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ACADEMIC MINDFULNESS

A tool for performance, well-being, and personal growth

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ABSTRACT

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The world is changing at a fast phase with new technologies, structures, and values that tend to cause overwhelm at the expense of our emotional and mental health. Our lives are filled with a constant stream of information, whether it is by scrolling, swiping, browsing, gaming, or consuming leading to our brains never getting to rest. To be able to keep up our performance and produce good results both academically, at work and in life in general, a tool for counteracting the overwhelm is of high necessity.

The aim of the thesis is to explore if practicing mindfulness can be a tool used by students during higher-education for both stress-management, neutralizing addiction related to technology, and social media, the students' attitude towards implementing a mindfulness program at their school, as well as increasing the overall quality of mental health. The empirical research comprised a qualitative study which was carried out by interviewing students who are or have been practicing Mindfulness during higher education.

The results indicate that Mindfulness exercises can be used as a tool for stress-management, neutralizing addiction to technology and social media to some extent, and that there is sufficient open-mindedness for implementing a program at their educational institution as well as increase in both wellbeing and mental health. Mindfulness can be classified as a basic form of self-care.

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1 INTRODUCTION

Mindfulness has been practiced for thousands of years by numerous civilizations and religions in the East, in contrast to the Western culture where Mindfulness has protractedly remained profoundly obscure, until now (Nillson H, & Kazemi A. 2016). World-leaders, influential guides, CEO's of Fortune 500 companies, Corporations, athletes, artists, and high-performers are positively embracing the practice of Mindfulness for reaching one's maximum potential and overcoming distinctive obstacles. Tim Ferriss, the author of five #1 New York Times and WSJ bestsellers, interviewed over 100 ultra successful people, for instance, billionaires, icons, and world-class performers, about what their tactics, routines, and habits are. He observed an embossed pattern for more than 80% of the people that he interviewed, they have some form of Mindfulness Meditation habit in their day-to-day routine (Ferriss, 2016).

The fight or flight response have been a fundamental tool for survival in ancient times, when threats and dangers were different from the ones that we have today. Stress responses were mostly triggered when survival was at stake. Today's modern lifestyle is contributing to high-stress environments that are activating the same stress responses. Being stuck in traffic or overwhelmed at work can trigger the same type of stress as a lion attacking a village, where a matter of survival is critical. One of evolution's most adaptive emotions is fear, which signals the fight or flight response to activate. The fight or flight response become hurtful for mental, physical, and emotional wellbeing if it gets triggered for unapparent reasons. Mindfulness has shown to be a useful tool for overcoming false triggers for the fight or flight response. (Dayton, 2013)

We are currently living in the most significant industrial shift in human history where technology is replacing old ways of working and taking a large part of our lives. Technology can increase the standard of living, help us build new products and offer new services, keep in touch with family overseas, and educate us among other things. Unfortunately, technology can cause a reverse effect if we let it control

us and not the other way around. We have the whole world on our fingertips, thanks to the internet and a smart device that is 100 times faster and a fraction of the price compared to the Cray-1 supercomputer that was announced 1975 with a price tag of over \$7.9 million (Modine, 2018). Great innovation and development are taking our society a step further in civilization, but at what cost?

The human brain does not like an amplitude of information; it is less happy with its decisions if there are several options available. Our short-term working memory is similar; it is limited compared to our long-term memory that can store limitless amounts of information. The short-term working memory is used when studying or learning something new. We tend to compress as much information as possible in the short term to pass an exam or to gather information for a presentation. The night before the exam, we realize that our brains are jammed from an overload of information, causing stress, performance related anxiety and pressure. The information would be stored in the long-term memory if we began studying a week in advance. Practicing Mindfulness has shown to be beneficial for organizing and structuring our thoughts and emotions, just like being structured and organized with our learning. (Davey, 2016).

Social media is one of the greatest inventions of our time – it allows us to keep in touch with people from the other side of the world, share our lives with friends, family, and relatives. Additionally, it gives us the possibility to market our products and services for a targeted audience, creating tens of thousands of new jobs, thousands of profitable start-ups, and brought together like-minded communities.

Social media is also a leading factor for anxiety, depression, addiction, loneliness, jealousy, stress, ADHD, paranoia, problems with mental functioning, exacerbating narcissism, and compulsive behaviour (Rohilla, P.S Kumar, K. 2015), (Vancouver Island University, 2017). Today, social media is being considered a new social norm, exceeding beyond 3.19 Billion active users in 2018 (Chaffey, 2018). Mass consumption of information can be harmful; it keeps social media consumers on their edge, that negatively affects their daily life at work, school, home, and sleep patterns.

Our society lives in a vicious cycle where sick-leaves are increasing due to mental illness, the use of anti-depressants has increased by 65% in the US since 1999-2002, obesity is sky-rocketing due to lack of exercise and the endless supply of fast-food options. Fundamentals such as breathing, emotional expression, various forms of daily movement, and real human interactions have been forgotten and ignored. (Sifferlin, 2017)

Practicing Mindfulness meditation has shown to be beneficial for organizing and structuring our thoughts and emotions, as well as emotional intelligence and self-awareness that could result in better high-quality lifestyle choices. The awareness of practicing mindfulness has been increasing for the past decade, thanks to its great benefits for one's health, new research and positive results on a therapeutic level, our constant interaction with stress, and major celebrity influencers such as Oprah praising its benefits. Oprah stated that meditation had helped her company immensely, "People who used to have migraines, don't. People are sleeping better. People have better relationships. People interact with other people better. It has been fantastic." (Ranker, 2018)

The writer of the thesis is well familiar with practicing different forms of mindfulness exercises for a better quality of life. Adversity and sickness related to physical health lead to mental struggles where the author began his interest in looking for natural methods to combat stress, anxiety, and depression.

1.1 The aim of the Thesis

In our increasingly stressful and high demanding business environment, the emphasis on mental health and overall wellbeing is attaining considerable importance. In an already busy entourage, technology is contributing to mass consumption of information that can have adverse effects in the long-term. How can we do great work when half of our attention is always on a disrupting smart device next to us? How can we build new relationships if we are glued to our smart-phones before business meetings begin, come up with new ideas and solutions while notifications are continually popping up during the meeting, and lastly leave the meeting with the phone in our hand?

Mindfulness within corporations is a relatively new topic, but one that is rapidly gaining popularity. Companies such as Apple, Google, and Yahoo are offering meditation rooms, mindfulness- programs, -coaches, and -classes for their employees. It is a genuine way to enhance the individual's life, however, could it decrease the addiction to technology? (Lechner, T.)

The aim of the research is to explore if practicing mindfulness can be a tool used by students during higher-education for both stress-management, neutralizing addiction related to technology, and social media, the students' attitude towards implementing a mindfulness program at their school, as well as increasing the overall quality of mental health.

1.2 Research Method and Structure

The research consists of two main sections, a theoretical background and qualitative research based on individual interviews.

The theoretical background covers the increasing focus around (1) medical scientific results of mindfulness, (2) the economic growth and innovation within the industry, (3) corporations implementing mindfulness strategies for their employees to maximize results and general well-being, and how (4) social-media / technology corporations have a negative effect on us being mindful. The current existing research is highly focused around athletic and corporate culture, which leaves a gap in the academic environment.

Practicing Mindfulness is relatively unknown and unfamiliar among university and college students. The qualitative research was conducted through in-depth interviews by students and former students that have been practicing mindfulness.

The questions covered in the in-depth interviews are divided in various categories based on the theoretical framework.

- 1. Demographical Background** – can help us identify correlations in gender, cultural background, and educational institute.

2. **Personal Interest and Motivation** – factors such as interest, type of mindfulness exercise, reason, length of session, source of content and training can help us understand the fundamentals for practicing mindfulness.
3. **Performance and Results** – shows us the possible results contributed by practicing mindfulness.
4. **Social Media and Technology** – investigates whether Social Media and/or Technology make us less mindfulness and if addiction is an underlying factor.
5. **Personal Spending** – displays the spending habits and its reasons related to the mindfulness industry
6. **Implementing a Mindfulness Program at your School** – studies the students' attitude towards implementing a 'mindfulness strategy' at school

The full structure of the interview is attached in the second Appendix in this thesis.

2 THEORETICAL FRAMEWORK

Our interest in health and overall wellbeing is increasing year by year with a growing concern for what the long-term effects and excessive use of technology and social media can do to our mental and emotional health. One's health is affecting work-life balance, performance in general, our relationships and many other aspects of our life. Understanding the history, theories, and fundamentals of Mindfulness can help us clarify how it could and can be used to counteract the constant disruption and addiction caused by technology and social media. (Kaeun, K. *et al.*, 2011)

2.1 What is Mindfulness?

Mindfulness is a state of mind where mental focus is concentrating around one's awareness in the present moment. The characterization of mindfulness is the attention and consciousness, around our sensations, thoughts, breath, and environment while nonjudgmentally accepting how we feel. (Hofmann, S.G. 2010)



Figure 1: Definition of Mindfulness

By changing the relationship to our thoughts and feelings, it is possible to observe what we are experiencing objectively. To clarify, we would not see ourselves as depressed, anxious, angry, or paranoid. Instead, we can equitably and open-mindedly notice that we are experiencing an episode of anxiety, depression, anger, or paranoia. (Knight, L.F.M 2009)

2.2 History

The practice of mindfulness is increasing its popularity in the West, although it is not a new concept. Research states that mindfulness had its origins within Buddhism over 2500 years ago, but even before Buddha's birth, some Hindus had taken part in ranges of meditations that involved mindfulness (Ross, A. 2016). Some exploration by archaeologists as wall art is showing evidence that meditation was practiced already 5000 – 3500 BCE. An article by Psychology Today is stating that Indian scriptures included various meditation techniques approximately 3000 years ago (Puff, R. 2013).

Hindu mindfulness – 1500 BCE

A large number of references are stating that various Hindu scriptures are emphasizing on meditation, being silent, and acceptance, which are the fundamentals and central concepts of mindfulness (Raval S. 2016). Vedic texts known as “Upanishads” in a later era, 600 BCE, detailed the spiritual practices of Hinduism (Wade, B).

Daoist mindfulness – 6th c. BCE

Daoist meditation or mindfulness has its roots in the Chinese philosophy and religion of Daoism. The basics of its practices include mindfulness, visualization, contemplation, and concentration. Parts of Daoist mindfulness consociates with Buddhist meditation. Daoist's developed something called *guan* meaning “observation” by Buddhists “anapanasati” which signifies “mindfulness of breath” practices. A well-known aspect of Daoism is its contribution of Qigong to mindfulness, which promotes health and vitality through moderate body movements (Komjathy, L. 2008).

Buddhist mindfulness – 535 BCE

As earlier mentioned, Buddhist mindfulness is focused on one's breath while being seated. Buddha was the teacher of the most ancient techniques of meditation called Vipassana, which means to see things as they are. Vipassana aims to achieve the highest form of happiness while eliminating all mental contamination (Dhamma). Examining mindfulness and vipassana practices presents that both forms of meditation focus on avoiding spreading random thoughts via non-judgmental concentration on the present mental activity. (Amihai, I & Kozhevnikov, M. 2015)

History shows that the practices of mindfulness have been around for millennia. The ideologies are all stating the focus on one's inner experience by changing our relationship to our thoughts and feelings. The same cornerstones of mindfulness practiced for thousands of years in the integrates now into Western society (Nillson H, & Kazemi A. 2016)

2.3 The Science of Mindfulness

The TIME published an article in 2003 stating that mindfulness meditation and its benefits within medicine was started to get seriously studied after the 1960s (Stein. 2003). Even though that we have come far with modern technology and extensive research within modern neuroscience, many parts of our mind and its functioning remain unknown.

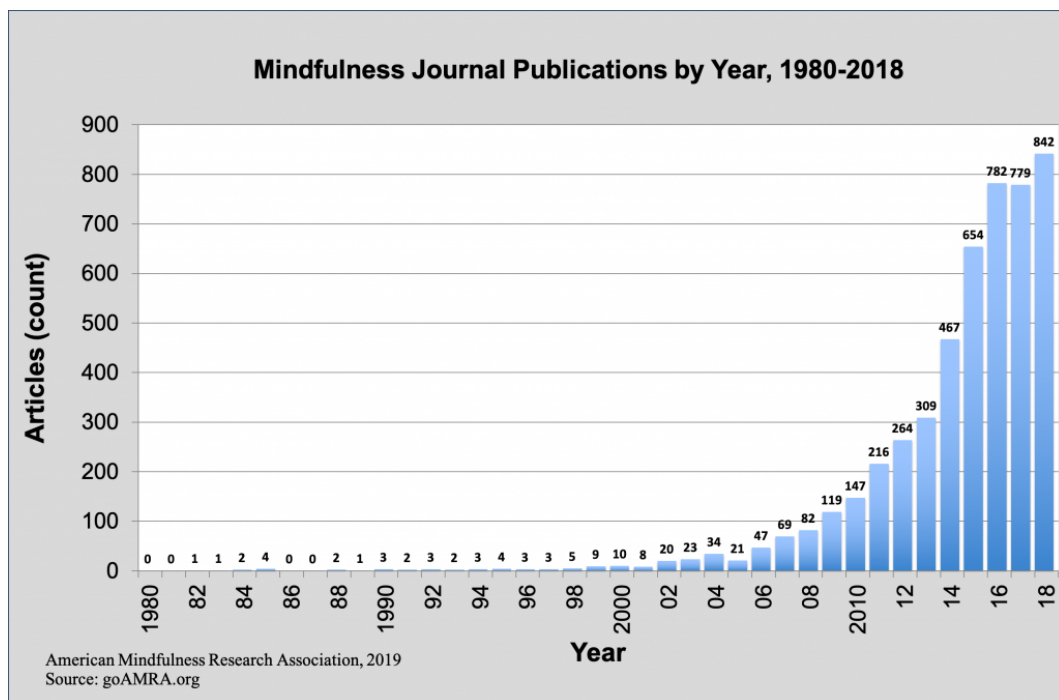


Figure 2: Mindfulness Journal Publications by Year, 1980-2018

The figure above by The American Mindfulness Research Association (AMRA) indicates that mindfulness journal publications have been spiking during the last 20 years. AMRA is stating on their website that they serve as a professional resource for both sciences and humanities, as well as establishing evidence, practice, and construct of mindfulness (AMRA, 2018).

