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An Analysis of the Effectiveness and Impact of the Provision of Mindfulness, Emotional Intelligence and Work Readiness Modules to Irish Third Level Students

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**An Analysis of the Effectiveness and Impact of the Provision of
Mindfulness, Emotional Intelligence and Work Readiness Modules
to Irish Third Level Students**

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The Research Centre for Psychology, Education & Emotional Intelligence

Master of Arts – QQI Level 9

August 2022

DECLARATION

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Abstract

Recently, there has been an emphasis on social-emotional learning (SEL) in educational settings and the role this may play in an individuals' later life outcomes as well as their ability to manage stress and express and manage emotion in adaptive ways (Collaborative for Academic, Social and Emotional Learning (CASEL), 2020). Recent research also supports a positive correlation between emotional intelligence (EI) and the development of interpersonal skills, academic attainment, memory and problem-solving skills (Boyatzis & Saatchioglou, 2008). Further research emphasises the role of emotional competencies in sustaining employment and placement in higher education (Carthy et al., 2013; Murphy, 2015). As a result of the coronavirus pandemic, many college courses have pivoted to complete online delivery, meaning that educators and students alike are faced with new challenges associated with the online delivery of modules and student supports. Given the positive correlation between SEL and positive life outcomes in conjunction with the scale of the recent transition to distance learning, this small-scale study sought to explore the impact and efficacy of three five-week modules (mindfulness, EI, and workplace readiness), which were predominantly delivered online to a sample of students from Technological University (TU) Dublin. Specifically, the mindfulness module was made available to all first-year students, the EI module was available to all second-year students and the workplace readiness (WPR) module was available to all final-year students. Results demonstrated that participation in the mindfulness module led to decreased levels of perceived stress for students while increasing levels of resilience. Furthermore, students who attended the module reported that the course provided emotional support and that it aided them in finding a healthy work-life balance. Regarding the EI module, results revealed that participants' average overall level of EI increased after completion of the module. Students reported that they believed the module provided emotional support and enabled them to manage academic stress more effectively. Finally, regarding the WPR module, results revealed that there was an increase in participants' overall level of EI as well as improved scores on the CareerEDGE Employability Development Profile after completion of the module. Furthermore, students reported that involvement in the module not only empowered them to effectively assess their strengths and weaknesses but enabled them to develop interpersonal skills to allow them to communicate with employers more confidently as they transition into the workplace. Taken collectively, results support existing research and suggest that mindfulness, EI and WPR modules can effectively enable students to benefit personally, academically and professionally. However, further confirmatory research is required.

CHAPTER ONE:

Introduction

1.1 Introduction:

As a consequence of the COVID-19 pandemic, many college courses transitioned to online delivery, and it is likely that as time progresses, a substantial number of courses will continue to offer students the chance to study remotely. Furthermore, this shift to online delivery has meant that colleges and universities are faced with the new challenge of providing pastoral care as well as social and emotional supports to students in a virtual setting. Two very well-established student supports that have been proven to provide social-emotional support as well as aid students in the development of stress management skills and self-awareness are mindfulness based interventions (MBIs) and EI coaching (Boyatzis & Saatchioglou, 2008; Carthy & McGilloway, 2015; Dacre Pool & Qualter, 2012; Johnson, Park & Chaudhuri, 2019; Lindsay et al., 2019; Lindsay et al., 2018; Nelis et al., 2009; Parsons, Garder Parry & Smart, 2022; Slaski & Cartwright, 2003; Yuan, 2020). That said, there has been limited research conducted to investigate the efficacy of and opinions surrounding such online supports for students in third level education. A third category of support which has become increasingly relevant particularly in the higher education sector are WPR programmes. WPR programmes have gained in popularity in recent years as a form of student support which aims to prepare students for the transition from education into the workforce, particularly emphasising the development of graduate employability characteristics. The implementation of such WPR modules is particularly important as recent research has found a discrepancy between employees' desire for graduates who possess relevant technical knowledge as well as a broad range of social emotional skills and the skills actually present in new hires (Jameson et al., 2016). Research has also emphasised the role of social and emotional competencies in promoting student success in higher education and in the workplace, with reports suggesting that academic and technical failure accounts for only 11% of new hire failures and as little as one fifth of university dropouts (Carthy et al., 2013; Murphy, 2015). Enabling third level students to develop a rounded skillset encompassing both academic knowledge and social and emotional capacities yields multiple benefits for students, employers and indeed society as a whole.

1.2 Study Aims and Objectives:

The principal overarching aim of this research was to assess the efficacy of mindfulness, EI and WPR training for undergraduate students as well as to determine the role these programmes play in students experience of academic stressors, academic attainment and development of employment characteristics. The project addressed four specific aims as follows: (1) completion of a full literature review; (2) quantitative assessment of the impact of participation in mindfulness, EI and WPR modules on perceived stress and resilience (mindfulness), social and emotional competencies (EI) and workplace readiness (WPR); (3) student interviews to ascertain the perceived effectiveness of each module; and (4) recommendations as to how each module may be improved to ensure maximum future efficacy.

1.3 Research Questions and Aims:

This study forms part of the *Transform-EDU* project which is a three-year study which has been developed by researchers across all three campuses of TU Dublin. The project recognises the importance of all aspects of third level education (i.e., structured programmes as well as extra-curricular activities) and has been designed to establish an innovative approach to teaching and learning which will serve to create a connection between education and industry to help provide students with a rich and comprehensive learning environment (Owende et al., 2018).

Specifically, the *Transform-EDU* project involved providing students with a range of optional structured co and extra-curricular supports to enable them to achieve key learning outcomes and develop dynamic 21st century graduate profiles. Optional modules and supports were developed for students in a range of areas including EI, sustainability, civic engagement and work readiness. Then, at graduation students are awarded individual Transformative Learning Records (TLRs) which are designed as a supplementary transcript to display competencies developed as a result of engaging in extra-curricular learning and to also highlight charitable, mentoring and civic engagement activities. The TLR's can be added to students' CVs and enable them to highlight to potential employers any additional engagement with learning activities and personal development that they engaged with throughout their time at TU Dublin. Fundamentally, the *Transform-EDU* project enables students to develop a rounded skillset to ensure they are best placed to meet the challenges of the contemporary work environment. One aspect of the *Transform-EDU* project, involved the development of a series of training modules and

workshops to aid third level students in the development of their emotional competencies, better support their employability characteristics, and foster career success. These training modules have been available to students across three years of their undergraduate education with each year focusing on a different aspect of mindfulness, EI, and work readiness coaching.

Based on a wealth of previous research, a positive correlation is assumed between EI and the development of academic attainment, memory and problem-solving skills (Boyatzis & Saatchioglou, 2008). Furthermore, recent research emphasises the role of emotional competencies in sustaining employment and placement in higher education (Carthy, McCann, McGuinness & McGilloway, 2013; Murphy, 2015). Considering the potential stressors associated with the transition into higher education, and employers' increased desire for graduates who possess relevant technical knowledge as well as a range of social-emotional skills, the current research works within a framework of student support and employability, particularly in the context of third-level education. As part of the larger Transform-EDU project, the study aims to answer the following research questions:

- 1) What is the impact of the mindfulness, EI and WPR modules provided by Transform-EDU on perceived stress, level of EI, and perceived preparedness for the workplace?
- 2) What is the efficacy (measured by pre- and post-test assessment) of the mindfulness, EI and WPR modules provided by Transform-EDU?
- 3) What adaptations can be made to these modules to best fit the needs of undergraduate students?

Based on the study's results, suggestions are made for ways in which the training can be optimised to promote further transformative learning throughout TU Dublin and beyond.

1.4 Structure of the Thesis:

This study notes the role which SEL may have on the promotion of positive life outcomes, particularly in academic and vocational settings. *Chapter Two* begins by presenting a review of the current literature surrounding SEL, specifically focusing on mindfulness, EI and WPR. Research on these topics is presented in a systematic way to illustrate the potential benefits associated with mindfulness, EI and WPR training for students and particularly for students in higher education.

Following from this, *Chapter Three* outlines and justifies the epistemological and ontological approaches which were employed for this research as well as a discussion of ethical considerations. Furthermore, this chapter provides the details of the methodology which was employed to address the objectives of this study. This includes detailed descriptions of each research group (i.e., group one: mindfulness, group two: emotional intelligence; and group three: workplace readiness) and outlines the details of not only the training modules provided to each group, but of the information seeking focus group which followed each group.

Following this three-group structure, *Chapter Four* presents the quantitative and qualitative results for each cohort of students. Each section begins first with a presentation of quantitative data showing pre- and post-test results from students who participated in the available SEL modules. Qualitative data is then presented for six focus groups, three comprising students who participated in the SEL modules and three comprising students who did not participate.

Finally, *Chapter Five* revisits the research questions and aims, discussing them in the context of the results and with respect to current literature. Based on the research findings, a series of key recommendations are made relating to the topics of delivery method, timing and employability.

CHAPTER TWO:

Literature Review

2.1 Social Emotional Learning:

SEL is a wide, overarching term that describes any number of social-emotional interventions which can be delivered in an educational setting (e.g., mindfulness or EI interventions).

