my body. And understanding the ramifications of that in the fact that you sort of do it as a protective mechanism because you are obviously feeling things you don't want to feel where this process is no, you actually do need to feel them".*

> *"I definitely feel more connected with how the insides of my body are feeling. I had never thought about that before, about how my insides are feeling. So that is body awareness and that's good".*

> *"Sometimes I was somewhere and I suddenly felt my physical body. I felt … 'I'm here, this is me and that's my body.' That was something new and I felt it so strongly. This hasn't happened before, this realisation that this is now, and I am here".*

> *"The app has made me more conscious of conflating feeling and emotion and putting a name on it which starts the spiral about whether it is a good or bad emotion. Stopping the thinking/emotion allows me to keep feeling it".*

One participant noted that this reconnection with the body directly back to the Undo meditation approach and was able to compare it to previous mediation experiences:

> *"When I was doing other meditation methods, I was thinking of not thinking. But when I did the Undo meditation I was able to release all the thoughts that were in my mind because of the fact that I was feeling my body and when I finished the meditation I was feeling really, really good."*

The responses to the question regarding the Bodymind may have also been shaped by the way the questions were framed. Participants were asked "Are you able to discern between feeling and thinking and emotion/thought-feeling? Has this changed as a result of you using the app?". Because this was the focus of material in the app it appeared that some participants responded to the question intellectually, as if they were being asked to provide a 'correct' answer rather than just reflecting on their experience of connecting with the body. Accordingly, many described their difficulty with getting their head around the concept and wanting to revisit this foundation, however

Collective IQ Consulting.   ABN 52071469198. T: 0403 404 191. E: gaye@collective-iq.com.au   5

47

in other parts of the interview when they were describing events or if asked a more direct question about pain, were able to describe a changed relationship with pain. For example one participant responded that she wasn't 100% sure of the connection between thoughts and pain – she found the "information really interesting and got more awareness but that's all" but in another part of the interview described the following event:

> *"I had been having tightness in my chest for weeks and when I got it checked out the doctor said it was stress. Every night I would get into bed, lie down and relax and the tightness would come. On my first or second meditation I focussed on the tightness and it went away and did not come back. That blew me away and I can completely say that was the app. That was a wow moment".*

Another participant had difficulty linking the experience in her body with the intellectual understanding of her body and pain, reporting a positive experience in one question but still questioning the concept intellectually in the following question.

> *"I was walking when I was listening to the pain foundation, I really focussed on where the pain was and it went away and I thought it was ridiculous! I've tried focussing on it since and it hasn't gone away but it did that time".*

> *"… I have doubts about this side of things. I still think that if pain is there it is because you have hurt yourself in some way".*

CHANGES OR BENEFITS FROM USING THE APP

Prior to the study participants were asked to identify things that they were struggling with, how content they were, if they felt something was missing in their life and if there was something they would change about the way they are. While the issues and their responses to them were obviously different across the ten participants, the responses to the questions revealed eight key themes related to the changes and/or benefits that they saw in themselves and in their lives. While these themes are explored individually this is a process so there is much overlap and connection between the different themes. For example, an improvement in a particular issue such as confidence or assertiveness can be a symptom of, or a step towards, a greater level of self acceptance, or making time for oneself can be a step toward being more self aware or a way of managing stress.

A greater level of self acceptance

Just over half of the participants reported a greater level of self-acceptance at the end of the study period and for some this was the most important thing they got from using the app. For some this reflected an overall improvement on how they saw themselves while for others, using the app had started a process towards general self acceptance and/or acceptance of an issue about themselves that they had previously struggled with. The difference in the experience of this is reflected in the following quotes:

"There is more acceptance. You grow up with this belief that you have to be or act a certain way, but this is me, this is who I am and this is how I feel and that's OK, so actually I have felt a big shift in that".

"I can't say I am completely happy with who I am but I can accept it, and accept the feeling that I feels this way. I have difficulties with who I want to be and who I am sometimes. I still want to change but this is not something that I need to do all the time or think about all the time, it's gone into the background".