The increased interest in studying mindfulness and its effects on us seem to unravel several mysteries, with increased exploration of our brain. Scientifically, mindfulness has shown to be positively useful in many areas of mental, emotional, and physical health.

Research indicates that mindfulness has been successfully used for people being socially rejected. The study illustrated that after 1 hour of rejection, the mindful contributor had less distress in the course of rejection. (1) The brain scans present that the relation was arbitrated by decreased activation in the left ventrolateral prefrontal cortex (a brain area often associated with the reticence of adverse effect) during the scene of rejection. (2) Another correlation found within the

study was mindfulness and less connectedness between the left ventrolateral prefrontal cortex and the bilateral amygdala and the dorsal anterior cingulate cortex – a brain part that plays a vital role in the breeding of social distress (Martelli, A.M. et al. 2018)

The access to mental health support is continuously increasing among university students. Taking UK as an example where the access to various counselling assistance at universities grew by 50% from 2010 – 2015 (Mair, D. 2016). The conclusion would suggest that the time of university would prove to be a remarkable, and underused moment for both understanding and preventing adversity related to mental health in adolescents.

Mindfulness has increased in popularity in universities with a focus on training student's attention for a positive result on mental health (Barnes N., et al 2017). A controlled trial took place at the University of Cambridge, in UK, where students over 18, without any mental illnesses or ongoing crisis, were aimlessly designated to receive a two-month long mindfulness course fitting for university students. The concluding results of the study revealed that Mindfulness Skills for Students (MMS)-program participants had lower distress and apprehension levels. Additionally, the MSS practitioners had (1) higher well-being both post-intervention and midst exam week, (2) less likely to report of any issues related to their studies, and finally, the MSS practitioners were unquestionably more likely to donate their received monetary voucher to charity. The publication stated that the randomized controlled trial is the most extensive study of mindfulness in a university community to date (Galante, J. et al. 2017).

Anxiety disorders have been increasing during the 21st century. A sizeable population-based survey stated that over 33.7% of the population during their lifetime would get overwhelmed by such disorder (Bandelow B. et al. 2015). A clinical trial with the primary objective to examine mindfulness on individuals with a Generalized anxiety disorder (GAD) was conducted. A common characterization of GAD is an excessive and uncontrollable worry about everyday proceedings resulting in eventual bodily symptoms such as a headache, fatigue,

and muscle tension, among many other (ADAA, 2018). Often as a consequence, people with GAD tend to miss work days and use various health services more often than the average worker. The trial consisted of 57 people with GAD, mean age of 39 and 56% female participants. Randomly assigned participants did an eight-week SME (stress management education) - with another name “attention control class” or MBSR (mindfulness-based stress reduction) program. The results concluded that the participants in the MBSR class had consequentially less missed days from work as well as fewer visits to a mental health professional. The outcome of the trial shows that mindfulness meditation may improve job-related operating and additionally lower healthcare visits for persons with GAD (Hoge, E.A. et al. 2017)

Another study demonstrated that training within mindfulness changes the brain waves in depressed people. The error-related negativity (ERN) is one of the most studied electrophysiological index of cortical error processing (Wessel, J.R., 2012). While performing a task, the ERN activates and occurs as a negative wave when someone makes a mistake. As a comparison between healthy individuals and those with depression, the healthy ones have larger ERNs. The data shows that chronically depressed patients ERNs can be institutionalized (read normalized) by brief training in mindfulness (Fissler, M. et al. 2017).

The American National Institute on Drug Abuse published a publication related to the Opioid Overdose Crisis in the United States, stating that over 115 people in the US alone, die daily from overdosing, and the economic load of misuse exceeds \$78.5B a year. Another concerning fact is that the overdoses went up over 30% from July 2016 to September 2017 – in 45 states (Opioid Overdose Crisis, 2018).

A study found that Mindfulness-Based Stress Reduction (MBSR) is changing brain networks of opiate-dependent patients. The program participants went through magnetic resonance imaging (MRI) both before and after a 4-week period of the MBSR program. The participants of the program showed compelling strengthening to parts of the brain where addiction and mindfulness research was

most of the interest (brain networks related to executive control and interoceptive awareness). The concluding statement of the study is that an MBSR program may be advantageous for treating opioid-dependent patients (Fahmy, R. 2018).

Cognitive flexibility, often referred to as brain flexibility refers to the brain's capability to shift between various thinking concepts, simply put, changing the thinking of old situations to new ones, and break habitual thinking while adapting to new situations (Canas, J.J, 2018)

One of the core concepts in mindfulness is to focus, recognize when the mind "wanders off," and then re-establish the focus. Behavioural Brain Research has shown that mindful children have more brain flexibility, meaning that the children can more effortlessly redirect the focus from mind-wandering to a present state of being, along with mind-, and body-centred states. The study focused on investigating brain networks, and their connectivity in children and how they are related to the participants reported symptoms of mental health. The research was the world's first in studying mindfulness and dynamic functional connectivity (Marusak, H.A. et al. 2018).

The hippocampus plays an essential role in both learning and memorizing. It is one of the most studied brain structures that lay deep in the temporal lobe. The hippocampus can easily get damaged, and some research shows that it can get distressed by several psychiatric-, and neurological disorders (Anand, K.S, & Dhikav, V. 2012).

A new study suggests that mindfulness can result in less learning inaccuracies and that the size of the hippocampus can alter as a result of such training. The research showed that prior learning could eventually interfere with new learning, which in medical terms is called proactive interference (PI) where a reduction may be possible with training in mindfulness. The final results showed that the trainees of mindfulness had an exceptionally lower PI failure quota. The consideration of the research is vital due to the correlation between mindfulness-training and the increase in the left hippocampal size (Greenberg, J. 2018).

As a closure discussing the many aspects related to the science of mindfulness - even though the research related to mindfulness is unquestionably soaring today, we still do not know enough.

What we do know by exploration and investigation in the field gives us clear indications that mindfulness can be of help in several areas of health and well-being. To summarize, (1) it changes our brains structure, (2) it helps us manage (even eliminate) depression, stress, anxiety, addiction, social rejection, (3) mindfulness can increase our capacity to learn, memorize, and shift between concepts of thinking.

2.4 The Business & Economics of Mindfulness

When a new entity is gaining mainstream attraction, it may contribute to significant economic prosperity, whether it is technology, health, well-being, food, or other trends. Today, the business of mindfulness is exceeding billions of dollars in revenue, and various programs implement within corporate structures. The Business of Mindfulness part of this thesis will cover the economics, and disparate mindfulness business models.

2.4.1 Apps

The Research Director John LaRosa of Marketdata LLC, stated that the market value of the Mindfulness market in the U.S. exceeded \$1.21B during 2017 and the expected growth would land north of \$2B in 2022. The revenue categories covered everything from Studios, Books, CDs, DVDs, Apps, and Retreats (Larosa, J. 2017). The total figure can be misleading due to unaccounted revenue from Mindfulness meditation publishers, and creators on platforms generating ad-revenue like YouTube have not been taken into consideration

In a smart device-driven world, mindfulness apps are rapidly captivating popularity where guided mindfulness exercises are just a tap away on the smart-phone for every occasion. Every week new self-care apps are added to app stores with the majority being meditation and mindfulness apps. Apptopia stated that the spending

of consumers on the top 10-apps by revenue is up 40 percent year over year in the first quarter of 2018. Worth mentioning is that new installations of the apps increased by 36% year over year (Blacker, A. 2018).

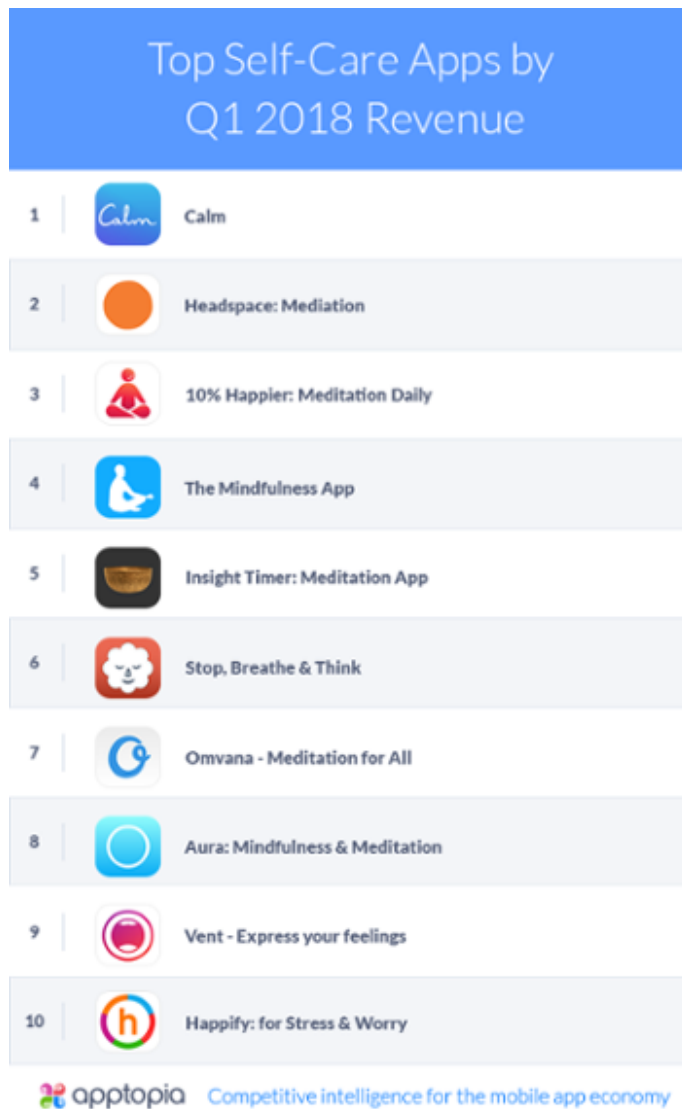


Figure 3: Top Self-Care Apps by Q1 2018 Revenue

The third figure is showing that all top self-care apps are related to meditation, mindfulness, and emotional expression. According to Apptopias estimations, the Q1 revenue (App Store & Google Play combined) surpassed \$32M in 2018 (Blacker, A. 2018)

Separately worth mentioning are both Calm and Headspace, that brought in over

88% of the total revenue of the ten mentioned apps

Reebok

The **Calm** app's core concept are (1) daily meditations which are varying from 3-25min sessions, (2) longer stories to help one sleep, and more niche type of (3) "masterclasses" within various topics such as mindful eating, breathing exercises and soothing sounds to help one sleep (Fisher, K. 2018). What took of Calm's explosive growth was that the app won Apple's App of the Year Award in 2017 (Blacker, A. 2018).

App downloads for Calm surpassed a 30 million-mark where the users can pay a yearly subscription of \$59.99. Depending on the user's preferred decision of payment, dividing into periods from \$9.99 – \$59.99 is possible. Calm's most recent funding round valued the company at \$250m with a goal to take the app to new levels by selling physical products worldwide (Kuchler, H. 2018).

Another popular mindfulness meditation app is **Headspace**, with over 31 million users valuing the company at \$320m (Perez, S. & Lunden, I. 2018). Headspace is stating on their website that the subscriber count surpassed a one million mark during June 2018 (Headspace, 2018). The subscriptions range from a (1) annual payment (€5.99/mo.), (2) monthly payment (€9.99/mo.), or a one-time (3) lifetime payment (€299.99). The premium version offers hundreds of different meditations for diverse purposes, meditations as short as a minute for users with a busy schedule, animations explaining and answering various techniques used, sleep sounds for easing the mind, "Headspace for kids", and the former monk and co-founder, Andy Puddicombe being the guidance and voice within the app (Headspace, 2018).

Headspace is stating on their website that since day one, they have been studying the science of meditation as a topic of modern science. Comparing the other 2000 meditation apps on the market, Headspace proudly articulates that they want to advance the field of mindfulness meditation by clinically-validated research for their product. The company has 65+ research studies in-process for validating the app approach to meditation, 35+ partners run by leading mindfulness experts such

as Stanford and USC, 16 published studies in preeminent mindfulness peer-review journals showing how the product influences mental and emotional states such as stress, focus, and compassion (Headspace, 2018).

There is a considerable amount of published research showing that Headspace improves overall well-being. The research done using Headspace indicates that positive results are occurring in a short time. A study published in a top mindfulness journal stated that the participants using the smartphone app Headspace for mindfulness training reduced stress levels by 14% (Economides, M. et al. 2018).

Other remarkable results gathered by various studies operated by the Northeastern University, showing that using Headspace increased one's compassion by 23% (Lim, D. 2015) as well as reducing aggression by 57% and additionally expanded self-kindness within three weeks (DeSteno, D. 2018).

Furthermore, more research shows that Headspace can be the perfect tool for stressful environments such as work. The research with diverse employee populations initiated that job strain was decreased (Bostock, S. 2018) and job satisfaction was improved (Wylde, M.C. 2017).

Although the research is impressive, difficulties are correlating the economic growth related to the increased amount of research and confident results. What can be stated is that mindfulness apps work and that users who are seeking a moment of tranquillity and a break from a rowdy entourage are prone to pay for the "premium value" offered by the apps. Over time, more scientific research will contribute to continued economic growth in the category of apps.

2.4.2 Studios and Centres

Another fast-growing area of mindfulness is studios and centres. According to Marketdata Enterprises, the previous year over 2450 studios and centres generated more than \$700m in revenue (LaRosa, J. 2017).

The Mindfulness Studios are running a similar concept to Yoga-, and Pilates classes where participants can join various courses and sessions lead by professional

instructors. A company titled “MNDFL” is offering numerous studios across New York where people can book themselves into classes by several categories like (1) instructor (the person leading the session), (2) class (type of mindfulness program, course, or session), (3) room (the studios offer event rooms, main rooms, and private rooms), and lastly (4) location (in this case Upper East Side, Greenwich Village, Williamsburg). MNDFL articulates on their website that the classes range from 30, 45 and 60 minutes starting at \$10. There are classes from early morning until late at night and, while guided sessions are not active, the studio offers people for self-guided practicing (MNDFLmeditation, 2018).