Particularly, within a SEL environment individuals learn to understand and manage emotions, set and achieve positive life goals, feel and show emotion, establish positive relationships and make reasonable life decisions (CASEL, 2020). SEL is an interactive process, supporting equality in education, where learning is centred around five main competencies: (1) self-awareness; (2) self-management; (3) social awareness, (4) relationship skills; and (5) responsible decision-making. These skills can be developed at several different stages in life and learnt in many ways (CASEL, 2020). Research supports this and has demonstrated that enabling students to develop their social and emotional competencies yields multiple benefits, both academically and beyond. In a large meta-analysis of 213 school based SEL programmes, Durlak et al. (2011) found that when primary and secondary school students (n = 270,034) were exposed to the five core competencies of SEL in a brief intervention format, academic performance increased by 11%, classroom behaviour improved and participating students reported being able to better manage stress (Durlak et al., 2011). Similarly, in a more recent study, Clarke and colleagues (2021) reported that universal SEL interventions not only have the capacity to positively impact on participants mental health in the short term, but to improve general social and emotional skills overall. Embracing the strengths of SEL, the current study will explore three distinct brief intervention modules (mindfulness, EI and WPR) particularly discussing them in the context of higher education and graduate employability.

2.2 Mindfulness:

Mindfulness practice has a long-standing history, with roots in the Buddhist tradition (Nisbet, 2017). Traditionally, mindfulness and meditation were practiced by those seeking the path of enlightenment (Wilson, 2014). However, as trade increased in Asia during the mid-nineteenth century, the practice of mindfulness began to travel west and by the 1960s mindfulness gained popularity in Europe and America (Nisbet, 2017). Since then, mindfulness has only grown in popularity, with one of the most influential characters in mindfulness's rise being Jon Kabat-Zinn (Nisbet, 2017; Wilson, 2014). Kabat-Zinn has been credited with transforming the traditional week-long meditation retreat into more accessible mindfulness classes which took

place over an extended period (Wilson, 2014). Out of this transformation, mindfulness only grew in popularity and application, gaining roots in clinical practice and interest colloquially (Misitzis, 2020; Nisbet, 2017). Defined by a sense of awareness of oneself and one's surroundings, mindfulness was developed as a tool to help individuals accept their present state and process their feelings in a meaningful way (Kabat-Zinn, 2003). Mindfulness has also been proven as an effective emotion regulatory tool, with those who practice mindfulness consistently showing improvements in mental health over time marked by decreased feelings of anxiety or periods of negative thought (Finkelstein-Fox et al., 2019; Gu et al., 2015; Guendelman, Medeiros & Rampes, 2017; Sun et al., 2020). As a result of its many benefits and its observed efficacy, since its development mindfulness has grown in popularity and MBIs are now commonly utilised across a wide range of populations, both clinical and non-clinical, as a means to encourage healthy emotion regulation, stress management and general wellbeing (Johnson, Park & Chaudhuri, 2019; Lindsay et al., 2019; Lindsay et al., 2018; Parsons, Garder Parry & Smart, 2022; Yuan, 2020). Furthermore, participation in and continued practice of techniques learned in MBI have been linked to long lasting effects including improved mental health, improved emotional and problem-focused coping strategies and a reduction in burnout rates (Kinnunen et al., 2019; Solhaug et al., 2019).

2.2.1 Mindfulness Training in Third Level Education:

The transition into higher education is often a period of heightened stress for students as they are introduced to new academic challenges and tasked with navigating new social situations (Acharya, Jin & Collins, 2018; Auerbach et al., 2018; Chan et al., 2019; Misra & McKean, 2000). Additionally, students transitioning into higher education have been shown to report higher prevalence of mental illness, often exasperated by increased levels of responsibility (Acharya et al., 2018; Auerbach et al., 2018; Chan et al., 2019; Misra & McKean, 2000). As a result, providing students, particularly first-year students with additional support (e.g., peer mentoring, head start programmes and resilience and mindfulness intervention) during this critical transition period has become increasingly popular and ultimately proven in many instances to ease transition related stress (Chandler et al., 2020; Lane, 2020; Patterson Silver Wolf et al., 2021; van Herpen et al., 2020). In addition to mediating student stress, such precautionary supports have been proven in some instances to increase student retention rates

amongst high-risk groups, promote general wellbeing and promote academic performance (Chandler et al., 2020; Lane, 2020; Patterson Silver Wolf et al., 2021; van Herpen et al., 2020).

There has been a significant amount of research exploring the efficacy of MBI interventions on the wellbeing of university students (Bamber & Schneider, 2020; Dawson et al., 2020; Kabat-Zinn, 2003). Mindfulness-Based Stress Reduction (MBSR) programmes, for example, were introduced in 1979 and are comprised of a structured 8-week course focused on intensive mindfulness training with the aim of stress reduction (Kabat-Zinn, 2003). While this module structure was initially developed to combat stress, it has translated into many unique areas of health psychology, including being utilised in an academic setting (Ramler et al., 2016). Ramler and colleagues (2016), for example, found that students, particularly males, who participated in an 8-week MBSR intervention showed an improvement in their adjustment first-year and reduced levels of physiological stress levels. Looking beyond the MBSR model other forms of MBIs are available for students to support wellbeing and reduce perceived stress, and as Dawson and colleagues (2020) found, the use of MBIs with college age students can reduce levels of anxiety, depression, rumination and overall distress amongst participating students. Participating students also show increased levels of mindfulness for a prolonged period following completion of mindfulness modules (Dawson et al., 2020). In line with this, Finkelstein-Fox, Park and Riley (2018) specifically considered the role mindfulness may have on students experience of transition into higher education and found that while prior experience of mindfulness did not predict a student's successful transition to college, previous experience was found to act as a protective factor. Specifically, for students who had difficulty regulating their emotion, prior experience of mindfulness increased resilience and led to decreased levels of depression and anxiety (Finkelstein- Fox et al., 2018). Positive student opinions relating to mindfulness have also been noted in recent research (Bamber & Schneider, 2020). Specifically, students reported feeling better able to identify and manage their emotions after participating in an MBI. Similarly, students noted that mindfulness training increased awareness both intra and interpersonally. While student feedback remained largely positive, there were some minor barriers to engagement identified (e.g., time & uncertainty) suggesting that MBIs should be shaped and tailored to fit the specific needs of students (Bamber & Schneider, 2020).

Ultimately, the implementation of MBIs to ease university related stress and facilitate healthy social emotional development amongst new university students has proven promising (Bamber & Morpeth, 2018; Bóo et al., 2020; Finkelstein-Fox et al., 2018; Flett et al, 2018; Huberty et al., 2019). By impacting on students perceived ability to manage academic stress, mindfulness modules have the potential to influence academic performance and improve mental health as well as improve general wellbeing and experience in first year (Bamber & Morpeth, 2018; Bóo et al., 2020; Finkelstein-Fox et al., 2018; Flett et al, 2018; Huberty et al., 2019).

2.2.2 Online Delivery of Mindfulness:

The COVID-19 pandemic has necessitated an unprecedented shift in the landscape of teaching and education globally, meaning that educators and students alike have had to adjust to a rapidly changing environment and find new ways to facilitate learning and assessment during such uncertain times (Bansak & Starr, 2021; Salta et al., 2021). Although the dramatic pivot towards distance learning may be new, the administration of online MBI is not a new concept. Specifically digitalised methods for the delivery of MBIs (e.g., online courses or smartphone applications) have become increasingly popular (Bostock et al. 2019; Cavanagh et al., 2018; Mrazek et al., 2019). Further, more recent research sought to directly address such adjustments to MBI by providing guidance as to why and how course adaptations should be made, suggesting that a shift to digital administration should be determined based on the needs of the demographic group and desired outcome of the course while still maintaining the integrity of the module (Loucks et al., 2022). Such digitalised methods of MBI delivery have unique advantages over traditional delivery methods as they have been proven to increase accessibility and baseline standardisation of each programme while also providing participants with unique opportunities for personalisation of the module (Mrazek et al., 2019). Digital mindfulness modules have also been found to be just as effective as traditional methods at reducing stress, improving mental health and improving awareness (Mrazek et al., 2019). A study conducted in 2018 by Cavanagh and colleagues specifically to examine the impact of online based MBIs echoed these findings and found that students who had been randomly assigned to participated in a two-week online mindfulness module with mindfulness components had reduced levels of perceived stress and a reduction in pervasive thought patterns (Cavanagh et al., 2018). Another study by Bostock and colleagues (2019), which examined the effectiveness of smartphone applications for the delivery of MBIs, found the same and those who participated in the training showed a significant decrease

in perceived levels of distress and increased levels of overall wellbeing. Additionally, all positive outcomes were sustained over a 16-week period (Bostock et al, 2019).

Alternative methods for the virtual delivery of MBIs (e.g., videoconferencing) have also been explored. The benefits of such programmes are that while they increase accessibility, videoconferencing maintains some of the integrity of face-to-face instruction (Krägeloh et al., 2018). Like other digital MBI delivery methods, assessments of videoconference delivery have shown significant positive improvement for participants with results sustained over a three-week period (Krägeloh et al., 2018). A more recent study completed by Lim et al. (2021) explored the usefulness of videoconference delivered MBI specifically in the context of COVID-19. To do this, two experimental groups, one face-to face (N = 36) and one virtual (N = 38), were compared to a control group (N = 86) who had received traditional face-to-face mindfulness training prior to the start of the pandemic. Results of the study found significant increases for all groups of participants with respect to self-reported sleep quality and significant decreases in perceived stress scores. Additionally, it was noted that attendance was equivalent across all groups, although those who participated in the videoconference course engaged with slightly more daily practice outside of the lessons than their peers who completed the course in-person (Lim et al., 2021). These results indicate that the combination of traditional and digital delivery methods which videoconferencing utilises provides a promising and comprehensive alternative to face-to-face workshop delivery and this may be particularly beneficial in the context of COVID-19 or other situations where traditional mindfulness training is not available (Krägeloh et al., 2018; Lim et al., 2021).