Feeling more relaxed and content

Most of the participants reported feeling more 'relaxed' and content since using the app but the term 'relaxed' was used in a variety of ways. For some it related to be able to relax physically to sleep better, feeling less stressed on a day to day basis or feeling less anxious. One participant who had reported having problems with anxiety and ruminating thoughts that prevented her from sleeping reported a marked change which she attributed to the use of the app.

"… it doesn't feel like it used to in the past, it doesn't make me feel anxious. The thoughts fade away, I don't get the anxiety anymore".

At other times (even with the same people) the term represented a more general relaxed attitude to life – a feeling of letting go or having trust that things were going to be OK.

"I am feeling more content, feeling that things will fall into place when they need to, it will be OK. I don't need to worry that I haven't done this yet or that yet, things will be OK.".

And another:

"I'm more tolerant of everything. I accept things how they are and don't have the feeling that I have to fix something or somebody or some situation. Some things are just how they are and you can't stress all the time that you have to change something".

Being more present

When asked, and the majority reported a definite reduction in the amount or frequency of negative thoughts during the study. One participant who had expressed a desire to be more mindful and connected reported an increased sense of being centred:

"I was mopping the floor today, and usually I would be stacking up the next things I have to do but today I was just mopping the floor".

Another participant reported an improvement in her connection with friends, with her feeling that when she met them she was not distracted or thinking about something else like she had previously.

Collective IQ Consulting.   ABN 52071469198. T: 0403 404 191. E: gaye@collective-iq.com.au   7

49

Feeling more focussed

Almost all of the participants (except one who said they were unsure) said they felt that they were better able to focus and less likely to be distracted during the study. While many of the answers to this question were short, for many it was very definite.

> *"I have been more on task. I get more done and in the order that I have set myself. I have been more focussed on what I have to do".*

> *"My focus has improved. I have had problems with this in the last 10 years. Now I think about it, it has improved during the study period – I hadn't realised that this has changed until the question was asked".*

> *"I have been really focussed. There has been a big improvement in my ability to map out a day at work and then block out new things that pop up that are distractions – I allocate those for tomorrow".*

Feeling more rational, less reactive

A consequence of being more aware of their internal thinking processes resulted in half of the respondents reporting that they felt they were less reactive to their external world, as captured in the following quote when the participant reflected on her interactions with others:

> "*I think about things a lot more and realise that it's been a lot of my thoughts going into things, not other people's. I would think that people were thinking something about me but now I realise that that is my thoughts".*

For several participants the simple act of making time and space for themselves had resulted in them feeling less stressed and able to take a step back and reflect on their lives better.

Improvement of identified issues – or their perception of it

As already noted, during the pre study interview participants were asked to identify things that they struggled with or they would like to change about themselves. Several participants identified physical such as weight loss or a skin condition but the majority of participants raised issues related to their personality or psychological issues. These included things such as an inability to handle stress, feeling unsettled, an inability to stay organised, negative thoughts and overthinking , being easy to anger or wanting to be more popular or liked.

In the post trial interviews all but one participant reported some level of improvement on their issues and the one that reported that things were 'much the same' noted later in the interview that they were responding to stress differently. While the skin condition had actually improved, for most people the most notable change was the perception of the problem – they had stopped judging it as much and gained more acceptance.

For some the improvement was quite profound:

"These have both been ongoing concerns for a long time now and now they're gone. It doesn't make sense to even think about myself in those ways anymore and I feel that when things don't make sense anymore that signifies there has been a profound shift".

For others it was more of an incremental change:

"I still want to feel more confident but I feel a bit more confident now. It's hard to tell but I feel the app helped me focus on myself when my focus is usually on other people or other things, and that helped me feel more confident"

Taking time for themselves/Focussing on themselves

Nearly half of the participants talked about how being part of the study and making time for the meditation gave them time for themselves which they had previously not made or allowed. This was a major a challenge for one participant who commented:

"I have a fear of taking time out of my work day to meditate, it feels wrong, like slacking off and I shouldn't be doing it. So that was a bit of a barrier to overcome during the study".