Another company offering similar services is “Chill,” a company based in Chicago. Compared to MNDFL, Chill is offering memberships for \$150/month including unlimited core classes and discounts for other services that they offer, such as massages and workshops. Class packages are priced at 5 classes / \$105 and 10 classes / \$200. Additionally, Chill is offering private instructions and corporate gift card options (ChillChicago, 2018).

A different concept to permanent mindfulness studios is **mobile meditation studios**. New York’s first mobile meditation studio is called “Calm City” that delivers 10-minute audio-guided mindfulness meditation classes in a vintage RV. It is possible for participants to book a seat on the truck at a precise location or even the whole truck for a minimum of 2 hours up to multiple days. The Calm City truck is intended for private-, school (academic), and corporate use where customizable programs are available depending on one’s preferences. The base pricing is \$5 for 15 minutes (private). The company gives the pricing for its extended intervals and larger groups by request (CalmCity, 2018).

The Company “Meditation Works” is a comparable company to “Calm City,” with a focus on corporates only. The meditation studio on wheels is driving up to the company offering 10-minute guided classes weekly so that employees can take a break from their job to get more done, manage stress and increase compassion among clients, among other benefits stated on Meditation Works website. The first session for the company is free and afterward starting at \$100. Just like Calm City,

Meditation Works offers custom programs with custom pricing (MeditationWorks, 2018).

Mindfulness Studios and Centres come in all forms and sizes offering a wide range of services and products. As a precedent, a company called Inscape offers a mobile app with meditations and mindfulness exercises, corporate programs, private sessions, a studio, and major corporate partners such as Facebook and Nike (Inscape, 2018). This area of mindfulness is rapidly growing with the United States being the forefront of the industry.

2.4.3 Physical Products

The advancements in the mindfulness industry have led to several tangible products. A company named InteraXon is producing a brain-sensing headband called “Muse” that uplifts and heighten the meditation experience by giving feedback depending on brain migration. InteraXon is boastfully presenting the product as a world’s first real-time feedback provider on what is happening in the human brain during meditation.

The process of getting set up with the headband device is to connect with the phone app, take a tutorial showing how to correctly place the headband for it to read one’s brain signals accurately, calibrate by taking a snapshot before the session, and lastly showcase the feedback from the session.

The product is tested and certified in conformity with CA, US, and EU standards and research at over 100 institutions around the globe, including Harvard University, MIT, NASA, Mayo Clinic and the University of Toronto.

Muse is currently selling its headband to European customers for €219.00 and shipping included (ChooseMuse, 2018). The company has over \$28.8m in funding with a Series B round raising \$11.6M (Crunchbase, 2018).

A large segment of physical products is forming a market of \$112m in the US, that includes books, CDs, DVDs, and magazines where CDs and DVDs are declining as a result of non-compatible devices (LaRosa, J. 2017).

The Guardian stated that the revenue from mind, body, spirit books are booming in the UK due to a “mindfulness mega-trend,” The article specified that the sales are slowing in every other category, except for a category offering “spiritual assistance” where sales are up by 13.3%. The population is starting to take meditation in all seriousness as a new category of science and literature that can combat stress and as a tool for uncertain periods of one’s life (Flood, A. 2017).

Another noteworthy reason for the growth in book sales, CDs, DVDs, and magazines are celebrities endorsing the benefits of mindfulness and supporting authoritative and persuasive mind, body, spirit leaders and coaches.

A prime example is the American media executive, philanthropist and talk show host Oprah Winfrey (Oprah Winfrey Biography, 2018). Oprah’s Super Soul 100 members list is a selection of thought-leaders, best-sellers, spiritual dignitaries, and wellness professionals. Eckhart Tolle and Deepak Chopra are both on the list, who embraces conscientiousness by mindfulness meditation (Supersoul.tv, 2018).

Eckhart Tolle is a #1 New York Times best-seller and spiritual teacher with several significant books such as “The Power of Now,” “A New Earth” and “Stillness Speaks.” Eckhart is a prominent speaker who publishes his retreats and talks on both CDs and DVDs. Worth mentioning is that the best-seller “The Power of Now” is translated into 33 languages emphasizes the importance of living in the present moment by preventing and bypassing any future and past thoughts, which in other words is the definition of mindfulness (EckhartTolle, 2018).

Deepak Chopra, MD, that TIME magazine described as “one of the top 100 heroes and icons of the century”, is an expert in integrative medicine, personal transformation, internal medicine, endocrinology, and metabolism. Deepak is the author of 85 books with several New York Times best-sellers, with many of them endorsing mindfulness and meditation in our daily life (DeepakChopra, 2018). The most recent collaboration between Oprah Winfrey and Deepak Chopra is the “21-Day Meditation Experience” that is starting the 29th of October 2018 (ChopraCenterMeditation, 2018).

A ripple effect is forms when famous people are embracing the prosperity of mindfulness meditation. Their followers might find interest in the topic leading to

great enthusiasm within the field of mindfulness. More science-based mindfulness books are set to release with an exceeding increase of science publications, general research, and trials.

2.5 Mindfulness in Corporations

Athletes like (1) LeBron James a 6-time NBA Champion, (2) Michael Jordan is known as the greatest athlete of all time, and (3) Kobe Bryant the 18-time All-Star are examples of some world-class high-performing athletes using mindfulness for balancing their training and life. Some artists that embrace the benefits of mindfulness are (1) Kendrick Lamar triple platinum selling artist, (2) J. Cole platinum-selling artist and (3) Jay-Z with several triple platinum albums and one of the world's greatest legends and star in music (Newsone, 2018).

Athletes and artists are no different to companies when it comes to high-performance, results, progress, and innovation. For being able to stay ahead of the competition, corporations need strategies and tools for their workers to stay in shape both mentally and emotionally, meaning eliminating stress, anxiety, depression, low-energy, toxic relationships, among other 'conditions.' Increased workplace creativity and focus may lead to innovation and ideas that can drive the company to state-of-the-art lengths.

A publication by the Boston Consulting Group (BCG) stated that major corporations in the East, for instance, Toyota and Panasonic have protractedly implicated the personal advancements of mindfulness and how it can assist business aspirations. An increasing amount of western companies are now supporting and encouraging their employees and leaders to mindfulness, among the people managing billion-dollar companies who practice mindfulness meditation are Jack Dorsey the CEO of Twitter, Marc Benioff the CEO of Salesforce, and the co-founder of Google Sergey Brin. A holistic type of leadership is taking root in the world's largest companies where employees can begin to expect a culture of trust instead of fear and control (Greiser, C. & Martini, J-P. 2018).

The founder of Apple, Steve Jobs, practiced mindfulness and later introduced “Zen mindfulness meditation” to implement into Apple’s corporate conformation. Apple is focusing on employee’s overall well-being and work-life balance. Employees at Apple do have the right to take 30-minute day-to-day meditation breaks; they also have access to on-site yoga and mindfulness classes (Lechner, T. 2018)

The mindfulness movement transpires in some of the company’s products, like calling the Apple Watch “The centrepiece of your corporate wellness program.”. The Apple Watch is promoting overall wellness where employees can track several aspects of their health with the watch. One example is the inbuilt “Breathe” app that helps the user to concentrate, stay grounded and practice mindfulness (Apple, 2018).

The company Google is a pioneer in the mindfulness industry, and it was there that the program “Search Inside Yourself” (SIY) was born. The program began in 2007 and was established by leading professionals in neuroscience, mindfulness and emotional intelligence for employees at Google. The SIY-program received much attention outside of Google and became a non-profit organization in 2012 named “Search Inside Yourself Leadership Institute” (SIYLI) that still works together with Google and other corporations around the world, such as American Express, Ford and Comcast (SIYLI, 2018).

The Search Inside Yourself Leadership Institute offer programs for individuals, organizations and for those who want to become an SIY Certified Teacher. The SIYLI lists some core skills that the participant will learn from the program, like (1) handling stress, (2) flexible when facing challenges, (3) open up for creativity and innovation, (4) boost focus, (5) advance self-awareness and regulation of emotions, and (6) clarity and effectivity in communication (SIYLI, 2018). The results from the program are noteworthy with 36% stress-reduction, 62.0-minute production increase each week, 7% lower healthcare costs and \$3000 in yearly savings gained on productivity (SIYLI, 2018).

Apple and Google are two great examples of open-minded companies embracing innovation and new ideas, that have implemented mindfulness in their corporate

structure. More conservative companies, e.g. Goldman Sachs, KPMG, and the Bank of England are also applying and taking up mindfulness training in their companies due to the positive results. Sally Boyle, the head of Human Capital Management at Goldman Sachs stated that in the future we will talk about mindfulness like we talk about exercise today (Ft.com, 2018).

2.5.1 Internal-, and third-party Mindfulness programs for Corporations

There are two main routes for implementing a corporate mindfulness strategy which is hiring a 3rd party company or launching their internal program. Having a professional third-party company can be helpful in getting the necessary expertise and knowledge for an unfamiliar area of training. For start-ups and small companies, an external business can be expensive and then the company's internal program can be more relevant.

Mastermind is one of many companies offering corporate mindfulness programs for teams at work. Mastermind operates in the surroundings of Dallas and has worked together with companies such as The Boston Consulting Group, Accenture, Deloitte, FedEx, and Hilton. Mastermind's key goal is to provide the fundamentals of mindfulness for teams by research based mindfulness techniques as a support for long time practice that will improve several areas of mental and physical health. The company offers a wide range of services such as workshops, events, classes, programs, speakers, training, and retreats, all related to mindfulness and all activities available as "custom programs" that can be most beneficial for the company and the individual's need (Mastermindmeditate, 2018).

Unplug is another company offering similar services to Mastermind. Unplug's general business model is less niche with a broader customer segment offering their products and services to all individuals (6-96-year-olds) with their Unplug Meditation App, their private studios in West Hollywood and Santa Monica, in-studio classes and sessions for all ages, even 1st graders. The company's clientele is extending to several areas of business, in sports the National Football League

(NFL), in investment banking JPMorgan and Deutsche Bank, one of the world's leading universities Wharton University of Pennsylvania, and the media giant NBC Universal among many others (Unplug Meditation, 2018).

Unplug offers a far-reaching expanded corporate program and articulates that Unplug can visit your organization, or that your organization can meet them at a particular place, e.g., a retreat or business trip. Unplugs "Delivered" program brings a teacher/mentor to the company or event location with a single 1h session priced at \$475, 4-week program for \$1800 and 8-week program landing at \$3600. The "Retreat" program is off from the company site that can be held anywhere allowing the works to go deeper into a mindfulness experience. A 3h half-day option costs \$1425, and full-day option 5h is \$2375. Unplugs Corporate Wellness Pass offers individuals to access the sites (studios) of Unplug. The session packages sell as 20, 50 or 100 sessions ranging from \$340, \$800 and \$1500. Other programs that Unplug offers are "Unplug & Connect" for employees that are burned out, have no inspiration, lack productivity and creativity. The Unplug & Connect program aims to let the employee find a deeper sense and self and to connect with their organization on a new inspiring level. The "Unplug Select" is a custom-tailored program for specific company needs (Unplug Meditation, 2018).

Golbie Kamarei is the founder of BlackRock Meditation Program, where her mission is to help employees and management to reach the top level of purpose and performance by sharing her 13+ years of expertise all across Wall Street (Stanford Graduate School of Business, 2018). BlackRock Inc. is the world's largest financial management corporation with over US\$6.3 trillion assets under management (BlackRock, 2018).

Kamarei shares valuable knowledge and lessons in the Greater Good Science-Based Magazine by Berkeley University of California for launching a Meditation Program at work.

- (1) Kamarei precisely specifies that a Mindfulness program should start small and with a Why, and How will later follow. The BlackRock Meditation Program started with an email invitation where 30 people showed up. The

word spread fast due to the program's popularity, and Kamarei was looking to expand and scale into other offices.

- (2) It is critical to understand and adapt to the particular company culture by knowing its values, corporate language, priorities, and principles. Corporate language in this context implicates that conventional mindfulness terms can be taught to anyone unfamiliar with the industry, including high-performers and conservative corporate people.
- (3) A significant building block for the BlackRock Meditation Program was data collection and analysis. Quantitative data collection was possible by sending out surveys and over time used for expansion purposes. Some distinguished results that Kamarei gathered from her surveys gave her the following evaluation: over 90% considers that it adds emphatically to the culture, over 80% would recommend it to other employees, over 60% can both manage and experience less stress, experience expanded mental elasticity, focus, and decision-making.
- (4) The Meditation program should be custom-made for all types of personalities and needs. Some varied approaches and techniques supply different purposes and needs; it is about giving a range of choices that the individual can make.
- (5) Kamarei concludes that lasting change is what keeps the mindfulness well-being movement going. The BlackRock Meditation Program started with one person, and today there are over 50 volunteers that drive the program all around the world for BlackRock with a reflection of the company's culture (Wolfe, 2018).

Furthermore, an article published in the Knowledge (database) @ Wharton, the University of Pennsylvania by Christian Greiser and Jan-Philipp from Boston Consulting Group declared that companies should focus on so-called "Micro-practices" where employees are fixating on training fundamentals and essentials of mindfulness to reach mastery (Greiser & Martini, 2018).

2.6 Technology-, & Social Media Companies make us less Mindful

When technology- and social media companies are designing their products, an internal question is often asked: “How can we get users to spend as much time on our products as possible?”. In short, more time spent on the device means more advertising revenue for social media companies and advertisers advertising on their platforms, furthermore more user mass data for technology companies that by agreement can be sold to third-party companies.

2.6.1 The Role of Dopamine and the Reward Prediction Error

The brain produces a chemical called dopamine that works as our reward system. The release of dopamine intervenes when our brain senses a pleasure or reward, like eating good food, when we exercise, have sex, smoke cigarettes, do well in social situations, complete our “to-do-list”, or get that like on Facebook - resulting and motivating us to repeat those behaviours (Haynes, 2018).