2.2.3 Limitations of Mindfulness Training

Considering the breadth of mindfulness research currently available, it is also important to address the current limitations within the field. While mindfulness has grown in popularity colloquially, this also creates an opportunity for confusion, as the terms mindfulness and meditation are often used interchangeably without much thought given to their true definitions (Misitzis, 2020; Van Dam et al., 2019). Unlike what traditional media might promote, there is not one true definition of mindfulness (Bodhi, 2011; Gethin, 2011; Van Dam et al., 2019). In some instances, the term ‘mindfulness’ may be used to represent the act of being present and

breathing, while in another it refers to an umbrella term of different available MBIs (Van Dam et al., 2019). That said, mindfulness is often considered in relation to attention, awareness, openness and discernment (Van Dam et al., 2019).

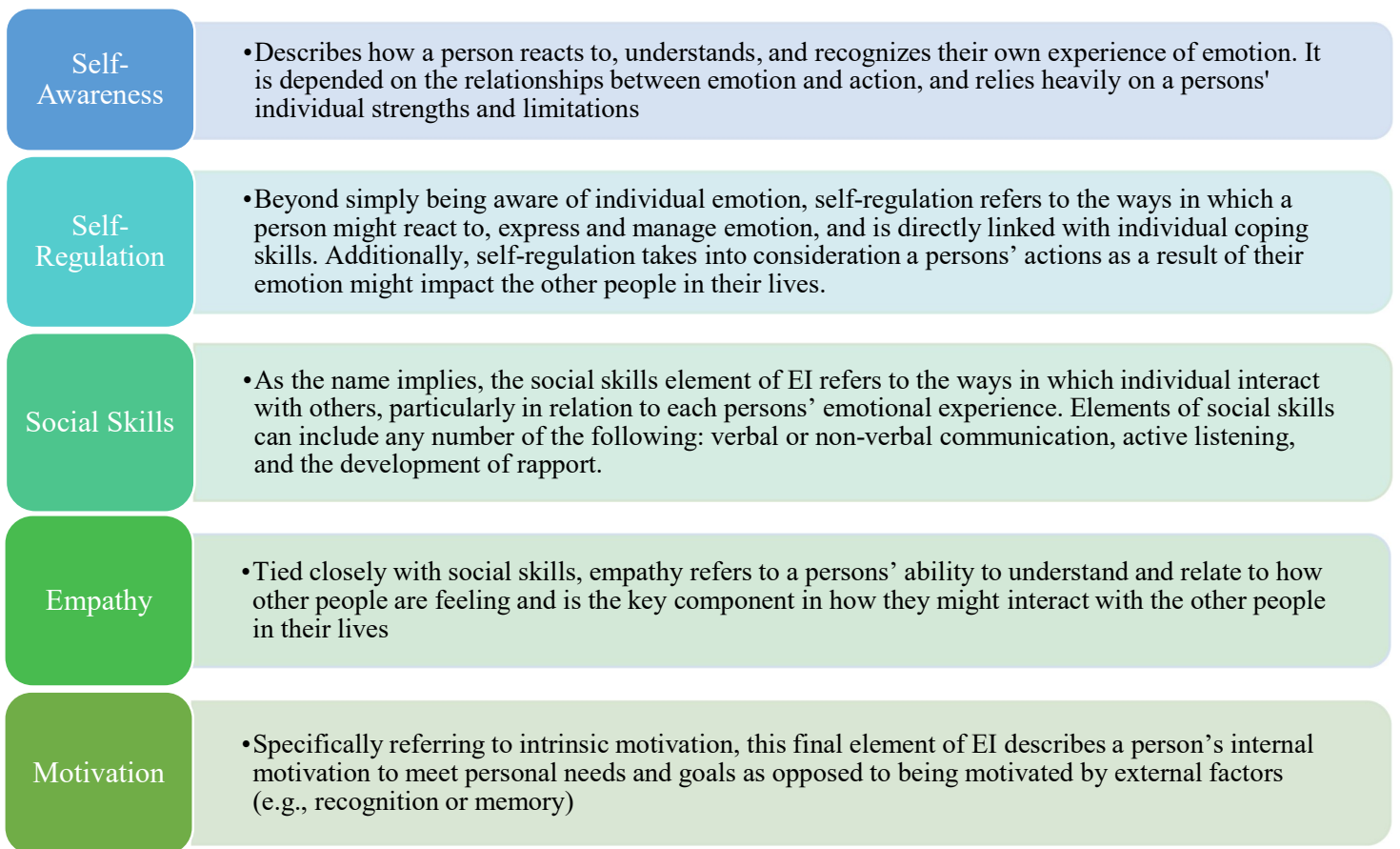
Similar to confusion over the definition of mindfulness, there is debate relating to the methodological issues of mindfulness. These concerns are particularly notable when considering construct validity and the possibility for replicability (Van Dam et al. 2019). Across mindfulness research there is no one standardised measure to assess individual mindfulness causing researchers to widely depend on self-report measures for assessment which can often be criticised for their potential biases (Salter- Pedneault, 2020; Van Dam et al, 2019). Furthermore, self-report measures can also be easily influenced by factors such as how questions are interpreted, potential sampling biases, restrictive rating scales, and participant introspective ability (Salters-Pedneault, 2020). In addition to assessment limitations, there has also been opposing research which suggests there may be limitations as to how influential mindfulness practice may be at alleviating stress, anxiety, and physical pain (Dimidjan & Segal, 2015; Van Dam et al., 2019). Furthermore, in instances where an individual has previous experiences of trauma, there may be some associated risk to participating in a mindfulness practice and a ‘do no harm’ approach must be adopted (Bear et al., 2019). As such, further research on mindfulness is required to explore the extent to which MBIs can impact on an individuals’ lived experience.

2.3 Emotional Intelligence:

The first cited use of the term EI occurred in 1916 in a literary analysis; however, the term EI as it is known today emerged in the early 1990s and was first conceptualised by Salovey and Mayer who defined EI as an individual’s ability to identify and observe emotion, their ability to recognise variation in emotion and finally their ability to use emotional information to inform and support action (Cherniss, 2010; Salovey & Mayer in O’Connor et al., 2019; Mayer et al., 2004; Mayer, Salovey & Caruso, 2000; Mayer & Salovey 1997; O’Connor, Hill, Kaya & Martin, 2019). Unlike mindfulness which has a rich history, EI is still a relatively new concept and as such is much more complicated and theoretically divided (Craig, 2019). Fundamentally, EI describes the idea of emotion-based reasoning and results from an interaction between intelligence and emotion (Craig, 2019; Mayer & Salovey, 1997). In its simplest form, EI is

generally assumed to consist of five different component parts: (1) self-awareness, (2) self-regulation, (3) social skills, (4) empathy, and (5) motivation (Figure 1; Craig, 2019). While these five elements are important to a basic understanding of EI, theorisation of EI is much more complicated and there has been much debate in the academic community as to how EI can be best understood and defined (O'Connor et al., 2019).

Figure 1. The Five components of EI

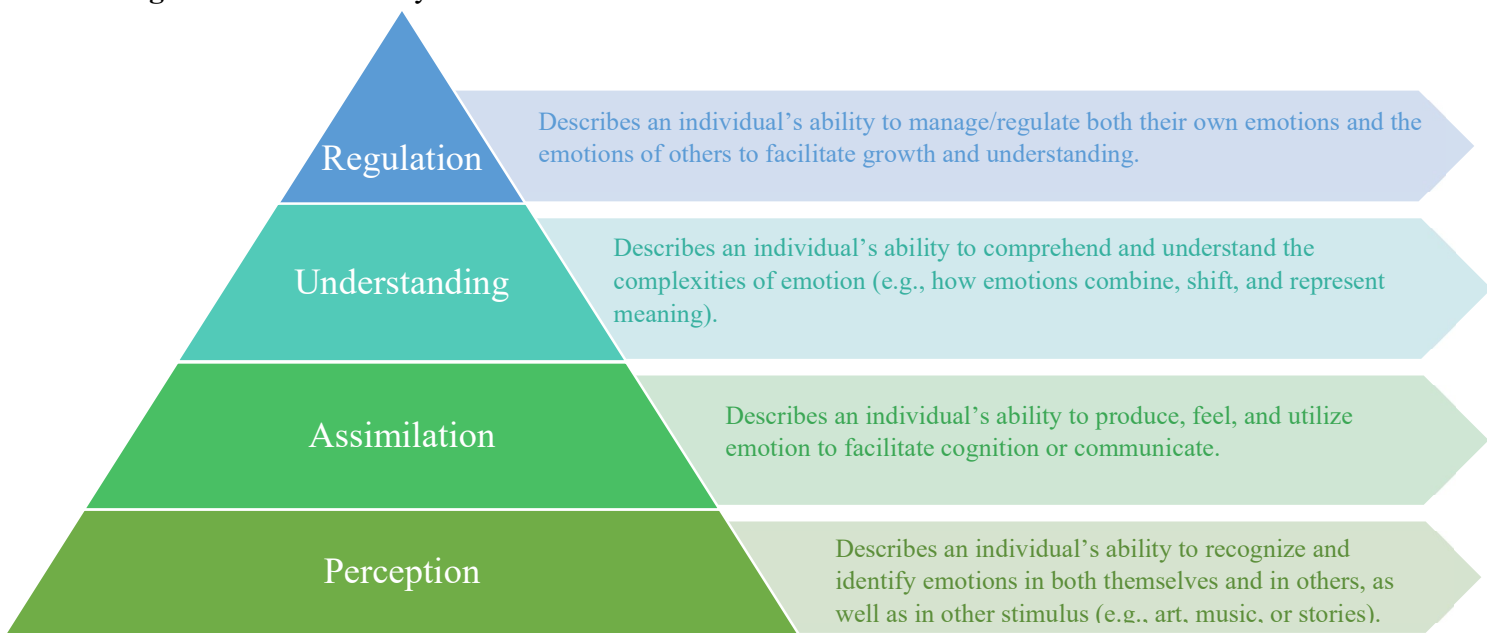


Note: Describes the five component parts of EI. Figure created from information outlined by Craig (2019).