For another participant making time to focus on herself was one of the greatest benefits of using the app:

"I was able to focus on myself and not focus on anything else for a moment. That sometimes helped me calm down and find out what was really important in that moment".

Taking time out for themselves also had a flow on effect with one participant reported that taking time out for herself had helped with her tendency to get angry easily – she was letting things go more and not getting caught up in small issues.

Seeing others' perspectives better, more compassion for others

An improved ability to see and understand others perspectives and have more compassion for others was noted by a number of the participants after the study period.

"You have to be able to accept that, and know that there is a reason they're behaving the way that they are. You can't change that but you can influence the way you relate to them or speak to them".

One participant who had been dealing with a problem at work was able to apply this learning in how she responded to her boss.

"I am seeing it more from my boss's point of view. He is young and still has to learn how to treat people better to get the best out of them …. I've had some realisations about this".

CONCLUSION

"I am a believer in the universe bringing things at the right time. The app opened up my mind and made me more aware. I have always been interested in this sort of thing (alternative) and now I am seriously investigating my options of work opportunities in this area".

As noted in the introduction, this study involved a small sample of very diverse people in terms of age range, where they lived, their previous experience of meditation and also where they were on their journey towards self awareness. Despite these differences, the post trial interviews revealed some interesting similarities between their experiences of the process and the reported benefits or outcomes in their lives. Being involved in the study certainly had positive outcomes for the majority of the participants – some of which were quite profound as evidenced by the quotes contained in this report. Those who were new, or relatively new to meditation saw the six weeks as the beginning of a process or journey and that it had stirred an interest and a different way of seeing the world that they wanted to know more about.

WHAT DOES THIS MEAN FOR THE FUTURE OF UNDO

In extrapolating out the results of this study to predict the experience of future Undo users, it should be noted that this group had two factors that set them apart from the 'average app user'. Firstly, they were aware from the outset that they had to report on their use at the end which may have resulted in more consistent use and engagement with the app than if they hadn't been part of the study. Secondly, the process of having a pre and post interview after the six weeks perhaps encouraged them to be aware of and reflect on changes more readily than they would have if they had not been involved in the study, as they knew they would be asked to reflect on their pre interview answers. Further, the interview itself gave participants a chance to discuss and reflect on issues – as one participant stated "Sometimes you don't notice the change until someone asks you the question".

Despite this positive feedback and the impact it made on participants lives only three participants said they would continue to use the app after the study while a further four said they were unsure. Five cited price as a factor, either because of their own life situation and inability to pay and/or in comparison to other meditation apps. This may be the greatest challenge for the Undo app – how to encourage new users to 'stick with it' long enough to see the deep change that is possible through the use of the technique.

UNDO ROADMAP
2022 –2023

Legend
Guided User Journey - GUJ
Performance/Functionality - PF
Intuitive User Interface & Aesthetics - I&A
Multimedia Features - MF
User Community - UC
Live Content - LC

Q4 – 2022
- User Progress System V2 (GUJ)
- Notes (GUJ)
- Online & Offline Capabilities (PF)
- Live meditations with Matthew (LC)

Q1 – 2023
- Download Content Manager (PF)
- Favorites (GUJ)
- Personalized Content Experience (GUJ)
- Multi-voice meditations (MF)

Q2 – 2023
- Integration with Apple Health & Google Fit (MF)
- Community Assignments for Achieving Goals (UC)
- 1on1 Discovery Session with Matthew (LC)

Q3 – 2023
- Iterative improvement based on user feedback (I&A)
- Undo web solution (PF)
- Meditation Programs for Companies (UC)

REFERENCES

[1] Hannah Arendt. The human condition university of chicago press. *Chicago IL*, 1958.

[2] Gillian A Bendelow and Simon J Williams. Transcending the dualisms: towards a sociology of pain. *Sociology of health & illness*, 17(2):139–165, 1995.