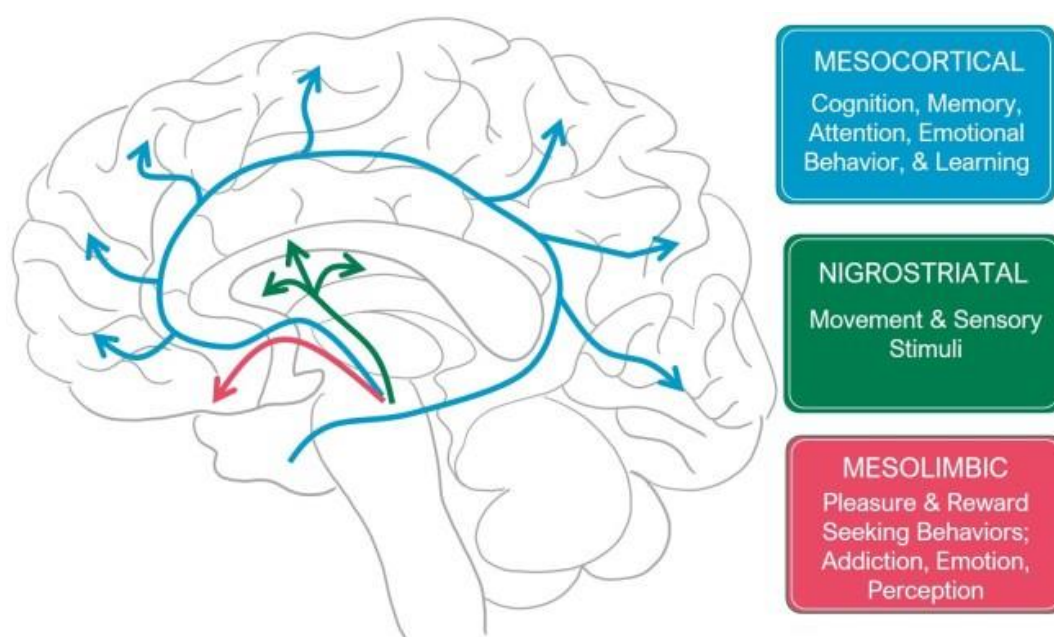


Figure 4: Three dopamine pathways and their related cognitive processes.

The 4th figure illustrates 3 out of 4 major dopamine pathways in the human brain that acts as arteries for neurotransmitters (Ayano, 2016). Mesocortical, Nigrostriatal, and Mesolimbic pathways that contemplate as the brain’s “reward pathways” have been shown dysfunctional in the case of addiction. That exposes

the reason why addicts need a larger dose to get the same reward, meaning a greater extent of text messages, likes, and comments in the context of social media usage. Research shows that social stimuli activate all three dopamine pathways meaning that our smartphones contribute to a limitless supply of negative and positive social stimuli for free (Haynes, 2018). The Reward Prediction Error (RPE) encoding is an element of our dopamine neurons that casinos have been taking advantage of for a long time. The cue for waiting when the slot machine spins give us the same anticipated feeling as a positive reward. The time between the spin and its outcome activates our dopamine neurons, and when the result is negative, we tend to dissociate from gambling, that is the reason why slot machines keep a balance between a positive and negative outcome so that our brains stay engaged and active (Schultz, 2016).

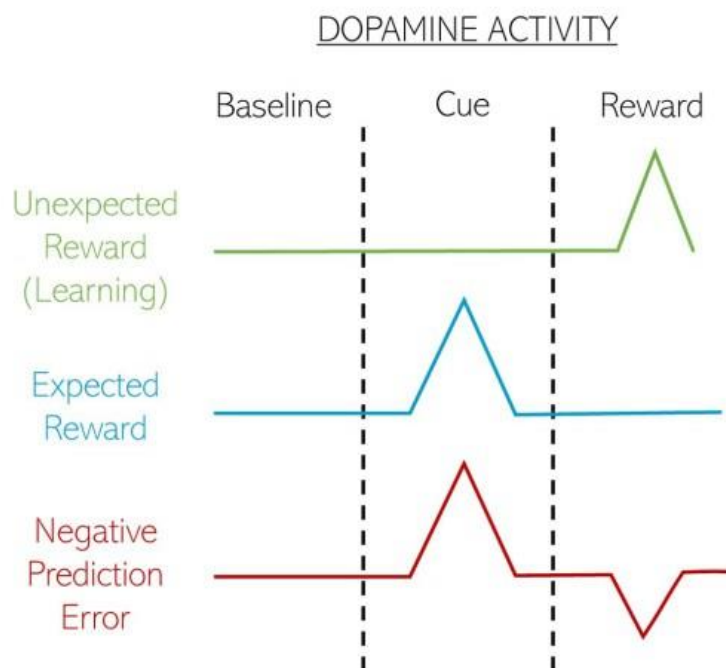


Figure 5: The prediction of reward and consequent activity in dopamine neurons

The fifth figure illustrates that unexpected rewards are increasing our dopamine neurons activity. Technology- and social-media companies are implementing variable reward schedules into their products and services, just like casinos. Variable Reward Schedules were brought in by B.F. Skinner in the 1930's where the correlation of reward-stimuli was most recurrent by mice that had varying

responses. If the possibility to get a reward on a randomized reoccurrence at a little cost, we end up checking customarily (McLeod, 2018).

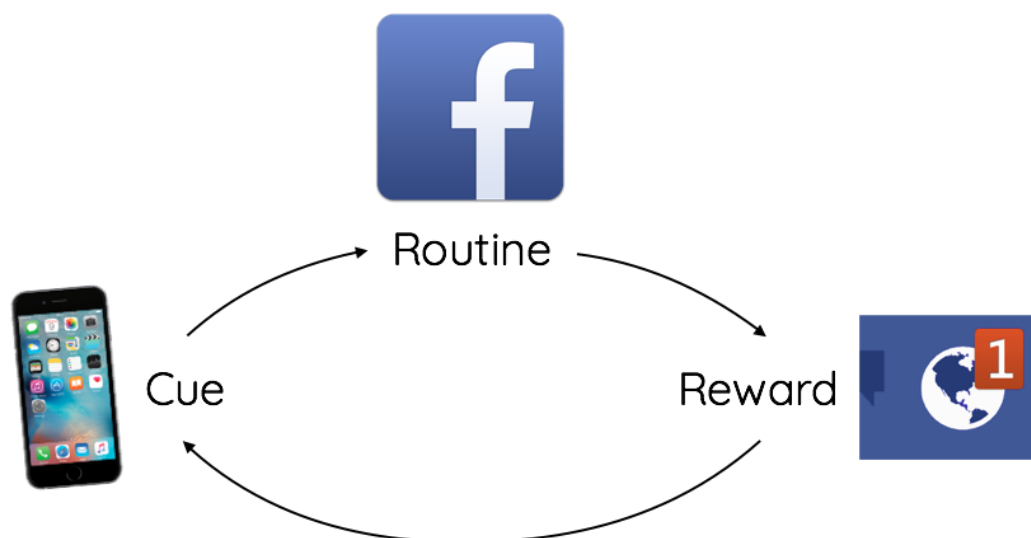


Figure 6: The Cue, Routine, and Reward Loop

The 6th figure exemplifies a Reward loop for a Facebook user. The cue is a smartphone (stimulus) that creates the routine (trigger) which gives the reward, that is the payoff that makes the user repeat the cycle. More interaction repeatedly on social platforms increases the number of rewards (in this illustration notifications) that result in more frequent use.

2.6.2 Particularizing how dominant Technology-, & Social Media corporations keep us affiliated

Technology is designed for addiction by attention engineers finding ways to exploit the natural tendencies of human beings by dopamine-fueled feedback loops. Whether it is push-notifications or likes, billion-dollar corporations are playing a fundamental role in forming today's society, many of which are incredibly harmful (Wang, 2018).

Twitter uses the Reward Prediction Error for its bell in the notification center. Just like the pull of a slot machine, the spins feel like forever but are in reality just a few seconds. Twitter's highlighted notifications have a 2-3 second delay for the user to get excited and build up tension. In the context of Twitter, the notification is the

reward. Instagram is following the same tactic by delaying like notifications (Loftus, 2017).

Netflix offers “Netflix Originals” that are their own produced shows that users cannot watch anywhere else. Netflix Original TV-, Documentary-series are often released in full seasons so that users can watch everything in one go. Many users prefer to watch the whole season at once spending up to 10-hours a day on the platform (Loftus, 2017).

YouTube’s strategy to encourage users to watch more content is their auto play feature. When a video ends, it automatically begins to play another one that the user would click and want to watch. Other streaming corporations that have the similar feature implemented are Netflix, HBO, and Amazon Prime. Furthermore, many major news corporations are following this model. Instagram and Snapchat have a “Stories” feature displaying happenings from friends and influencers within a 24h timeframe, that will disappear once the 24h have passed. Both apps have an “auto play” Story function implemented to make sure users view all Stories. Displayed advertising regularly appears between Stories (Hartmans, 2018).

LinkedIn is a popular networking app owned by Microsoft. LinkedIn uses social reciprocity implicating that when someone wants to connect with the user, or the user recently established a connection there is a list with possible new connections (Hartmans, 2018).

Snapchat is a social media giant that has actualized a feature termed “Streaks.” The streak encourages users to send “Snaps” (Pictures and videos) to keep the streak active. The streak will reset to 0 if there is no interaction within a timeframe of 24h. The emoji next to the user that the “snapchatter” has a streak with is changing depending on the streak’s length. The largest segment of users using Snapchat are teenagers, which makes the Streaks feature more manipulative for a brain that is still actively developing (Hartmans, 2018).

Instagram, Facebook, and Snapchat are using a friend-suggestions, meaning that users can tag each other in their posts that send the other user a notification once

tagged. It is an excellent way to lure friends on the platform for further interaction with other content (Loftus, 2017).

Tinder is the world's largest dating app that turned dating into a game of swiping left (dislike) and swiping right (like). Tinder is another app using social approval for users to remain engaged to its service. Users will come back to the app to see if anyone likes them. Premium subscription models called "Plus" and "Gold" that the app offer have features such as (1) unlimited swipes, (2) swiping anywhere in the world from your current location, (3) displaying users that have already liked you, (4) increased amount of "super-likes" that will increase the attention of likeness for another person, (5) Area boosts that will make the user's profile a top profile within the area of being for 30 minutes once a month (Morgan, 2018).

Facebook and **Snapchat** have a feature called "Memories" making the content more personal. Memories are displaying happenings from earlier years of bonding with the user's friends making the experience feel more special and intimate. If the user wants to delete his/her profile, Facebook will guilt the user by stating that "(Name of best friend) will miss you" that will play deeper with your emotions (Hartmans, 2018).

Spotify creates customized playlists by repackaging music that the subscriber enjoys making the experience more personal. (Hartmans, 2018).

Supercell is one of the world's largest mobile game developers with several mega-hits. Their game "Clash Royale" has over 160 million total downloads, having users calling it the most addictive game of our time and declared to be both Google Play-, and Apple App -Store's best game. The main addiction lays in their "Chests" that work as rewards. The chest contains gold for in-game purchases and cards that the user uses in battle, without those two the user is stuck. There are over ten different chests that have different rewards, the best-rewarded ones are rare and take up to a day to open. The user can open the worst rewarded chests every 3 hours. Real money can be used to get them open immediately and get faster ahead in the game, having users spend over US\$1 million in extreme cases (Edwards, 2018). Another fundamental of Clash Royale is its community consisting of a clan of 50 people.

The chat is often active; card trades are taking place, and establishing tournaments are favoured, all giving social interaction and stimuli. The in-game battles are averaging between 2-3 minutes meaning that there is always room in one's schedule for a game having us regularly check back in.

Most companies have the "Delete Account" button almost hidden in the settings, making it difficult for users to delete. Some apps do not even support account deletion, the users needs to log in from their browser and find the button from there, which is the case with, e.g. Spotify.

The earlier mentioned tactics are just the surface of how companies are taking advantage of our behaviour and make us want to come back for more stimuli.

2.6.3 How Technology Corporations take responsibility

The corporations in charge of our social and technological revolution are commencing a sense of obligation for their users. Some major corporations are already acting by implementing features into their services and products that give the user more control over their usage. Google revealed at its annual developer's conference that 70% of their users want help balancing their digital lives (Wilson, 2018).

Apple introduced several new features in the most recent software upgrade iOS 12, giving the user more control of time management. Their "do not disturb" mode can now be timed from a particular time (e.g., 22:00 – 07:00) completely disabling notifications overnight. A new feature in iOS 12 gives the user more control over screen time by sending weekly reports displaying which apps consume most of the users' time. The user can even set timers for each app that sends a notification if the limit is about to get surpassed (Wilson, 2018).

Google recently launched the "Digital Wellbeing" program that will help users understand how they consume technology and create healthy digital lives. A similar feature to Apple's "Screen time," Google offers a feature named "Dashboard Data View" showing the amount of phone unlocks and time spent in apps. YouTube that is owned by Google will notify and remind the user to take a break after a certain

time spent watching videos. Emails are a large part of most people's daily life, an endless amount of notification. Google's Gmail is tackling the problem by a customized notification setup that will only notify the user for their "most important emails." In the Digital Wellbeing program, Google is also looking out for families, especially kids with its "Family Link." The parents/guardians of the kids can manage the apps they use, monitor screen time, customize the YouTube content that they are allowed to see, time limit the app and internet use, block inappropriate content and schedule internet breaks (Wellbeing.Google, 2018).

Apple and Google are two of the largest gateways to a digital experience as a result of their software's iOS and Android. Both of the companies aim to lead by example by creating a more sustainable and meaningful environment online; it is good for business and the right thing to do. Facebook is now acting by making changes to its algorithms displaying family and friends first. Facebook and Instagram are currently rolling out a "usage insight" feature that reports the time spent in-app (Bradshaw, 2018).