Throughout the study of EI, there have been four significant theories which have dominated the field: (1) the EI ability-based model (Mayer & Salovey, 1997 in Fernández-Berrocal & Extremera, 2006; Petrides, 2011); (2) the trait model of EI (Petrides, 2010; Petrides, 2011); (3) the Bar-On emotional-social intelligence model (Bar-On 1997 in Fernández-Berrocal &

Extremera, 2006); and (4) Goleman’s mixed model of EI (Boyatzis, Goleman & Rhee, 2000; Goleman, 2001). The ability-based model of EI defines EI as an individuals’ ability to appropriately appraise and express emotion, distinctly highlighting four distinct emotional abilities: (1) perception, (2) assimilation, (3) understanding; and (4) regulation of emotions (Figure 2; Fernández-Berrocal & Extremera, 2006; Mayer et al., 2000).

Figure 2. The EI Ability-Based Model

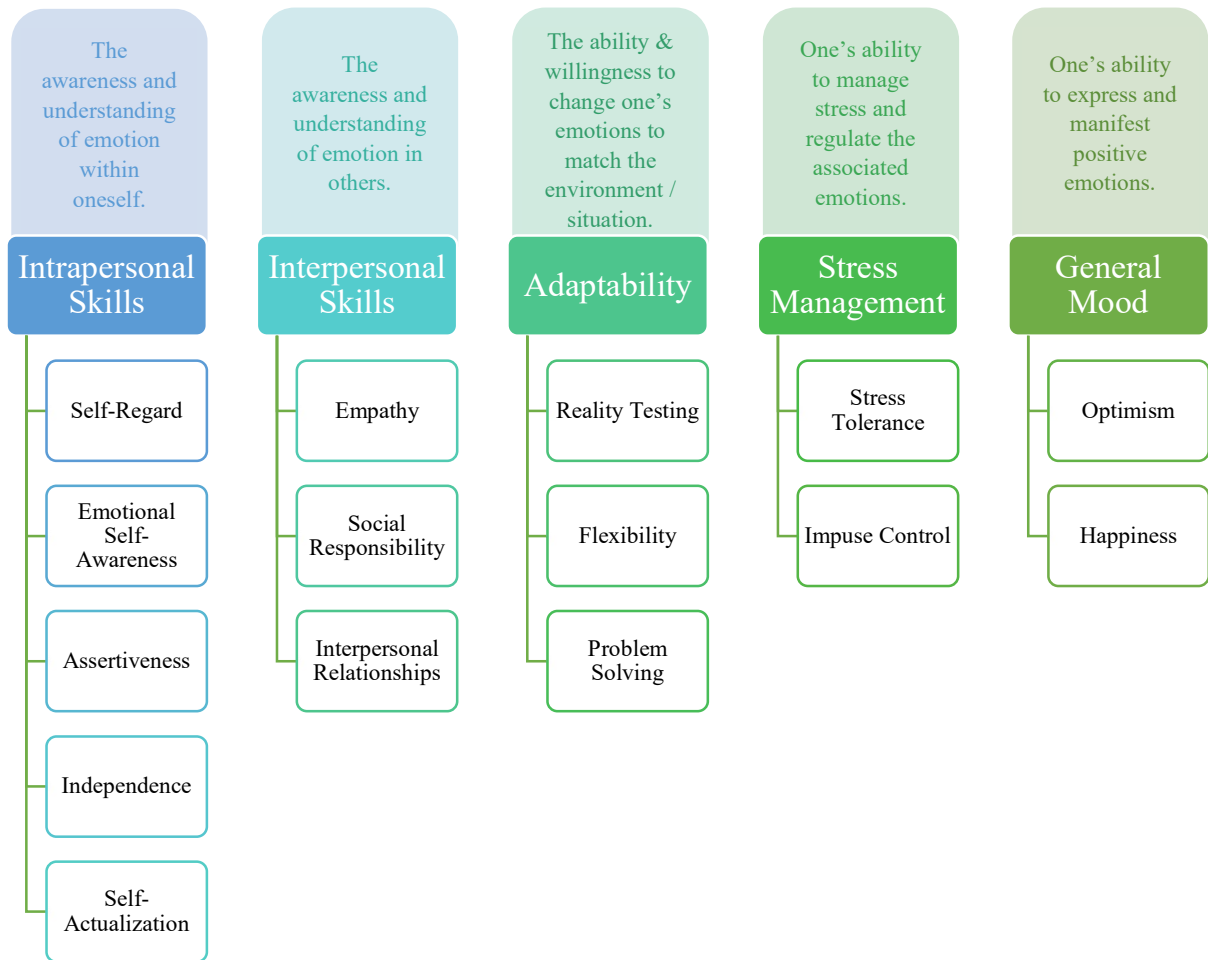


Note: Describes the primary abilities of EI as presented by the EI ability-based model (Fernández-Berrocal & Extremera, 2006; Mayer et al., 2000). The ability-based model emphasises the importance of being able to understand and manage emotions as well as use the insight gained from this understanding to aid in decision making and cognition (Faltas, 2017). The primary abilities within the model are organised hierarchically with the most basic level abilities (perception of emotion) at the bottom and the most complex (emotion management and regulation) at the top. This hierarchical organisation suggests that the primary emotion abilities, as presented by the ability model, feed off each other and build-up to the development of more complex skills (Fernández-Berrocal & Extremera, 2006; Mayer et al., 2000).

Unlike the ability model the trait model of EI maintains a strong biological basis, and poses that individuals, as part of their innate personality characteristics, have both ‘emotional traits’ and ‘emotional self-perceptions’ (Sánchez-Ruiz, Pérez-González & Petrides, 2010; Van Der Zee & Wabeke, 2004; Vernon, Petrides, Bratko, & Schermer, 2008). Fundamentally, the trait model of EI suggests that EI is less what emotional skills a person may possess or can learn, but instead places more emphasis on how an individual perceives their own emotional abilities or emotional

self-efficacy (Petrides, 2010; Petrides, 2011). The Bar-On emotional-social intelligence model, emphasises the interconnectedness of both social and emotional competencies and argues their impact on an individuals' behaviour and performance, ultimately presenting five distinct, high-level social skills which are further subcategorised into fifteen subfactors of EI (Figure 3; Faltas, 2017).

Figure 3. The Bar-On Emotional-Social Intelligence Model



Note: This figure describes the five high-level emotional skills and their subsequent sub factors as presented by the Bar-On emotional-social intelligence model. The Bar-On emotional-social intelligence model suggest the importance of a variety of different social and emotional skills that influence how effectively individuals understand others as well as how well individuals can relate with those around them (Fernández-Berrocal & Extremera, 2006). Furthermore, the Bar-On emotional-social intelligence model describes how individuals express their own emotions and cope with the demands of daily life (Fernández-Berrocal & Extremera, 2006).

Finally, Goleman’s mixed model of EI is rooted in twenty-five different emotional competencies and combines elements of emotional and personality traits to better understand EI (Faltas, 2017; Fernández-Berrocal & Extremera, 2006). Goleman poses that EI comprises five critical competencies including (1) awareness of one’s own emotions; (2) emotion management; (3) motivation and particularly self-motivation; (4) emotion recognition; and (5) relationship management (Fernández-Berrocal & Extremera, 2006). Furthermore, this mixed-model approach to EI focuses heavily on workplace competencies (Figure 4; Goleman, 2001).

Figure 4.

Mixed Model of EI



Note: Presents the workplace readiness competencies of the mixed model of EI. Goleman outlines initially four essential factors (i.e., self-awareness, social awareness, self-management and relationship management; Goleman, 2001). These four factors are then further subdivided into twenty distinct EI characteristics (Goleman, 2001). The details of this breakdown are outlined in the above figure.

2.3.1 Debates in Emotional Intelligence:

Beyond its definition and theorisation, there remain several debates surrounding the study of EI within academia, including whether EI represents a trait characteristic or if it is a competency that can be developed (Dulewicz & Higgs, 2004; Mikolajczak, 2009; Sánchez-Ruiz, Pérez-González & Petrides, 2010; Dacre Pool & Qualter, 2012; Van Der Zee & Wabeke, 2004; Vernon

et al., 2008), queries about the individuality of EI as a standalone psychological construct (Emmerling & Goleman, 2003; Mayer, Caruso & Salovey, 1999) and the practical implications of EI (Cherniss, 2010; Emmerling & Goleman, 2003).