[3] Dan Chisholm, Kim Sweeny, Peter Sheehan, Bruce Rasmussen, Filip Smit, Pim Cuijpers, and Shekhar Saxena. Scaling-up treatment of depression and anxiety: a global return on investment analysis. *The Lancet Psychiatry*, 3(5):415–424, 2016.

[4] Walter Cullen, Gautam Gulati, and Brendan D Kelly. Mental health in the covid-19 pandemic. *QJM: An International Journal of Medicine*, 113(5):311–312, 2020.

[5] Mark Deuze and Denis McQuail. Mcquail's media and mass communication theory. *McQuail's Media and Mass Communication Theory*, pages 1–688, 2020.

[6] N Farb, JJ Daubenmier, CJ Price, T Gard, C Kerr, B Dunn, AC Klein, MP Paulus, and WE Mehling. Interoception, contemplative practice, and health. front psychol. 2015; 6, 2015.

[7] Éva Gál, Simona Ștefan, and Ioana A Cristea. The efficacy of mindfulness meditation apps in enhancing users' well-being and mental health related outcomes: a meta-analysis of randomized controlled trials. *Journal of Affective Disorders*, 279:131–142, 2021.

[8] Eugene Gendlin. Focusing: How to gain access to your body's knowledge, 2003.

[9] Anthony Giddens. Modernity and self-identity: Self and society in the late modern age. In *The new social theory reader*, pages 354–361. Routledge, 1991.

[10] Annika Howells, Itai Ivtzan, and Francisco Jose Eiroa-Orosa. Putting the 'app'in happiness: a randomised controlled trial of a smartphone-based mindfulness intervention to enhance wellbeing. *Journal of happiness studies*, 17(1):163–185, 2016.

[11] Sahib S Khalsa and Rachel C Lapidus. Can interoception improve the pragmatic search for biomarkers in psychiatry? *Frontiers in psychiatry*, 7:121, 2016.

[12] John La Rosa. The $10 billion self-improvement market adjusts to a new generation. *Market Research Blog. https://blog. marketresearch. com/the-10-billion-self-improvement-market-adjusts-to-new-generation*, 2018.

[13] Ronald David Laing. *The politics of experience and the bird of paradise*. Penguin UK, 1990.

[14] Ronald David Laing. The divided self: An existential study in sanity and madness, 2010.

[15] Madhavan Mani, David J Kavanagh, Leanne Hides, Stoyan R Stoyanov, et al. Review and evaluation of mindfulness-based iphone apps. *JMIR mHealth and uHealth*, 3(3):e4328, 2015.

[16] Maurice Merleau-Ponty. *Phenomenology of perception*. Routledge, 2013.

[17] Daniel Nehring and Ashley Frawley. Mindfulness and the 'psychological imagination'. *Sociology of Health & Illness*, 42(5):1184–1201, 2020.

[18] Stephen W Porges. *The pocket guide to the polyvagal theory: The transformative power of feeling safe*. WW Norton & Co, 2017.

[19] Hannah Ritchie and Max Roser. Mental health. our world in data. *Retrieved October*, 7:2019, 2018.

[20] Caitlin E Synovec. The body keeps the score: Brain, mind, and body in the healing of trauma (reprint edition) b. van der kolk, new york, ny: Penguin books, 2015, 464 pp.,, 2020.

[21] Nicholas T Van Dam, Marieke K Van Vugt, David R Vago, Laura Schmalzl, Clifford D Saron, Andrew Olendzki, Ted Meissner, Sara W Lazar, Catherine E Kerr, Jolie Gorchov, et al. Mind the hype: A critical evaluation and prescriptive agenda for research on mindfulness and meditation. *Perspectives on psychological science*, 13(1):36–61, 2018.

[22] Daniel Vigo, Graham Thornicroft, and Rifat Atun. Estimating the true global burden of mental illness. *The Lancet Psychiatry*, 3(2):171–178, 2016.

[23] Mariet AE Vrancken. Schools of thought on pain. *Social science & medicine*, 29(3):435–444, 1989.