2.7 A Conclusion of the Theoretical Framework

The Theoretical Framework articulates some major trends within the industry of Mindfulness. It is clear that new tools and methods are necessary for emotional-, mental-, and physical wellbeing due to our society's overflow of information by technology. The radical shift in information technology and social media have not prepared us for coping with the burden that it has brought us. The theoretical framework in the scientific research shows that Mindfulness can be used in many areas of health and wellbeing while creating a better standard of life by a consistent practice. The economic figures show that the Mindfulness industry is expected to continue its growth adding new concepts and forms of practice such as vans, studios, and retreats. Corporations are highly embracing the results received from Mindfulness, but universities and other schools are not there yet. Furthermore, the theory points out technology corporation's role in making us less and how some of them take responsibility.

3 EMPIRICAL RESEARCH

This section of the thesis covers and describes the various strategies used within the empirical part of the research.

3.1 Research Method and Approach

The aim of the research is to explore if practicing mindfulness can be a tool used by students during higher-education for both stress-management, neutralizing addiction related to technology, and social media, the students' attitude towards implementing a mindfulness program at their school, as well as increasing the overall quality of general well-being and mental health.

The research method for the investigation is qualitative with in-depth interviews. The in-depth interviews allow for a more subjective display with higher accuracy followed up by eventual follow-up questions. The qualitative research method allowed the interviewees to fully explain underlying reasons, opinions, and motivations that would not have been possible with a quantitative investigation where the responses are mostly fixed. The in-depth interviews granted the possibility to deepen the investigation related to personal experiences and perspectives. A major difference between the qualitative and quantitative method is that qualitative investigations tend to be more time-consuming with its definite data-analysis (MQHRG, 2019).

3.2 Collection and Description of Data

Research data for the investigation was composed by audio recorded in-depth interviews. The goal was to find between 6 – 8 promising interviewees that are currently or have been practicing mindfulness during higher-education. By reaching out on social media (Facebook, Instagram, and Snapchat) the researcher was able to gather in total 9 interviewees for the in-depth interviews. Notably, one of the participants have only practiced mindfulness during the last year of Upper Secondary School when Matriculation Examinations take place, meaning that one out of nine participants does not fit the category of higher-education, but the

researcher still sees the interviewee as being relevant and valuable for the research. The interviewee is referred to as the “5th interviewee” in the 4th chapter of this thesis. The total participation count ended up being 9.

The basic data of the study participants are:

- 9 participants in total
 - 3 males
 - 6 females
- 4 University of Applied Sciences Students
- 4 University Students
- 1 Upper Secondary Student (High-School)

A consent form for the interview confidentiality was sent out to the participants for signing. In addition, the consent form explained the purpose of the study, the procedures, risks, and the nature of the study. Also, all the contact information of the researcher was stated for a possibility to ask additional questions (Appendix 1).

The in-depth interview was divided into 6 main categories with underlying questions that were all open-ended:

1. Demographic Background (3 questions)
2. Personal Interest and Motivation (6 questions)
3. Performance and Results (3 questions)
4. Social media and Technology (7 questions)
5. Personal Spending (2 questions)
6. Implementing a Mindfulness program at your school (2 questions)

The current organized structure of the interview both supports and benefits the interviewee when explaining the deviation between the mentioned categories (Appendix 2). Additionally, the organized structure allowed the researcher to transcribe all answers into a spreadsheet without the risk of overlapping information. Furthermore, the open-ended questions allow the participants to include more information that can make the research more authentic and valuable,

and even bring forward unexpected results. The individual interviews provide a possibility for the researcher to dive deep into obscure and ambiguous issues that can provide additional standpoints for the research.

All interviews were audio recorded via Skype's own audio recording feature delivering high quality sound. The interviewees had the option to choose if the consent form was sent to them via Skype or Email as well as the option to choose if they wanted the questions displayed on the screen during the interview or just listen to the researcher asking the questions.

3.3 Data Analysis

Data Analysis explains the researcher's methods of analysing and reviewing Qualitative data gathered from in-depth interviews.

3.3.1 Qualitative Systematic Review

There are two main forms of a systematic research, the quantitative and qualitative. The quantitative systematic review is focuses on research that have numerical data while a qualitative systematic review extracts data from rhetorical communication, interviews, and observatory examinations – with a focus on meaning and understanding of the participants. A qualitative systematic approach was used for this investigation (MQHRG, 2019).

3.3.2 Thematic Analysis

The qualitative research has been Thematically analysed, which is common for analysing data within a qualitative research. A Thematic analysis is underlining and pointing out various patterns and subject matters within the research data, compared to the quantitative research's statistical analysis which is more suitable for large amounts of data. A focal point for the Thematic analysis is finding assorted themes that can be linked with the core research questions for the research (sites.google.com, 2019).

3.3.3 Phenomenological Research Approach

Another recognized qualitative research method is Phenomenology that is used for describing human understandings, experiences and certain phenomena. Phenomenology has its roots in philosophy and psychology and is now extensively used in analysing in-depth interviews. Another common characteristic for a Phenomenological investigation is its (1) small sample size, typically less than ten, (2) interview questions are open-ended, and (3) in-depth interviews. A prevalent method of analysing data via a Phenomenological research approach is to re-read and re-listen to the data for being able to categorize the data in themes and patterns while gathering significance in the data with answer to questions based on What and How (CIRT, 2019)

An overview on how the data was analysed:

- The audio-recordings were listened to and transcribed as a whole into a spreadsheet with the earlier mentioned categories and questions.
- The transcribed spreadsheet was organized and narrowed down into carefully chosen data creating a new spreadsheet with most relevant information for the research matching the original research objectives and questions.
- The relevant data was highlighted to get a better general overview that could be narrowed down into smaller units.
- The smaller units were coded into terms such as “Reactive”, “Anxiety”, and “Mindfulness App” to easily identify the answers and to highlight the most important parts of the full answer(s).

Unique (alone standing) answers was taken into consideration to increase validity with the theory of the thesis. The unique answers tend to have a similar meaning to the other answers.

3.3.4 Authenticity and Validity

An ongoing process throughout the research is finding authentic and valid data that can present reliable findings. Reliable findings tend to repeatedly show similar outcomes within the data, e.g. all (the majority) of the interviewees have the same answer for the same question or in general results that can be repeated consistently with identical conclusions (Phelan, C. & Wren, J. 2006)

The researcher of the thesis is aware that speculative data can occur, implicating that the final results cannot be said to be customarily applicable. Furthermore, measuring results for outcomes related to Mindfulness practices can be somewhat vague, since the gathering of every single detail related to the person's life during the time of practice cannot be accounted for. This could include dietary choices, sleeping patterns, irregularities in the social life, accidents, medication and so forth. Nevertheless, the Theory and the form of Qualitative Research chosen for the study is strengthening the trustworthiness of the final conclusions and results.

4 ANALYSIS AND RESULTS

The fourth part of the thesis portrays the results and analysis of the in-depth answers gathered in the empirical part of the research. To increase material translucency, all the interview questions can be found on the 2nd Appendix at the end of the thesis.

The language used in the interview for questioning was English, although some interviewees preferred to answer in Swedish. The Swedish answers have been translated into English and thereafter transcribed. All questions were open-ended, and every interviewee managed to answer every question that was asked. Notably, some questions asked were solely answered with a simple “YES” or “NO” without any further elaboration, which tend to lessen the Phenomenology in this research.

4.1 Demographic Background

The Demographic Background section aims to find possible correlations between the interviewees and the questions asked in the investigation.

The questions asked in the first part of the interview (1. Demographic Background) were:

1a. Identify your gender

This can show correlations between male and female participants and if their answers are differentiated.

1b. Educational Institution (University, University of Applied Sciences, College or other?)

Studying the Educational Institution gives us information about open-mindedness of students, eventual educational intensity differences.

1c. What is your cultural background?

This showcases any possible differences between cultures related to the ‘world’ of Mindfulness.

Analysing the Demographic Background didn't show any specific trends. The cultural differences weren't large enough (8 Finnish participants, 1 Australian), and no particular line of difference between the Universities and Universities of Applied Sciences. Taking the gender into consideration (3 males, 6 females) didn't give us any data that stood out. The answers from both sexes were in line with each other and the major findings from the research didn't point in any specific direction.

A quantitative research could have possibly given us more demographic based data with a broader extent of cultures and additional participants that could point out more specific based data trends.

4.2 Personal Interest and Motivation

The Personal Interest and Motivation section was built as a core support for the rest of the interview with fundamental questions. The questions in this section are analysed individually.

2a. What made you interested in practicing Mindfulness?

Every individual tends to have a reason that sparks the curiosity or interest for practicing Mindfulness, whether it is stress management, performance, or anything else. The answers to the question were somewhat diversified and different, but still evenly divided. Some of the participants had several causes of interest.

- (1) Three of the participants stated that their interest originated from friends-, and family -recommendations that later on led to self-practice and increased curiosity.
- (2) Three of the participants told that their source of interest began from their hobby.
 - a. The 3rd interview respondent said that he practiced meditation during Kung-Fu lessons, and the respondent has thereafter used it in daily life. Kung-Fu is a form of martial arts with roots in the East, China (Kung Fu, 2013).

- b. The 5th interview respondent stated that the interest began from Gymnastics and its mental training program for increasing performance.
- c. The 7th interview respondent said that it inaugurated from Yoga at a young age, and later on continued with reading Zen Buddhism that introduced him to Mindfulness and Meditation.

(3) Three of the participants stated that their interest emerged from struggle with Anxiety. One of the respondents said that *“Anxiety got me interested in practicing, wanting to find ways to quiet the mind and do self-reflection. I started during my teen years and have been off and on since then.”*

(4) The 9th participant said that *“It began from Cognitive Behavioural Therapy and later came part of the everyday life by learning more through books and acknowledging information related to the subject of Mindfulness.”*

The source of interest varies with some deriving directly from the culture in the East (Zen Buddhism, Yoga, Kung-Fu) whereas other out of curiosity and from recommendations. A collective inference is that all participants got in touch with Mindfulness both indirectly and directly to increase well-being.

2b. What type of Mindfulness have you practiced during higher-education?

This question explores the various forms on Mindfulness that the interviewees have practiced during higher education. Mindfulness comes in many forms and types of exercises; however, the awareness of the moment should always be considered. Many interviewees had several forms on practices.

- (1) Eight of the participants stated that they practice Mindfulness Meditation, which is also the most common type of Mindfulness practice in the world.

- (2) Four of the participants said that they exert various forms of breathing exercises. The focus on breath is a fundamental element in Mindfulness that affects both the Mental and Physical state.
- (3) Five participants have practiced Yoga, where the core focus is on breathing and physical sensations.
- (4) Other revelations of practice were:
 - a. Visualisation (x2)
 - b. Drawing (Arts in general) (x3)
 - c. Mindful-walking (x2)
 - d. Rock-climbing
 - e. Spike mat
 - f. Mantras

The participants had 10 different forms of practices in total of which a few stood out more than others. With a majority having Mindfulness Meditation as one of their core sources of practice, and breathing exercises as a second one can assert some illations such as:

- 1. No tools are needed for the practice (compared to arts, rock-climbing, spike-mat, Yoga)
- 2. It can be done almost anywhere
- 3. It can be done instantly when overwhelming emotions or feelings arise
- 4. Only 1 minute of practice can help reset the body

2c. What is your main reason for practicing Mindfulness?

Exploring the reason of practice can provide us with indispensable content explaining WHY the participants engage in Mindfulness. Several interviewees had differing reasons.

- (1) Seven interviewees said that Anxiety is one of their main reasons for practicing
- (2) Six interviewees said that one of their main reasons is to practice for stress-management and to increase calmness
- (3) Three interviewees stated that one of their main reasons is to practice improving Mind-body connection. *The mind-body connection refers to the relationship with the mind and the body and how they affect each other.*
- (4) Other revelations of reason were:
 - a. *Focus (x2)*
 - b. *Resetting the body*

An unequivocal inference for the main reason of practice are Anxiety-, and Stress-related. Anxiety is a feeling of worry, nervousness, and fear that tend to increase with stress. The interview responses in this section indicate that Mindfulness helps with managing Anxiety and Stress, which are common issues for concerns in today's stressful society.

2d. How long does a typical session last?

The length of practice tends to vary depending on the type of exercise. The time devoted for Walking, Yoga, Drawing and Rock-climbing was all between 30 – 60 minutes per session compared to Meditation, Breathing Exercises and Visualisation ranging from 5 – 20 minutes per session.

The findings convey that physical forms such as Yoga, Walking and Rock-climbing need longer sessions to attain a similar satisfaction like more mental / emotional focused exercises.

Breaking down the results for the typical length of Meditation, Breathing and Visualisation evince that 10 minutes is a common mean value.

- Meditation: 2 x 5 minutes a day
- Meditation: 10 – 15 minutes a session
- Meditation: 5 – 10 minutes a session
- Meditation: 10 minutes a session
- Meditation: 10 – 30 minutes, even 5 minutes depending on the situation
- Breathing: 10 – 30 minutes, even 5 minutes depending on the situation
- Visualisation: 10 – 20 minutes

Highlighting the possible reasons for 10 minutes being a common length of a session is that the (1) attention span is increased in a short session, and a short session is enough to (2) reset the body's hormonal balance such as cortisol and adrenaline, (3) Headspace and other popular meditation apps have custom lengths of 5, 10 or 20 minutes.

2e. How consistent have you been with practicing? Please specify

Some factors that can alter one's consistency of practice are time, need, and general interest. This question discusses the participants' consistency of practice.

A notable finding in the routines of the interviewees are their Reactive approach to Mindfulness training. Eight out of nine participants stated that they mostly practice whenever there is a need and when general wellbeing is lacking.

The 4th interviewee said that: *“During the most stressful periods the practicing have been almost every day but during calmer periods the practicing slows down”*

The 6th interviewee stated that: *“It is on and off, currently climbing 1 – 2 times a week, and Yoga about once a week but would prefer about 4 times a week.”*

Breathwork is only reactive, when feeling anxious or overwhelmed. The practice of Mindfulness was before more proactive but currently it is more reactive.”