2.3.1.1 Emotional Intelligence – Trait or Competency:

A trait is defined as a set of innate and relatively stable characteristics that determine the ways in which an individual might think, act or behave (Cherry, 2019). In opposition, a competency describes an ability that can be learnt and represents a sense of control or an individual's ability to have autonomy over events in their own life, their environment, and any occurring issues (American Psychological Association, n.d.). Considering the argument in favour of EI as a trait component of personality, research has found a significant relationship between parent and child trait EI scores, suggesting that the variation in EI is related to genetic variation (Vernon et al., 2008). Furthermore, researchers have found that the genetic variation associated with EI characteristics is similar to the genetic variation associated with personality (Vernon et al., 2008). In contrast, research in support of the competency side of the debate asks the question, "can EI be developed?". To answer this, researchers conducted a review of available EI research in which the development of EI and EI coaching was assessed (Dulewicz & Higgs, 2004). After the assessment, researchers found sufficient evidence in support of EI development, also noting that there are some elements of EI that are more readily developed than others. These characteristics specifically refer to "enablers" (e.g., self-awareness & interpersonal sensitivity). In contrast "constrainers" (e.g., conscientiousness & emotional resilience) and "drivers" (e.g., motivation & intuitiveness) are less susceptible to change (Dulewicz & Higgs, 2004). These results suggest that not only can EI be developed, but that each element of EI has a different capacity for change. This is not to say that EI coaching should be confined to the development of "enablers," however, as EI coaching is fundamentally about being aware and knowing how and when to properly utilise each skill.

Considering the breadth of research in relation to EI, it is near impossible to declare a winner in the trait-competency debate. Compelling claims can be made in favour of both theories; however, the two theories also interact with each other (Mikolajczak, 2009). Mikolajczak argued that "the theoretical conflict's about EI's nature have consumed an incredible amount of

researchers' energy, without ever managing to put an end to the debate" (Mikolajczak, 2009, 29). Considering both the biological information and the information on the propensity for EI to be developed it would seem evident that there is a clear interaction between the trait and competence arguments and that a hybrid perspective on the debate might be the most comprehensive approach (Dulewicz & Higgs, 2004; Vernon et al., 2008).

2.3.1.2 The Individuality of Emotional Intelligence as a 'New' Intelligence:

For a theory to be recognised as a unique form of intelligence, it must meet a series of specific criteria (i.e., the conceptual, the correlational and the developmental elements; Emmerling & Goleman, 2003; Mayer et al., 1999; Roberts, Zeidner & Matthews, 2001). Considering the conceptual element of intelligence, in which EI is seen as a measure of performance, Mayer and colleagues argue in favour of an ability model of EI (Fernández-Berrocal & Extremera, 2006; Mayer et al., 1999; Mayer, Salovey & Caruso, 2000). Each of the EI abilities as described by Mayer and colleagues, represent an individual's capability to face life's challenges as well as their ability to conceptualise emotional information and use this knowledge to inform action (Mayer & Salovey, 1997). Furthermore, when EI is considered as distinct from personality, it can be assessed as such, meaning measures like those developed to assess IQ can be implemented to assess variation in EI (Day & Carroll, 2004; Mayer, Salovey, Caruso & Sitarenios, 2003; Mayer et al., 1999). Moving down the list to the correlational factors of authentic intelligence, one must consider the uniqueness of EI as well as how EI is distinct from other forms of intelligence (Mayer et al., 1999). EI draws on elements of social intelligence and expands on this to assess the ways in which individuals might reason about emotions both internally and externally (Mayer et al., 1999). EI is further differentiated from other pre-existing intelligences by the ways in which it is directed to focus on "the emotional (but not necessarily verbal) problems embedded in personal and social problems" (Mayer et al., 1999, 272). Finally, the developmental question. Can EI be developed over time (Fancher, 1985 in Mayer et al., 1999; Mayer et al., 1999; Roberts et al., 2001)? This is a topic, along with the implication and importance of EI, is discussed at greater length in section 2.4.2 – Impact and Application of EI. However, to further our current assessment, the answer would appear to be yes, EI can be and often is developed and improved (Boyatzis & Saetcioglu, 2008; Mayer et al., 1999).

2.3.2 Impact and Application of Emotional Intelligence:

Since the proposition of EI as a new intelligence, there has been much research conducted on the impact and application of EI, with a large part of this research focused on the ways EI impacts daily life and life outcomes (e.g., the impact of EI on academic attainment and life outcomes (Jones et al., 2015; Parker et al., 2004; Vaillant & Davis, 2010). Furthermore, extensive research assessing the ways in which EI can be taught and developed over time through workshops, courses, and training has been conducted (Boyatzis & Saatchioglou, 2008; Nelis et al., 2009; Qualter et al., 2007; Ruiz-Aranda et al., 2012; Slaski & Cartwright, 2003).

2.3.2.1 The Impact of Emotional Intelligence on Outcomes & Life Satisfaction:

It has been noted in the research that life outcomes associated with EI are determined by two complementary factors “the cards that one is dealt, and how one [chooses to] play them” (Vaillant & Davis, 2010, 2015). Vaillant and Davis argued in favour of EI, rather than IQ, as a buffering factor in someone’s life, and while lack of such social and emotional skills act as a predictor of low adult social attainment, high levels of EI served to predict and correlate strongly with high levels of social attainment later in life (Vaillant & Davis, 2010). With respect to the impact of EI over time, Jones, Greenberg, and Crowley (2015) sought to assess the connection between SEL and individual wellbeing in adulthood. In conclusion of a longitudinal study, researchers found a significant meaningful relationship between teacher-rated social-emotional abilities in childhood and later life outcomes across all areas examined. Specifically, Jones and colleagues reported that for each point increase on the initial teacher social competence rating, participants were more likely to have experienced positive life outcomes (e.g., success in education and maintaining full-time employment). Conversely, for each point decrease on the initial teacher social competence rating, it was found that participants were more likely to experience adverse life outcomes (e.g., increased rates of incarceration and homelessness; Jones et al., 2015). The results of this particular study suggest that EI, and in particular, the presence or absence of prosocial skills, can have a significant impact on later life outcomes. Finally, in a 2004 study, Parker et al. used the transition from secondary school to third-level education as a means to determine the importance of EI and social-emotional skills in individual academic attainment and found that while EQ-i as a whole was an insufficient predictor of later academic success, a positive correlation between several elements of EI and academic success was

observed. This suggests that while EI might not be an entirely accurate predictor of academic attainment, specific abilities represented within this scale (e.g., intrapersonal, adaptability & stress management), are essential factors to help ensure a successful transition from secondary education to higher, third-level education (Parker et al., 2004).

2.3.2.2 Emotional Intelligence in Third Level Settings:

Third level colleges are increasingly focusing on providing students with rounded instruction, including SEL. Further, many colleges course now included dedicated modules (e.g., personal development) which incorporate elements of EI coaching (McGinnis, 2018; Wang, 2019). EI coaching is also increasingly being offered to students and an extracurricular and there is a growing body of evidence to support that students' social and emotional skills can be improved as the result of coaching (Boyatzis and Saatcioglu 2008; Dacre Pool and Qualter 2012; Gilar-Corbí et al., 2018; McGinnis, 2018; Nelis et al., 2009; Reilly 2005; Wang, 2019). For example, Nelis and colleagues (2009) sought to determine how and if it is possible to directly influence an individual's level of EI by teaching associated social and emotional skills. After completion of a four-week training session, it was determined that participants showed a significant increase in their ability to identify and manage emotions effectively. A six-month follow-up showed that the positive effects associated with short-term EI coaching were persistent (Nelis et al., 2009). However, while the positive effects of EI training can have long-lasting effects, it is important to note that the added value associated with the training can break down over time without proper maintenance or in the presence of a turbulent environment (Boyatzis & Saatcioglu, 2008). In another particularly robust analysis, Boyatzis and Saatcioglu (2008) completed a 20-year review of EI coaching within an MBA programme. The review confirmed that coaching lead to increased social-emotional skills, with results still present up to seven years post-graduation. Boyatzis and Saatcioglu also reported a knock-on effect of training that positive increases in social-emotional competencies can support positive development of cognitive skills such as memory, decision making and problem-solving (Boyatzis & Saatcioglu, 2008).

Several studies have supported EI coaching as a tool to positively impact key academic variables and promote graduate employability. For instance, Unnikrishnan and colleagues (2015) reported a positive relationship between EI and academic achievement. An additional positive relationship

was also found between EI and level of satisfaction with career choice (Unnikrishnan et al., 2015). A similar relationship was found in a qualitative study conducted by Hurley and colleagues (2020) where a survey of 12 nursing students revealed that those students who completed EI training experienced increased levels of resilience, empathy and compassion. Participating students also expressed an increased sense of preparedness for the workplace (Hurley et al., 2020). Finally, in a study completed by Dacre Pool and Qualter (2012), researchers sought to determine the efficacy of EI and emotional self-efficacy training for university students. Researchers found a positive increase in both EI and emotional self-efficacy levels for those students who participated in an eleven-week EI intervention. Particularly, the research found a marked increase in EI competencies related to understanding and managing emotions (Dacre Pool & Qualter, 2012). These results may indicate that EI skills are best developed in stages, with an initial focus on intrapersonal EI followed by interpersonal EI. This is supported by Sigmar et al., (2012) who, through the use of neurological evidence, suggest that EI typically does develop in stages.