The 3rd interviewee articulated that: *“Mindfulness meditation is nowadays quite irregular, mostly practicing during the most stressful days. Spike mat is still a 5 day a week practice.”*

It is clear that the general approach is Reactive, although a few participants aim to practice regularly. The answers suggest that the feeling of anxiety, stress, and, overwhelm tend to increase the participants regularity in Mindfulness practice.

Leading the results back to question 2d. regarding session length, the first interviewee stated that the length of the practices is shorter when dealing with anxiety and depression and longer when visualising. Another interviewee said that she practices art (draws) until feeling better. The findings could hint that even the session length could have an impact from the level of anxiety, stress, and overwhelm.

2f. What is your primary source of Mindfulness training? (for instance, App, Book, or Website)

The internet has enabled us to access a vast amount of information from anywhere with a broadband connection. Most streaming applications are also offering the possibility to download offline content, making their content available anywhere with a smart device. This section discusses the participants’ primary source of Mindfulness. Some participants had several sources.

- (1) Three participants stated that their primary source of Mindfulness training is from the application “Headspace.”
- (2) Four participants got their training from YouTube, where one stated that *“It began with breathing exercises from my therapist and later on I learnt the*

term Mindfulness from some YouTubers that were also struggling with anxiety.”

(3) Three participants said that books were their primary source and one specifically stated that the reason for books were to ***get away from technology***.

(4) Other findings were:

- a. Spotify (x2) – Mindfulness playlists or calming music
- b. Yoga (x2)
- c. Instagram (x1) – Influencer content with advices and ideas
- d. iPhone’s Podcast App (x1) – Podcast named “Live Awake Host.”

The results show that the majority of all sources are electronic, although books remain an important source for exploration of the topic. Only one interviewee said that one of his sources were his own imagination. An overall inference regarding sources, it is clear that a form of support for one’s Mindfulness training is greatly needed and beneficiary.

4.3 Performance and Results

This chapter discusses Performance and Results from practicing, both academically (when stated) and in other areas of life.

3a. Have you noticed any changes in your academic performance? If so, please specify

For some of the participants, Mindfulness have been a “game changer” related to their academic performance.

The 1st interviewee said that:” *During difficult times, Mindfulness was a way to not break down and to be able to pass courses and actually manage to show up for school.*”

The 2nd interviewee stated that:” *Mindfulness meditation helped for public speaking and school presentations that used to bring high levels of stress. The meditation was practiced in the morning before a presentation.*”

The 9th interviewee stated that:” *I have more harmony when interacting with other people when having a mindfulness practice such as yoga or meditation. The introversion is decreasing and have decreased and in additional worrying. Feel much less restless when attending lectures and more in the moment and less distracted.*”

The quoted statements above demonstrate major benefits for each interviewee, but in different ways – from attending school to handling a stressful situation.

The academic performance related answers showcase that there is some diversification in the notice of changes. It has been beneficial for every participant, but in a variety of areas. Some stated that there was an increase in focus, energy, and motivation while others managed to attend school, meet assignment deadlines, produce better work, be less self-critical, and find unique individual importance in courses. The outcome of the answers asserts that both general well-being, stress management and overall academic achievements were expanded.

3b. How has your ability to handling stress changed since you started practicing Mindfulness?

Four interviewees were not able to specify **how** their ability to handle stress has changed, but they all said that it helped maintain the levels of stress.

Worth noting is that two participants interpreted that they were able to distance themselves from the stress and the stressful situation, which is a core purpose of mindfulness, to be less reactive to overwhelming moments and situations.

The other participants stated that their stress management have improved and that they feel ordinarily calmer in commonly stressful situations, such as public presentations and during exam weeks.

The result from the answer is to some extent vague, with only 5 participants being able to answer **how** their ability to handle stress has changed. The outcome of the question is that stress management improved for every participant but in what way remains ambiguous.

3c. Have Mindfulness benefited any other areas of your life? If so, please specify

Question 3c. examines if Mindfulness practices have had any enhancements in other areas of the participant's life. All interviewees cited several benefits.

A distinct observation was the participants experience an improvement with human relations.

The 1st interviewee said that: *"Human relations and dealing with conflict. Managing to stay calm during situations of conflict while taking care of it without angering myself"*.

The 3rd interviewee explained that: *"I'm more relaxed in daily situations, and handling conflicts can be done more calmly... Improvement in human relationships can also be seen to some extent"*.

The just stated quotations by the 1st and 3rd participant elaborates on the topic of human relations with conflict. Since conflict was not asked about separately, there may be a possibility that the other participants increased their ability to positively solve conflicts but mentioned it generally as improved "Human relations".

The 5th interviewee described her benefits in the following way: *"Mostly emotionally by going deeper into myself to explore more. Taking ownership and responsibility for my feeling and emotions and not blaming them on others. A difficult relationship with dad that was about to get non-existent and later on changed to a healthy relationship. Generally better relationships with others since blaming others is excluded. I am less reactive to emotions and more proactive"*.

Four other participants' social and relationship improvements can be summarized as following:

- Improved social relationships and being in rooms with lots of people. The participant had to be drunk before handling such situations.
- Can feel people and situations in a different way with all senses combined.
- Hugely benefits the relationship with other people, handle social situations better, kinder to myself and I look after myself better physically. There is a more holistic approach to one's life and health.

Other findings worth mentioning:

- Higher self-confidence
- More general calmness
- Not as nervous for challenging tasks
- Helps to forget and not think about work after work
- Became a better listener

Although every Mindfulness practitioner have seen benefits in various areas of their life, and in different ways, the results indicate that there is a prominent area where most participants have benefited remarkably. Six out of nine participants stated that they have seen direct improvements in their social life, relationships and relations with other human beings, and two out of them further with handling conflict.

The indirect results for the same category such as higher self-confidence, becoming a better listener, and general calmness could eventually benefit the social and relationship aspect as well.

4.4 Social Media and Technology

Social media and Technology have and are replacing major areas in our society for differing reasons. This chapter is investigating the participants thoughts on social media addiction, benefits from practicing mindfulness within the area of social media and technology and further explore the general link between mindfulness and the use of social media and various forms of technology.

Despite that all the questions are open-ended, some participants were not able to elaborate with more than a Yes or No for some of the questions, making the reasoning behind the analysis difficult to comprehend.

4a (i). Would you consider yourself addicted to Social media?

4a (ii). Would you consider yourself addicted to Smart devices such as smartphones and tablets?

Question 4a is a two-part question investigating the interviewees consideration of being addicted to either social media or smart devices or both. The two-part question is also researching if there are any correlations between question 4a (i) and 4a (ii).

- Eight out of nine participants stated that they are addicted to social media, with some saying that they are “really addicted.”
- Seven out of nine participants stated that they are addicted to smart devices.

The 5th interviewee said that both for Social Media and Smart Devices: *“Yes, I’m addicted to smart phones, tablets and the laptop. I use smartphones and its social media platforms as an escape when negative feelings such as anxiety is overwhelming. Tend to scroll social media on the smartphone until falling asleep to avoid facing the emotions / feelings. Same with Netflix on laptop or TV.”*

The 6th interviewee stated for both social media and smart devices that: *“Both Yes and No. When I feel bad, I spend over 5h+ daily on the phone / social media but when I’m busy with other more meaningful things then much less. It is a way of distraction more than anything else. I have the need to always carry the phone around.”*

The 3rd participant was the only one who said that he is not addicted to either social media or the smartphone. He is more focused on learning and does not feel the need to check social media or the smartphone.

The 1st participant stated that he is only addicted to Social media but not specifically smart devices. He explained that a smart device addiction occurs as a by-product to social media.

It is apparent that the addiction to social media and smart devices are largely correlated. Several interviewees said that they have an urge to constantly check social media and always having access makes it difficult not to. The answers implicate that both social media and smart devices tend to be used as a distraction and escape from reality, which disrupts the feeling of mindfulness.

4b (i). Do you think that social media makes you less mindful? If so, please elaborate

4b (ii). Do you think that smart devices such as smartphones and tablets make you less mindful? If so, please elaborate.

The question 4b is a two-part question investigating the interviewees consideration of either social media or smart devices or both make them less mindful. The two-part question is also researching if there are any correlations between question 4a (i) and 4a (ii).

The majority of the participants clearly stated that social media and smart devices makes them less mindful. Some participants elaborated deeper that would argue for both yes it makes one less mindful and no it does not.

The 2nd participant explained that: *“You can be mindful while consuming the content on social media, but it is difficult to remember where the fine line goes between being mindful and not while spending time on social media. Social media often highlights the best moments of our lives which can bring misery and lead to detachment from our own lives and the current state. I highly enjoy editing and taking pictures and posting them to social media which makes me mindful when doing so.”*

The 6th participant said that:” *Both Yes and No. Yes, in a sense that when you are scrolling for hours and hours, there is no critical engagement... just absorbing pointless information such as memes or other people's happy pictures that doesn't reflect the reality of life. No, in a sense that there are lots of platforms encouraging mindfulness and people putting up reflective thoughts about e.g. life. It might encourage people to be more mindful.*”

It is clear that the participants who argued for both sides of question presented support for – **You can be mindful when using social media and smart devices as long as you keep a mindful approach** (being aware of the content that you browse, editing, being creative, taking photos...)

Summarizing the findings from the majority of the participants who fully sided with social media and smart devices making one less mindful:

- Social media is an escape from reality
- Smart devices are a way to waste time and detach oneself from the current moment
- Social media and smart devices make me less mindful if it is next to me, but not if it is in another room
- Social media is too superficial
 - Comparing one’s life to everyone else
 - Creating general overthinking

The concluding statement gathered from the interviewees answers is that the majority believes that both social media and technology makes one less mindful, a minority believes that if you have a mindful approach of using social media and technology it does not disturb one being in the moment.

An additional remark is that the superficiality, other people’s perfect lives, and your own perfection for appearance tend to actualize a great quantity of misery.

4c (i). Do you have difficulties focusing on daily tasks due to Social media?

4c (ii). Do you have difficulties focusing on daily tasks due to Smart devices such as smartphones and tablets?

The question 4c is a two-part question investigating the interviewees thoughts focusing on daily tasks with eventual distractions from social media and smart devices or both.

The answers indicate that most participants (7 out of 9) are distracted by social media while trying to focus on daily tasks. Smart devices had a similar outcome with 6 out of 9 participants feeling distracted.

The 2nd interviewee stated that: *“I have difficulties to focus on studying and freelancing, there is always a tab open on the side e.g. Facebook and Instagram. Even when I put the phone away, there is a craving after 5 mins to check the device and various platforms again what is happening”*

The 5th interviewee stated that: *“Yeah, I manage several Facebook and Instagram pages for work resulting in that I can't shut off from those sites even though I want to. It is difficult to live in "2 worlds" when daily practical tasks have to be done but lots of stuff is happening on the phone leading to distractions for everyday tasks. I haven't found the balance yet, and I tend to spend too much time online.”*

Both the 2nd and 5th interviewee clearly stated that there is an urge to see what is happening in their digital world, and both social media and smart devices tend to disrupt the concentration when working or studying.

The 6th interviewee articulated that: *“I constantly check my phone but if I’m busy and engaging in more meaningful activities or work I tend to forget about the phone. When I’m being bored and do daily repetitive tasks then the first thing, I tend to do is check the phone.”*

The case for the 6th interviewee is that the phone is a tool to mask boredom and repetitive tasks. Meaningful activities reduce the urge to check one’s phone.

Other notable findings from the 4c questions were:

The segment stating that it is a distraction:

- Only newspaper applications notifications are a distraction
- Better at managing the time spent online now but before a full day could go past

The segment stating that it is not a distraction:

- “Doesn’t disturb, my productivity hours are during times when people can’t reach me.”
- Keeping the phone away during lectures is easy

The closure for questions 4c (i) and 4c (ii) affirms that the majority of the interviewees feel that both social media and smart devices are disturbing their daily activities. For some, it is a way of masking boredom, for others it becomes a burden for both work and school.

4d. Have you noticed any benefits from practicing Mindfulness related to using social media and/or smart devices such as smartphones and tablets? If so, please specify

The last question of the Social media and Technology chapter is investigating if the participants have noticed any changes in behaviour or awareness with using social media and/or smart devices from practicing Mindfulness. Questions 4a to 4c are base questions for 4d.

Eight participants have noticed differences in consuming social media content and using smart devices and only one participant stated that she did not notice that anything has changed.

Two remarkable interpretations were found in observing the answers of question 4d.

Five participants say that they are more aware of their social media and smart device consumption.

The 4th interviewee said that: *“I’ve began to criticize more how I use my time on my phone and social medias. Then I’ve downloaded other apps that is investigating how well I sleep and where I spend my time during the day (shows if I’ve been still for too long). I also use the screen time app for iOS. Overall increased time-awareness.”*

Notable from the answers of the 4th interviewee is that she is using apps (technology) to track her sleep and if she is getting enough exercise (moving enough during the day) as well as tracking screen-time with her iPhone, meaning that technology have been a part in increasing time-awareness and criticizing how the time is being used online.

Other interviewees noticed similar patterns in their use:

- More aware of the content consumed
 - Being aware that a lot of content is a “made-up world”
- More time-awareness and what the time is being spent on
- Increased awareness in social media usage
 - Turning off mobile data when putting the phone in the pocket
 - Deleting apps that are not being used
- The urge to constantly check the phone is decreasing compared to before

Three participants explained that after practicing Mindfulness, there is not the same urge to check the phone.

The 6th interviewee said that: *“I don't have the urge to check the phone for at least 30mins+ after practicing mindfulness. Checking the phone feels like losing all the benefits and headspace gained from the practice.”*

Leading back to question 4b., where the majority of the participants said that both social media and smart devices makes one less mindful, it is possible to draw an ending that practicing Mindfulness decreases the urge to pick up the phone resulting in lowering one's addiction to both social media and the smart device that was investigated in question 4a.

As an ending statement, it is clear that Mindfulness increases awareness for (1) time, (2) online content consumption, (3) smart device consumption and tend to lower the general urge to not check the phone after practicing.

4.5 Personal Spending

The Chapter of Personal Spending investigates the participants purchasing behaviour related to the industry.