2.3.2.3 Online Delivery of EI Coaching:

Although a thorough search did not find any previous studies that had specifically explored online platforms as a standalone method of EI coaching in third level settings, a study conducted by Gilar-Corbí et al., (2018) introduced the possibility of online training through the use of a multimethodological approach where they implemented the use of blended EI coaching, ultimately combining online and classroom learning. Not only did the study report improvements in participants emotional competencies, but it was noted that the use of an e-learning platform in combination with more traditional teaching created the opportunity for holistic learning which might not otherwise have been possible (Gilar-Corbí et al., 2018). Beyond this singular instance of virtual EI coaching, online therapy is a well-established technique for the delivery of a wide range of psychological and medical supports, so much so, that the American Psychiatric Association have a dedicated Committee on Telepsychiatry who have created a specific policy with respect to telepsychiatry and college mental health in response to the COVID-19 pandemic (American Psychiatric Association, 2020). Furthermore, in a 2011 study, researchers completed a survey of psychologists and counsellors ($N = 109$) and found that there was no significant difference between the level of problem resolution or the quality of client relationship between

face-to-face and remote delivery (Berry et al., 2011). Kruml and Yockey (2011) provided further evidence in support of the online EI coaching, in their assessment of an online leadership module. While the focus of this study was on the development of leadership skills rather than EI, participants completed pre- and post-tests of EI and instruction focused on the development of stress management and empathy. In conclusion a statistically significant improvement was found for participants following completion of the module. It was also noted that there was no significant difference between the face-to-face and hybrid models of delivery which were offered to participants (Kruml & Yockey, 2011).

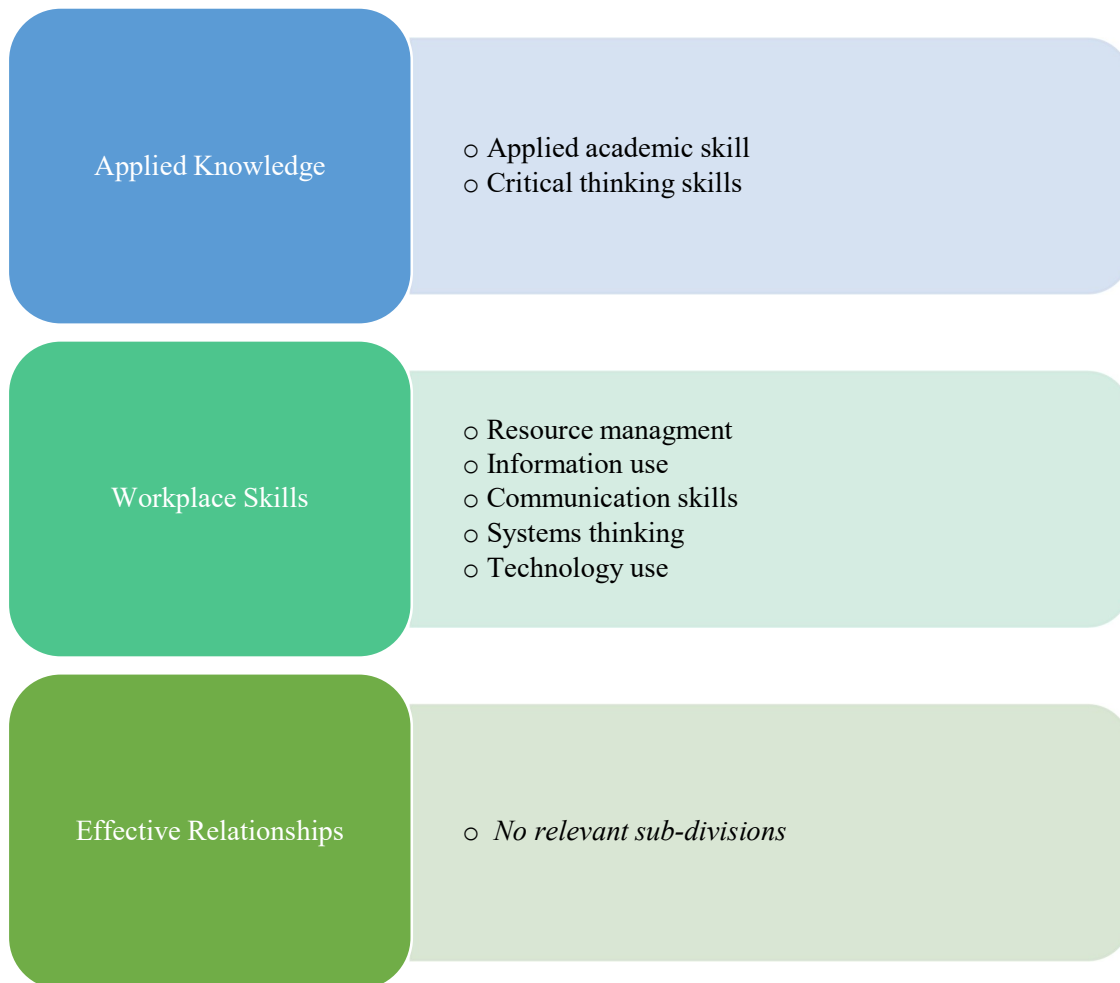
2.4 Employability & SEL:

As research surrounding the impact and implication of EI has expanded, more questions have been asked about the applicability of EI to everyday life. Of particular concern to this thesis is the relationship between SEL and employability. Furthermore, we seek to address the importance of developing high-level graduate social and emotional skills to improve postgraduate employability. In a traditional sense, employability describes the general skills that any particular employee, or prospective employee, needs to possess to achieve success across all aspects of their role or field (U.S. Department of Education, 2019). However, over time the definition of employability has shifted from strictly being a technical and skills-based model to focusing more heavily on the importance of personal and social attributes that better help an individual interact effectively with others (IBEC, 2020). Similarly, there has also been a shift in the way universities think about the development of employability characteristics within their students and rather than think about employability strictly in terms of high-level technical skills, several universities have adopted the following four broad graduate attributes: (1) the critical elements that students should learn; (2) the overall learning outcomes of a university; (3) considering graduates as contributors to society both as citizens and as workers; and finally (4) the development of graduates who will act as agents of social change in a dynamic and uncertain world (Barrie, 2009 in Jameson et al., 2016). These attributes have been developed out of higher education's need to focus on developing both students' hard (practical) and soft (social-emotional) skills, and with the goal of preparing students to enter the global economy (Barrie, 2009 in Jameson et al., 2016).

2.4.1 Hard & Soft Skills of Employability:

According to the United States Department of Education, the hard skills necessary for an employee to excel are represented by three main competencies within an employability skills framework as follows: (1) applied knowledge; (2) workplace skills; and (3) effective relationships (Figure 5; U.S. Department of Education, n.d.).

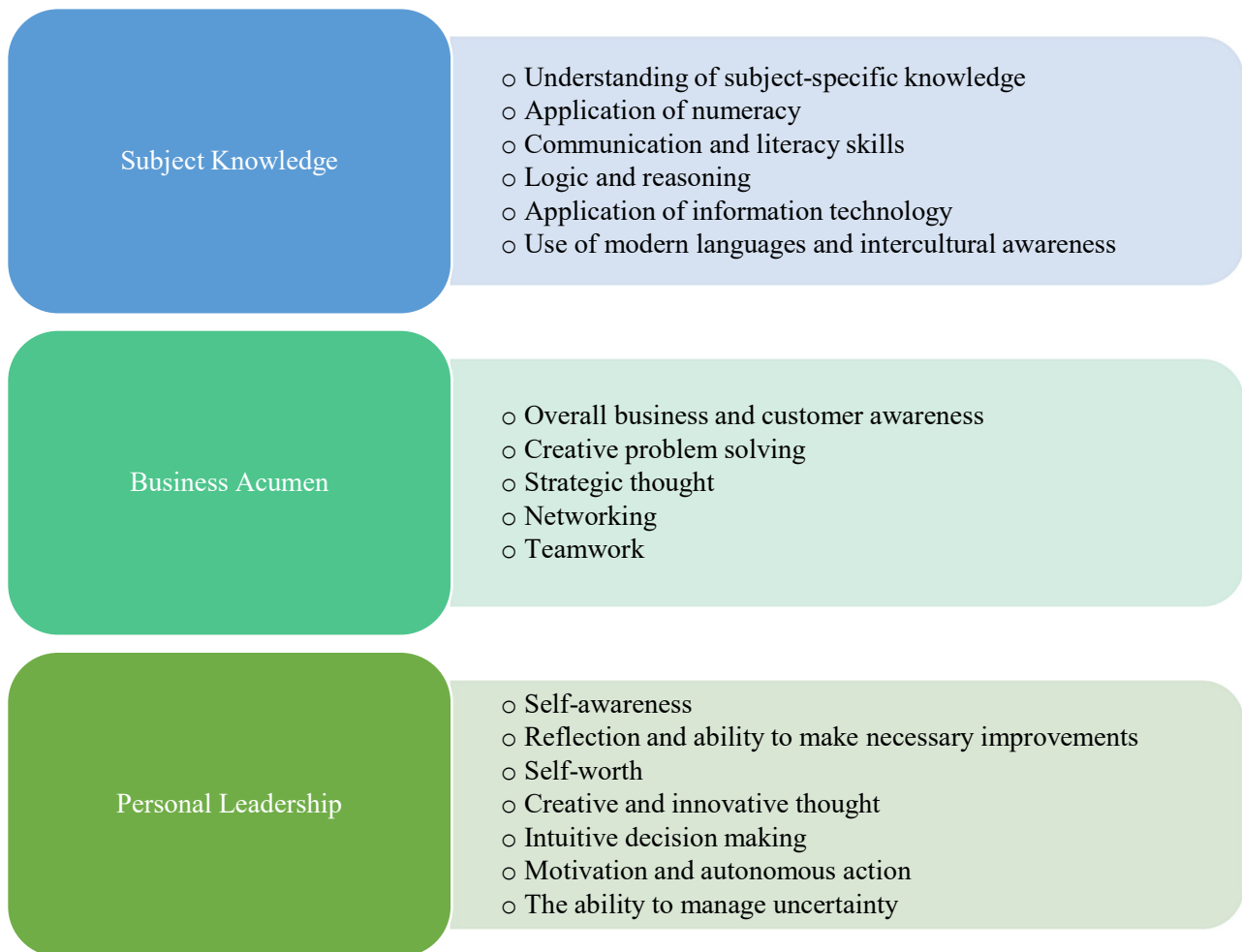
Figure 5. The Employability Skills Framework