5a. Have you purchased anything related to Mindfulness? Please specify

The purchasing behaviour shows results that are not traditionally categorized as a typical Mindfulness tool or product. **Five** out of nine participants said that they have purchased a Spike mat for their practice related to the industry. In general, the spike mat increases pain on the area where the mat is applied resulting in increased body sensation and awareness. The focus then remains on the physical body and breathing. Additionally, spike mats can be a boost for relaxation to “traditional” mindfulness meditation practice. The Spike mats falls under the category of

Acupressure, which works by stimulation of key points in the body to relieve tension, soreness, and pain (<https://www.doshamat.com/>).

Two participants stated that they have bought the premium version of the Headspace App, and the 1st interviewee stated that: *“I bought a full year subscription for the Headspace App. The reason for the Headspace App purchase was a desperation to improve health, and to have a sort of security during moments of anxiety and worries. It is impossible to have someone by your side all the time and a therapist isn't accessible all the time, that's why it is great to have something to tune in to on-the-go for calming down. The free version didn't simply offer enough help.”*

The 2nd interviewees reason for the Headspace App purchase was: *“I bought the Headspace App Premium version for a couple of months. The reason for the purchase was Headspaces different categories of meditation for different situations such as anger and grief which do not come with the free version.”*

Both of the interviewees who purchased Headspace Premium felt that the free version did not offer enough support or benefits, and furthermore the 2nd interviewee stated that she would consider continue to subscribe to the premium version.

Other purchases related to the industry:

- Yoga equipment (x4)
- Books (x3)
- Art supplies
- Climbing Equipment
- Spotify (x2) – *indirect purchase, bought mainly for listening to music*

The results showcase that physical products such as a Spike mat, Yoga equipment, and Books are the most popular purchases. A possible reason for the statistics is the

price friendliness compared to the Headspace App that only two participants had bought.

The most notable finding related to purchasing is that both the Spike mat and Yoga equipment are not considered a traditional product category for the Mindfulness industry. One could argue that the industries are overlapping each other and using cross-over benefits.

5b. Are you interested in buying anything else related to the mindfulness industry?

Discussing the interest of buying anything else related to the industry split up the answers in two main categories – (1) YES and (2) Not right now.

Three participants stated that they are not interested in a purchase related to Mindfulness at this moment.

Five participants said that they are interested in buying products or services related to the industry:

- A meditation course for group meditation and continued subscription of the Headspace premium version (2nd interviewee)
- The premium version of the Calm App, but the price feels too high right now (3rd interviewee)
- The premium version of Headspace but haven't bought it because of the price and haven't really needed the premium version yet (4th interviewee)
- More books and a yoga-retreat (6th interviewee)
- Some type of therapy possibly (9th interviewee)

Only one participant said Maybe and with the following explanation: *“I’d maybe buy something but not anything specific right now, eventually if there were anything revolutionary and tangible then YES but at a reasonable price.”* (1st interviewee).

The results showcase that there is a mixed interest in future purchases related to the Mindfulness industry. There is a clear interest in buying premium versions in the

App space, but the price seems to be a point in question. Furthermore, since every participant have already bought something related to the industry, the need for additional services or products tend to decrease.

4.6 Implementing a Mindfulness program at your school

In this chapter the participants discussed the benefits that an Academic Mindfulness program may generate as well as their comfort of using meditation rooms at their campus during school hours. Both questions in this chapter are inspired by Corporations utilizing Mindfulness programs and meditation rooms at their workplace.

6a. What kind of benefits do you think that your school would generate if a mindfulness program was consolidated? Please specify

Question 6a. received the most thorough answers by the interviewees, with several benefits listed both for students, teachers, and the educational institution. All of the interviewees mentioned several benefits and were positive to the implementation of a Mindfulness program at their school. The results have been divided into various categories for showcasing a clear overview.

(1) Academic-related Performance

The listed benefits related to Academic performance were (1) Increased Focus, (2) Increased Productivity, (3) Increased Efficiency and Performance, (4) better Time management and awareness of time, (5) More reachable students, (6) Higher engagement in class, (7) Producing better work, and (8) Positive impact on grades due to increased motivation.

- *The mentioned results show that Mindfulness could have a positive impact of several performance related areas that could lead to overall more focused, productive, efficient, and reachable students.*

(2) Mental Health

Mental health related benefits were the second most mentioned, and Mindfulness could make a remarkable difference in areas such as anxiety and depression. The interviewees stated that the benefits were (1) Decrease in anxiety and reduced performance related anxiety, (2) Decrease in depression (especially during the darkest months in the north), (3) Decreased stigma around mental health and a broader discussion related to the topic, (4) Suicide prevention and preventing students getting mentally ill, (5) Less burnouts for teachers, (6) Help to stabilize mental health for students and athletes, and (7) Student absence would decrease due to mental health issues. Additionally, the 2nd interviewee said that she knows several students that do not attend school because of mental health burdens.

- *The results related to mental health showcase that an Academic Mindfulness program can be a tool for stabilizing and managing many areas of mental health, especially anxiety, where 7 out of 9 participants main reason for practicing Mindfulness in the first place was anxiety.*

(3) General wellbeing

General wellbeing is covering areas of health in addition to mental health. The answers show that a mindfulness program could be great for (1) stress reduction, (2) better stress management, (3) increased calmness and students being more at ease, and (4) relationships between students would change by students getting closer to each other and being aware of each other's health.

- *The main finding in the general wellbeing category was the potential improvement of stress levels, general calmness, and student relationships*

The findings from question 6a. showcase a major potential of improvement for students, teachers, and even the educational institution. Furthermore, one participant stated that the students should be both receptive and accepting such a program. Another participant said that the program would need to be approached

in a social way to get as many people as possible interested and another interviewee elaborated with a similar statement that: *“Mindfulness looks different for different people; an issue would be addressing the practice to as many students as possible”*.

As a conclusion for question 6a. can be stated that the benefits from implementing a Mindfulness program for a school could be significant, but as some participants mentioned, the introduction could face setbacks.

6b. Would you utilize the possibility to use Mindfulness meditation rooms at your campus during school hours?

Mindfulness meditation rooms are becoming more common in the corporate world. Question 6b. is investigating whether students would feel comfortable to utilize such rooms at their school's campus.

The results show that 7 participants would utilize Mindfulness meditation rooms, 1 student said “Maybe”, and another participant did not feel at all comfortable with the idea.

The 4th interviewee stated that: *“I would absolutely. I did mindfulness at work during the summer in the company's restroom and it increased the energy and motivation for the rest of the day. If this was a possibility at my school, I'd definitely seize the opportunity”*.

The statement shows us the benefits of a mindfulness related exercise mid-day and a positive attitude towards doing so at the campus after a successful former experience with the exercises at work.

The 1st interviewee said that: *“No, I wouldn't feel safe doing so, a more secure and private environment/location such as my own home would be required. It would require lots of time for me to be comfortable doing mindfulness in a public area even though it is a private and closed off area. I would not be able to relax to the fullest extent”*.

The 3rd interviewee stated that: *“Maybe... Practicing mindfulness requires a safe environment without any distractions from anywhere. Some uncertainty for doing it at the campus and I would do it most preferably at home. I would have to check out the space at first. The PRIVACY is key in this question”*.

Both of the interviewees that did not answer Yes to question 6b. said that privacy is somewhat of an issue and that they would both prefer to do it in the comfort of their own home without any distractions.

The results show that the majority would utilize Mindfulness meditation rooms at their campus, but the privacy is of some concern. The overall perception of the meditation room idea is extraordinary with several students saying that *“a lot of people would benefit from this”*.

4.7 Discussion about the main results

This chapter examines and reviews the outcome of the main results that are based on the answers of the interviewees. The chapter is re-discussing the research in connection to relevant theories, former results, and the theoretical framework of this thesis. The main results are written in bold and parts from the theoretical framework are written in italics.

- **Mindfulness Meditation is the most common practice among the participants, closely followed by Breathing Exercises and Yoga.**

Looking back thousands of years, meditation has been a core practice in several religions and philosophies such as Hinduism, Daoism, and Buddhism. According to Puff (2013), some evidence suggest that meditation was practiced already 5000 – 3500 BCE.

The answers from the interview showcase that still today, Meditation is the most common form of Mindfulness practice. An addition to the listed arguments under

question 2b. in the section Analysis and Results, Mindfulness Meditation could be one of the only forms of Mindfulness practice that the participant is aware of.

- **The main reasons for practicing Mindfulness are Anxiety, Stress management, and Increased calmness**

The results showcased that the majority of the participants main reason for practicing were Anxiety, Stress Management, and Increased Calmness.

Bandelow (2015) stated that Anxiety Disorders have been increasing during the 21st century. Over 33.7% of the population during their lifetime would get overwhelmed by an anxiety disorder of some sort.

According to ADAA (2018), common symptoms of a Generalized Anxiety Disorder (GAD) is an uncontrollable worry and fear about everyday proceedings leading to headaches, fatigue, and muscle tension. A trial conducted of people with GAD did an eight-week MBSR (mindfulness-based stress reduction) program that resulted in less missed days from work as well as fewer visits to a mental health professional, Hoge (2017).

Mair (2016) said that the mental health support is increasing among university students, and that the UK had an increase of 50% between 2010 – 2015 for various counselling assistance.

As earlier mentioned, the 21st century is the age of technology, social media, and, excessive overflow of information. The theory suggests that Mindfulness would result in less missed days of absence from school and decrease the visits to mental health professionals due to the self-care in the form of Mindfulness. Linking the interviewee answers with the theory, it suggests that Mindfulness is a remarkable tool for anxiety reduction and stress management that then leads to general calmness. Another argument is that Mindfulness can work as a counteraction for the needed mental health support and professional help related to the area.

- **The mean length of a Mindfulness Practice was most commonly 10 minutes**

The length of a Mindfulness Practice is highly individual and greatly related to the type of practice. A practice can range from as little as one minute up to even hours. The results from this study show that the most common length for a practice is ranging from 5 to 30 minutes, and the time frame is dependent on the current situation. A clear timespan kept coming up in the answers, as shown in question 2d., which is 10 minutes, especially for meditation, breathing, and visualisation.

The theoretical framework did not clearly specify a reason for a common length of practice due to its individuality, but the participants of the research showcase that 10 minutes of practice is the most prevalent.

Some possible persuasive reasons for 10 minutes being the most common practice length can be: (1) attention span, the longer the session the more difficult to focus, (2) most Mindfulness apps offer custom lengths of practice that are 10 minutes, (3) a coffee break in both school and at work are often 10, 12.5, or 15 minutes meaning the Mindfulness works as a replacement, which it did for one of the participants, (4) resetting the body's hormonal balance can be done in under 10 minutes, and (5) a busy schedule for a university student does not allow for more than 10 minutes of practice.'

The results show that a 10-minute practice for an Academic Mindfulness Program could be the "magic number" if implemented.

- **The participants prefer a Reactive approach to Mindfulness**

A notable finding was revealed when the consistency of the participants' Mindfulness practice was brought up. Eight out of nine participants have a reactive approach to practicing, meaning that the practice takes place whenever there is a need. The results show that for most participants, the practice acts as a counteractive method for their current state of feeling and being.

Once again, whether the approach is Reactive or Proactive depends on the individual. There are many possible reasons why the participants prefer a reactive method. (1) A reactive approach is enough, (2) maintaining a proactive method takes too much time, (3) the participants are not aware of the long-term benefits of

a proactive approach, or (4) Mindfulness is not a large enough priority for proactive exercising.

Taking earlier interview results into consideration – three participants stated that one of their primary source of Mindfulness training is Headspace and four participants said that one of their primary sources is YouTube. Both Headspace and YouTube offer programmes that are made for reactive situations, such as panic, emotional breakdowns, anger, frustration, and so forth, meaning that many others prefer to practice only when truly needed *Headspace (2018)*.

- **Major improvements were seen in the participants' social life and in human relationships**

According to Martelli (2018), Mindfulness has been successfully used for people being socially rejected. Some correlations were found from brain scans that showcased (1) decreased activation in the left ventrolateral prefrontal cortex that is associated with rejection as well as (2) less connectedness between the left ventrolateral prefrontal cortex and bilateral amygdala and the dorsal anterior cingulate cortex which plays a vital role in the breeding of social distress.

The research gathered from the interviewees also presented some major improvements in human relations and social life. Several interviewees stated that handling conflicts can be done more calmly, some relationships have become healthier, and social life or human relations have improved.

The link between the theoretical framework and data from the interview can point to a general improvement in a Mindfulness practitioners' social life, leading to less distress in situations that can have a large impact on one's mental health.

- **Social media- and technology addiction is critical among the interviewees and tends to make one less mindful and distracted**

As Haynes (2018) stated, the brain produces a chemical called dopamine, which works as the humans' reward system. The release of the chemical takes place when the human brain senses pleasure or reward, leading us to repeat those behaviours.

The so called “reward pathways” in the brain have been shown dysfunctional in a case of addiction, exposing the reason why addicts need a larger dose of the same reward. In the context of technology and social media – likes and comments.

McLeod (2018) said that Technology and social media corporations implement so called “variable reward schedules” into their programs, just like casinos to keep the users engaged. The unexpected rewards are increasing the dopamine neurons activity leading to further addiction that keep us less mindful.

The interview data shows that eight out of nine participants are addicted to social media and seven out of nine are addicted to smart devices (technology). The answers show that social media and smart-phone use is used as a distraction or escape from the current moment disrupting the feeling of mindfulness. Some interviewees pointed out that the escape often occurs when negative and overwhelming feelings arise.

The majority of the participants said that social media and smart devices make them less mindful, although some interviewees stated that one can keep a mindful approach when consuming content and engaging with social services as well as technology.

The research suggests that the participants are aware of their large consumption and addiction, and the theoretical framework backs up the reason for constant engagement with social media and technology.

- **Increased time-awareness for using social media and technology by practicing Mindfulness**

Hoffman (2010) defined Mindfulness as concentrating around one’s awareness in the present moment with characterizations around attention, and the environment.

The Search Inside Yourself Leadership Institute (SIYLI) (2018), offer programs that will increase self-awareness to an advanced level, while regulating emotions.