Note: The Employability Skills Framework as presented by the United States Department of Education (n.d.). This model categorises the critical employability skills into three distinct categories as follows: (1) applied knowledge, representing a thoughtful integration of academic knowledge and technical skill; (2) workplace skills, highlighting the abilities an employee must have to successfully accomplish work-related tasks; and (3) effective relationships, highlighting the importance of interpersonal and personal qualities within the workplace. These categories are then further subdivided into seven groups as shown above (U.S. Department of Education, n.d.).

A similar structure is presented by the Irish Business and Employees Confederation (IBEC, 2020). In this model, IBEC categorises the critical employability skills into three distinct categories: (1) subject knowledge; (2) business acumen; and (3) personal leadership (Figure 6; IBEC, 2020).

Figure 6. The Employability Competency Framework



Note: The employability competency framework, as presented by IBEC (2020). In this model, IBEC categorises the critical employability skills into three distinct categories: (1) subject knowledge, which emphasises the importance of subject-specific technical knowledge and knowledge application; (2) business acumen, which highlights the specific practical and interpersonal skills needed for an individual to succeed in the workplace; and (3) personal leadership, which places emphasis on interpersonal skills, effective coping, and creativity. These three categories are further subdivided into eighteen subcategories as shown above (IBEC, 2020). Figure adapted from “Future Ready Improving graduate employability skills” IBEC, 2020, from <https://www.ibec.ie/influencing-for-business/labour-market-and-skills/future-ready-improving-graduate-employability-skills>

Moving on from the more technically focused elements of employability, a recent study conducted in Ireland surveyed Irish employers and asked their opinion on the importance of several different soft skills in the workplace (Jameson et al., 2016). The study utilised a list of competencies selected from Goleman's 1998 Emotional competence Framework. To complete the survey, Jameson and colleagues recruited Irish employers across five sectors and asked them (1) how important is it that employees possess each competency; and (2) what was the current prevalence of each competency within their current employees. At the end of the study, researchers found that 45.9% of employers rated all ten competencies as "very important" and 86.2% rated all ten competencies as either "very important" or "important," rating motivation, teamwork and communication as the most important overall. With regard to question two, results found a significant discrepancy between the importance of each competency and the current level displayed by employees. Specifically, only 14.1% of employers rated the current level of competencies amongst their staff as "excellent" across all competencies, highlighting a critical inconsistency between employers wants and the skills that are presented by current and prospective employees (Jameson et al., 2016).

While hard skills and technical knowledge remain a crucial element of employability, over time there has been an increased emphasis on personable soft skills within the workplace. As the nature of work changes more rapidly, as projects become more complex, and as technology develops, employees need to be able to meet the demand of a complex and ever-changing environment (Amdurer, Boyatzis, Saatcioglu, Smith & Taylor, 2014; Jameson et al., 2016). Furthermore, as already seen, the presence of soft skills and high levels of EI can serve as a means to help individuals manage stress, adapt to a changing environment, and face challenges with an open mind (Boyatzis & Saatcioglu, 2008; CASEL, 2020; Jones et al., 2015; Neils et al., 2009; Parker et al., 2004; Qualter et al., 2007; Ruiz-Aranda et al., 2012; Slaski. Cartwright, 2003; Vaillant & Davis, 2010). As such, it is essential to consider how EI can be developed for both current and future employees.

2.4.2 SEL in the Workplace & Workplace Readiness in Third Level Education:

Since the presence of soft skills within the workplace is an increasingly important factor, it is important to consider how such skills can be developed for current and future employees. One of

the most important elements in the development of soft skills for students is SEL (CASEL, 2020). So, beyond the presence and importance of soft skills, how does SEL relate to employability?

The true importance of SEL within the workplace becomes jarringly evident when considering the rates of employment success across sectors. As seen from the study conducted by Jameson and colleagues (2016), there is a substantial discrepancy between the importance and current prevalence of soft skills within the workplace (Jameson et al., 2016). This discrepancy was further highlighted in a recent study published by the New York based training and research firm LeadershipIQ, which reported that a shocking 46% of all new-hires would fail within the first 18-months of employment while only 19% would adequately succeed (Murphy, 2015). While this alone is a jarring statistic, what is even more interesting is that this high failure rate is not the result of inadequate technical knowledge, in fact, poor technical knowledge accounted for only 11% of new higher failures (Farrel, 2019; Murphy 2015). Rather, lack of soft skills accounted for low success rates, with poor coachability (26%), poor EI (23%), poor leadership, motivation and initiative (17%) and poor individual temperament (15%) being highlighted as key areas of concern (Farrell, 2019; Murphy, 2015).

Research on the relationship between EI and work outcomes has found that not only are emotionally intelligent employees more likely to develop strong attachments to their organisations, but they are also more likely to experience higher levels of job satisfaction, commitment to work and are better able to manage the high demands associated with their role (Carmeli, 2003). Lopes, Grewal, Kadis, Gall and Salovey (2006) echoed this, finding that EI is positively and significantly related to both job performance and positive affect. In a similar vein, a recent study conducted by Koman and Wolff (2008) specifically examined the role of EI for team leaders and managerial staff, reporting that not only does the presence of an emotionally intelligent team leader increase overall group EI, but this increase in EI can have a positive impact on group performance as a whole. These findings not only emphasise the importance of EI within the workplace, but they also illustrate the possibility for transference of EI skills amongst groups. Keeping this in mind, Koman and Wolff argue in favour of EI training and suggest that organisations place emphasis on fostering emotionally intelligent groups, and

particularly growth amongst team leaders and managers (Koman & Wolff, 2008). Finally, considering a more recent study by Brackett, Palomera and Mojsa-Kala (2010) researchers sought to determine what relationship, if any, there was between EI, supervisor support, job satisfaction, burnout, affect and accomplishment. In conclusion, it was found the EI positively correlated with not only job satisfaction, but also with personal accomplishment, positive affect, and supervisor support, ultimately supporting the idea that high levels of EI can positively impact on individuals within the workplace (Brackett et al., 2010). Taken collectively, these studies suggest an area of opportunity for EI training programs to be developed to help mitigate work stress, reduce burnout, and promote job satisfaction and performance.

On a smaller scale, many theorist have tried to conceptualised employability (e.g., the CareerEDGE model of employability (Dacre-Pool & Sewell, 2007) or the UKCES employability model (UKCES, 2009). Specifically looking at the CareerEDGE model of employability, this model identifies both the importance of general workplaces skills as well as the distinct importance of developing strong EI and interpersonal skills (Dacre-Pool & Sewell, 2007). Unlike other models of employability which focus predominantly on outcome-based measures, the CareerEDGE model defines employability as 'having a set of skills, knowledge, understanding and personal attributes that make a person more likely to choose and secure occupations in which they can be satisfied and successful' (Dacre-Pool & Sewell, 2007, p. 208). Ultimately, the aim based on this multi-layered pathway is to provide as space and directive to not only to enhance individuals' perceived employability, but to improve overall career satisfaction (Dacre-Pool, 2013; Dacre-Pool & Qualter, 2013). With this goal in mind, Dacre-Pool developed a teaching intervention for undergraduate students which ultimately succeeded in increasing levels of EI and self-efficacy within the group (Dacre-Pool, Qualter & Sewell, 2014).

Having seen the importance and potential positive impact of EI within the workplace, how can such skills be transferred to prospective employees, and particularly students as they prepare to enter the workforce? This is where the role of WPR coaching in third-level education comes into play. While WPR training in higher education remains a relatively new concept, to date there are two strong examples that can be used as reference. Firstly, the University of Aberdeen have developed a graduate readiness program called Students Taking Active Roles (STAR; University

of Aberdeen, n.d.). STAR serves as the university's way of embedding employability competencies into all academic areas explicitly targeting: (1) individual academic excellence; (2) critical and effective thinking; (3) learning and personal development; and (4) active citizenship. The STAR program creates a personalised presentation and reflective portfolio for students, which serves as an 'enhanced transcript' and allows students to the space to assess their individual skill confidence, develop skills, network, learn how to articulate both their acquired hard and soft skills as well as provide students with the space to reflect on growth (University of Aberdeen, n.d.). Similarly, the University of Central Oklahoma has developed the Student Transformative Learning Record (STLR) which has been developed to help students build up a reflective portfolio and help show growth across five core employability characteristics: (1) global and cultural competencies; (2) health and wellness; (3) leadership; (4) research, creative and scholarly activities; and finally, (5) service-learning and civic engagement (Farrell, 2019). Using this framework, the portfolio is used as a tool to assess students' skills on a scale ranging from exposure to integration to transformation to illustrate level of competency and interaction students have with each area. Furthermore, the portfolio serves as a resume enhancement to illustrate to employers' skills beyond just the technical (Farrell, 2019). Ultimately, both STAR and STLR not only provide students with an effective way to assess their specific growth throughout their time in university, but they also provide students with a framework for communicating with future employers in a way that shares more than just academic knowledge or practical experience.