Mindfulness have shown to increase the practitioner's self-awareness, increase of awareness of our surroundings, and emotional intelligence. The research based on the interview demonstrate that five participants are more aware of their smart device and social media consumption from practicing Mindfulness. Other participants stated similar statements such as (1) awareness of the content consumed, (2) awareness of what the time is being spent on, (3) deleting apps that are not useful or being used, and (4) turning off mobile data when having the phone in the pocket.

The research answers show a clear increase in self-awareness like time-awareness and awareness of consumption (time, content, usage). Three participants also explained that there is not the same urge to check the phone after practicing, which would argue for an increased awareness of addicting behaviour and consumption.

- **Most common purchases related to the Mindfulness industry are non-traditional products such as Spike Mat and Yoga Equipment**

LaRosa (2017) who is the research director of Marketdata LLC stated that the Mindfulness industry exceeded \$1.21B during 2017 in the U.S. The categories that were accounted for were Studios, books, CDs, DVDs, Apps, and retreats.

Although some interviewees stated that they have purchased premium versions of a Mindfulness App, a somewhat unforeseen finding was revealed showcasing Spike Mats and Yoga Equipment to be the top purchase among the participants. Spike mats and Yoga equipment cannot be accounted for in the Marketdata LLC's research since they are not traditional products of Mindfulness. Spike Mats can be categorized in the acupressure industry and Yoga is its separate own category with deep roots within Mindfulness.

With this specific finding, it shows that the Mindfulness industry is considerably larger if other overlapping industries are being counted for. Other possible reasons for this purchase behaviour is the one-time cost for a spike mat and yoga equipment (e.g. mat, blocks, stretch bands) that are beneficial forever or until worn out, compared to an app subscription that charges monthly or yearly.

- **An Academic Mindfulness program could have major benefits for well-being if implemented correctly**

Many companies today offer Mindfulness programs for other organizations that are looking to increase general well-being and increase performance.

Lechner (2018) discussed Apple's culture related to Mindfulness where the company is focusing on employee's overall well-being and work-life balance. Employees can take a 30-minutes off for meditation breaks and additionally there is access to on-site yoga and mindfulness classes.

The SIYLI (2018) was founded by Google and stands today as an individual organization working with major companies such as Amex, Ford, and Comcast. The program will teach the individual to handle stress, flexibility, creativity, innovation, increase focus, self-awareness, regulation of emotions, and clarity and effectivity in communication. Worth mentioning are the mean results from the program – 36% stress-reduction, 62.0-minute production increase each week, 7% lower healthcare costs and \$3000 in yearly savings gained on productivity.

An outtake shared by Golbie Kamarei, who is the founder of BlackRock Meditation Program, where her main mission is to help the people of BlackRock to reach top level performance. She stated that it is critical to know the company's culture, such as values, language, priorities, and principles so that Mindfulness can be taught to anyone within the industry, especially those who are unfamiliar with the practices (Wolfe, 2018).

The three mentioned examples are from major corporations embracing the culture of Mindfulness. Several main findings were found when the interviewees were asked what benefits they think that an Academic Mindfulness program could bring to their school.

The participants stated many (1) Academic-related performance benefits such as increased focus, increased productivity, and increased efficiency and performance. There were also benefits for (2) mental-health related issues such as decrease in anxiety, decrease in depression and less absence due to mental health struggles.

Benefits would also be seen in (3) general well-being in forms of stress reduction and better stress management, as well as improved social relationships between students.

The listed benefits could be somewhat similar or even completely identical to the benefits received at any Mindfulness corporate program. One student said that *“Mindfulness looks different for different people; an issue would be addressing the practice to as many as possible”* which addresses the same aspect that Kamarei mentioned about company culture.

Taking the theoretical framework and linking it with the research data from the interviews shows alignment that an Academic Mindfulness Program could be successful if it was both introduced and implemented correctly.

- **The majority of the participants would utilize Mindfulness meditation rooms on their campus if available**

Meditation rooms and even mobile meditation setups at corporations are increasing in popularity.

Lechner (2018) said that Apple, Google, and Yahoo are offering meditation rooms for their employees, for the possibility to take some time off work and unwind.

Another similar solution offered by CalmCity (2018) in New York is the mobile meditation studio that takes place in a van that can park anywhere close to the company, organization, or school.

The company MeditationWorks (2018) is similar to CalmCity but differs by a focus on corporates only.

The results from the interview shows that the majority would utilize a closed off Meditation room at their campus if there was one available. Since top companies such as Apple, Google, and Yahoo are offering the possibility for their workers to gather themselves during the workday, why wouldn't higher-education institutions offer the same possibility for the students in a fast-phased environment?

The interview answers show that there is a major need for a place or area to practice Mindfulness, and the demand could see an increase over time if more students were introduced to Mindfulness.

The results from the interview show that privacy is a critical factor. As earlier stated by the first and third interviewee, they would not feel fully safe practicing in a public area even though it is closed off. Both of the interviewees said that they would rather do it from the comfort of their own home.

Taking former information, the theoretical data, as well as the interview answers into consideration, some key aspects can be highlighted:

- The open-mindedness for a Mindfulness room at the campus / academic institution is there
- Privacy is a main concern
- Corporations embrace it due to the positive outcomes; Educational institutions could see similar results and/or benefits.

5 FINAL CONCLUSION

5.1 Final Conclusion and Reflection

This chapter is discussing the aim of the research linking to data and results from the theoretical framework and empirical research.

The aim of the research was to explore if practicing mindfulness can be a tool used by students during higher-education for both stress-management, neutralizing addiction related to technology, and social media, the students' attitude towards implementing a mindfulness program at their school, as well as increasing the overall quality of general well-being and mental health.

The pace of development in our world is on the fastest level ever, with new technologies covering most of our everyday tasks and life, excessive amount of information, and high pressure and demand at both work and school. It can be overwhelming when new “things” are replacing the old structured society. It is known to cause stress, anxiety, depression, confusion, uncertainty among many others. After studying both the science behind Mindfulness and asked several students view on the topic, I am now able to draw some final conclusions related to using Mindfulness as an everyday tool for a wide range of benefits.

Stress is a feeling that most of us have dealt with or will deal with at some point in our life. It can cause e.g. inflammation, restlessness, difficulties related to food, sleep, and relationships. One of the key aspects in this thesis was to investigate if practicing Mindfulness could help with stress management. To name a few, the theoretical framework suggested that a Mindfulness-based Stress Reduction program (MBSR) resulted in less missed days from work, fewer visits to a mental health professional, and changes brain networks of opiate-dependent patients. A study by Economides (2018) showcased that users utilizing the Headspace app for Mindfulness reduced stress levels by 14%. The SIYLI Mindfulness program created by Google resulted in 36% stress-reduction. The theory clearly suggests that Mindfulness is an efficient tool for stress-management (elimination, reduction).

The research data from the interviews showcased that the vast majority of the participants main reason for practicing Mindfulness is in fact stress-management and anxiety. *Anxiety and stress go closely together since anxiety is a form of stress.* When investigating the consistency, eight out of nine interviewees were in favour of a reactive approach, meaning that the practicing of Mindfulness is correlated with the level of stress or other overwhelming feelings. A few of the participants stated that the practice often takes place on the most stressful days, which would suggest that Mindfulness is a direct counteraction and neutralization against stress.

Neutralizing addiction can be a difficult task for many, especially if the line for addiction is not clear. Today, social media and technology companies do as much as they can to keep us affiliated with their products and services. This can be seen from the interview answers where eight out of nine interviewees said that they are addicted to social media and seven out of nine addicted to smart devices. The majority of the participants also stated that social media and technology makes them less mindful, and also that they have difficulties focusing on daily tasks due to social media and smart devices. *An exemplification of addiction is a study (Fahmy 2018) showing that a MBSR changed brain networks for opiate addicted patients, especially for the parts of the brain where addiction and mindfulness research was of most interest.* The interviewees (eight out of nine) said that they have noticed benefits and changes from practicing Mindfulness, such as awareness of content consumption, time-awareness of consumption, and a lower urge to check the phone. The results show that Mindfulness practice can neutralize addiction to both social media and technology, but to what extent is imprecise.

Implementing a Mindfulness program anywhere will have its challenges, whether it is a corporation, a university, or any organization that is looking to adopting challenges and aiming to improve wellbeing by a Mindfulness strategy. As earlier mentioned, corporations are offering their employees meditation rooms, Mindfulness programs, mobile meditation studios, and Mindfulness retreats to name a few. The majority of the participants in the interview said that they would utilize Mindfulness meditation rooms at their campus / school, and the attitude towards such a setting was greatly welcomed. The main concern for its

implementation is privacy and safety making it comfortable to practice. According to the participants, there is no doubt that a Mindfulness program wouldn't be successful, since they all listed benefits in several categories such as Academic Performance, mental-health, and general wellbeing. Overall, the attitude and chance of success for a Mindfulness program and meditation rooms at the practitioners' school is could be highly possible, but only if privacy is taken as a main priority and if there was a flawless way to introduce the program to the masses.

The level of general wellbeing and mental health are difficult to measure, but it is clear that prosperity and happiness have been decreasing over the years. *Mair (2016) stated that mental health support for university students is constantly increasing, with a growth of 50% for counselling services between 2010 – 2015. Barnes (2017) declared that universities have been focusing on Mindfulness training targeting mental health improvement.* There is a clear need for improvement in the health of students, and several studies show that Mindfulness is a tool that helps. Taking the theoretical framework and data from the interview into consideration, it is clear that Mindfulness increases the overall quality of general wellbeing and mental health.

As a concluding statement, Mindfulness have shown to be beneficial for stress, anxiety, depression, balancing mental health, efficiency and performance, focus, engagement, burnout prevention, better work production, improved relationships, emotional intelligence and awareness, awareness of social media and technology consumption, addiction, and personal reachability. Although the results are impressive, we can't say that Mindfulness exercises are a cure for everything or an instant replacement for medication or any specific diet. The interviewees that were picked out for the in-depth interview have all been practicing, which means that even if it has been highly beneficial for the participants, would not necessarily mean that it works for everyone else. Others might get the same or similar benefits from alternative activities, whether it is computer games or the gym. Mindfulness can be a tool for the earlier mentioned benefits, but the author of this thesis suggests that it shouldn't be relied on as a full solution, but if done so, carried out with caution.

5.2 Suggestions for further research

Further research could investigate how a Mindfulness program could be implemented into the academic curriculum whether it is optional or mandatory, possibly cooperating with a school. The academic institutions would have to clarify their goals for their institution, such as “We want more students to show up to our classes” or “Our students need to improve their concentration”. The investigator of the Mindfulness program implementation could then research which steps are necessary to make it a reality by working with school test groups, students that **are not** familiar with the topic, present the idea to the board of the school and mention its possible benefits. Mindfulness can be seen as emotional, mental, and personal growth, but schools today are not supporting this type of advancement enough. The author of this study hopes that the research could be used as a starting point for further research.

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APPENDICES

Appendix A

Consent Form

Vaasa University of Applied Sciences

Bachelor Thesis

A Qualitative Investigation of Practicing Mindfulness during higher-education.

I am conducting a qualitative study about mindfulness-based exercises being used during the time of university, university of applied sciences and college and its possible influence on well-being.

I welcome you to participate in this in-depth interview because you practice or have practiced some form of mindfulness during your time at a university, university of applied sciences or college.

This research is being organized by Christian Nylund, a student at Vaasa University of Applied Sciences and supervised by Peter Smeds.

The purpose of this research:

Is to investigate students experiences by using various forms of mindfulness practices. Mindfulness covers everything that makes the practitioner aware of the current state of being. The investigation will also focus on the students' relationship with technology and how it affects their state of mind.

Procedures:

Several questions will be asked in the interviews, which are being audiotaped. The interview will last about 25 to 40 minutes.

Risks and Benefits of Being in the Study:

No risks are involved in taking this in-depth interview.

Confidentiality:

The records of this study will be kept confidential. The material from the interview will be used in the research but no names will be mentioned. The audiotape will be deleted after all data has been written down.

Voluntary Nature of the Study:

Your participation is voluntary. You can skip any questions that you want and end the interview at any time.

Consent:

I have read the information stated above.

I approve to participate and to be audiotaped in the research.

The Participants Signature

The Participants Printed Name

Date

Signature of the Interviewer

Contacts and Questions

If you have any questions, please don't hesitate to ask!

Christian Nylund

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Appendix B

Thesis In-Depth Audio Recorded Interview Questionnaire

A Qualitative Investigation of Practicing Mindfulness during higher-education.

1. Demographic Background

- a. Identify your gender
- b. Educational Institution (University, University of Applied Sciences, College or other)?
- c. What is your cultural background?

2. Personal Interest and Motivation

- a. What got you interested in practicing Mindfulness?
- b. What type of Mindfulness have you practiced during higher-education?
- c. What is your main reason for practicing Mindfulness?
- d. How long does a typical session last?
- e. How consistent have you been with practicing? Please specify
- f. What is your primary source of Mindfulness training? (App, Book, Website...)

3. Performance and Results

- a. Have you noticed any changes in your academic performance? If so, please specify
- b. How has your ability to handling stress changed since you started practicing Mindfulness?
- c. Have Mindfulness benefited any other areas of your life? If so, please specify

4. Social media and Technology

- a. Would you consider yourself addicted to
 - i. Social media
 - ii. Smart devices such as smartphones and tablets
- b. Do you think that social media makes you less mindful? If so, please elaborate
- c. Do you think that smart devices such as smartphones and tablets make you less mindful? If so, please elaborate.
- d. Do you have difficulties focusing on daily tasks due to
 - i. Social media
 - ii. Smart devices such as smartphones and tablets
- e. Have you noticed any benefits from practicing Mindfulness related to using social media and/or smart devices such as smartphones and tablets? If so, please specify

5. Personal spending

- a. Have you purchased anything related to Mindfulness? Please specify
- b. Are you interested in buying anything else related to the mindfulness industry?

6. Implementing a Mindfulness program at your school

- a. What kind of benefits do you think that your school would generate if a mindfulness program was consolidated? Please

specify

- b. Would you utilize the possibility to use Mindfulness meditation rooms at your campus during school hours