2.5 The Irish Education System:

Education in Ireland is mandatory for all children aged six to sixteen or until three years of secondary education has been completed (Education_Ire, 2020). Education systems in Ireland are broadly categorised into primary (ages 4-12), post-primary (ages 12-18), and higher education, with each level tailored towards a specific subset of the population and working to achieve a particular set of academic goals (Education_Ire, 2020). While each of these education levels are unique, students in higher education are the primary focus of this research and as such third level education will now specifically be outlined.

Third-level education, while not mandatory, provides a space for students to expand further and specialise their schooling as they gain the knowledge and technical skills necessary to enter the workforce (Education_Ire, 2020). Higher education in Ireland includes a variety of educational opportunities across a range of third-level institutions including eight national and technological universities, seven colleges of education, 14 institutes of technology and several specialist training institutions (Department of Further and Higher Education, Research, Innovation and Science, 2020). As presented in a report published by the Irish Department of Education at the start of 2020, the Irish third-level education system seeks to achieve a set of six key system objectives: (1) “provide a strong talent pipeline combining knowledge, skills, & employability”; (2) “create rich opportunities for national and international engagement”; (3) “excellent research, development and innovation”; (4) “improve the equality of opportunity through education and training”; (5) “demonstrate consistent improvement in the quality of the learning environment”; and (6) “demonstrate consistent improvement in governance, leadership and operational excellence” (Department of Education and Skills, 2020, 1). In 2019 the Higher Education Authority (HEA) reported 231,710 new entrants (full-time, part-time, and remote) into the Irish higher education system for the previous 2017/2018 academic year, indicating an increase of 2.7% enrolment from the previous year (HEA, 2019). Additionally, the HEA reported a 16% increase in graduates (both undergraduate and postgraduate) from Irish institutions over the past five years, with the largest increase (38%) occurring within the Information & Communications Technologies, Natural Sciences, Mathematics and Statistics sectors (HEA, 2019).

2.5.1 SEL in the Irish Context:

Regarding curriculum, the Irish national curriculum is regulated by the National Framework of Qualifications (NFQ) which, published by the National Qualifications Authority of Ireland, outlines ten distinct award levels, ordinary certificate to doctoral degree, and discusses their associated learning outcomes (Irish National Framework of Qualifications, 2020). Learning outcomes within the NFQ are further subdivided into a set of four key competencies (knowledge, know-how, skill, and competency), and these four key points are again further divided into a series of eight key sub-strands (Irish National Framework of Qualifications, 2020). However, even with these extensive subdivisions, there is limited reference to SEL within the NFQ (Carthy et al., 2013). Moreover, while there is a reference to SEL for younger primary and secondary

school students through the provision of relationship and sexuality education (RSE) and social and health education (SPHE) there is little to no reference to SEL for third-level students (Carthy et al., 2013). While many colleges and universities do offer an extensive network of support for students, research on the provision of EI training for third level students has shown that many students choose not to avail of these supports simply because they are not a mandatory part of their chosen curricula (Carthy, McCann, McGilloway & McGuinness, 2012).

2.5.2 Technological Universities & TU Dublin:

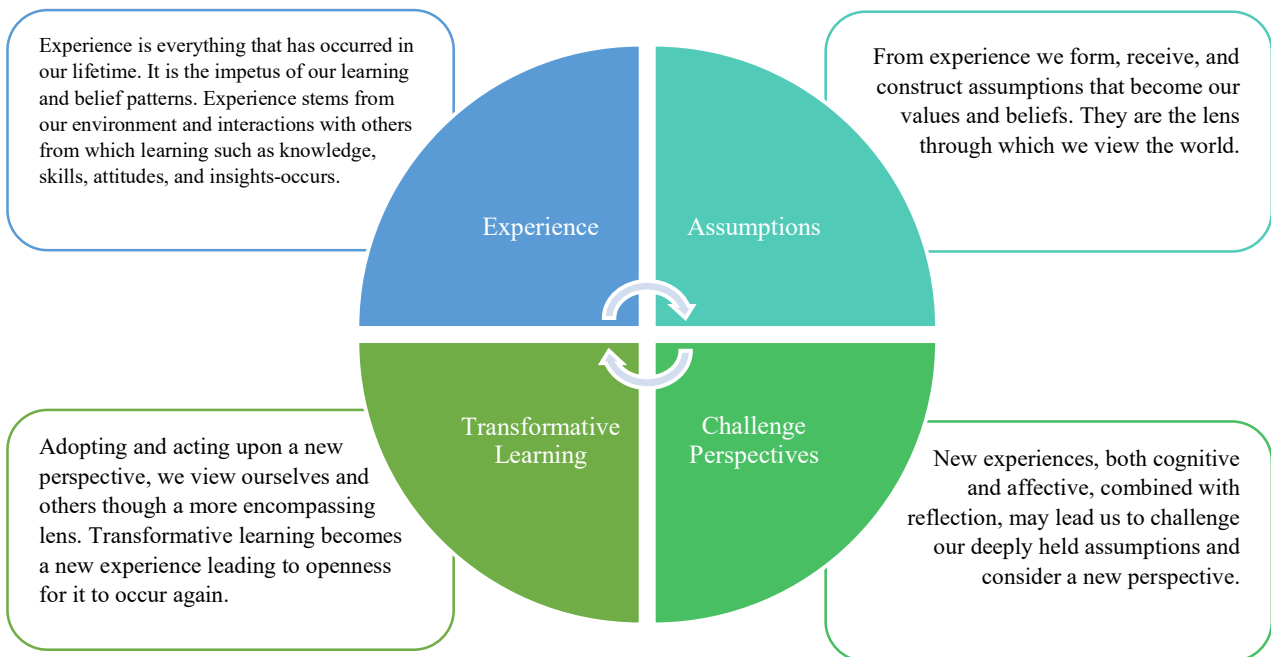
Unlike traditional universities, technological universities represent the consolidation of two or more technical institutes and emphasise industry research while offering programmes at levels six (higher certificates of education) to eight (higher diplomas & honours bachelor's degrees; Higher Education Authority, 2020). Furthermore, the role of a technological university includes, among others, the facilitation of research-based education, the provision of programmes which reflect upon the needs of the community and the support and development of a skilled workforce (Technological Universities Act, 2018).

In line with the above legislation, TU Dublin is the conglomeration of three Irish institutions (Institute of Technology Blanchardstown-ITB, Dublin Institute of Technology-DIT, and Institute of Technology Tallaght-ITT) to become Ireland's first technological university (TU Dublin, 2020). While newly founded in 2019, TU Dublin carries with it a rich history of education spanning back over one hundred and thirty years and serves to provide students and faculty from a wide range of educational backgrounds (e.g., engineering and technology, science, arts, and business). TU Dublin serves upwards of 28,000 students, representing 13% of all higher education students across Ireland as they work towards their "vision to create a better world together" (TU Dublin, *Strategic Plan* 2020). Furthermore, TU Dublin seeks to support innovative technological advancements with the goal of finding solutions to issues faced by society today as well as empower students on their educational journey so that they might thrive in their postgraduate careers.

2.6 Transform-EDU & Transformative Learning:

As the current study falls within the larger *Transform-EDU* project, it is important to understand the details of transformative learning and how it relates to student supports and SEL. While transformative learning has been long discussed in the academic sector, there is still much debate over the specific definition and means of the construct (Nerstrom, 2014). Fundamentally, transformative learning requires the expansion of an individual's traditional world view, the critical assessment of their beliefs, and the gaining and recognition of new perspectives (Nerstrom, 2014). One of the original frameworks presented to explain the process of transformative learning was posed by Mezirow (1978) and presented a ten-phase outline of the transformative learning process. However, while Mezirow's model was one of the first of its kind, the framework was quite complex as it did not follow any particular pattern, and not all of the phases were necessary (Nerstrom, 2014). Taking inspiration from Mezirow's original framework, a new model of transformative learning, the Nerstrom Transformative Learning Model (NTLM), is presented in a four-segment framework: (1) experience; (2) assumptions; (3) the challenging of individual perspectives; and (4) the experience of transformative learning (Nerstrom, 2014). The NTLM compiles the ideas initially presented by Mezirow and represents them in a simplified and sequential manner where each phase of the process is encountered on the journey towards transformative learning (Nerstrom, 2014). Details of the NTLM are presented in Figure 7.

Figure 7. The Nerstrom Transformative Learning Model



Note: Depicts details of the Nerstrom Transformative Learning Model. This new conceptualised model allows theorists space to visualise the transformative learning process more easily and how it can be applied in action (Nerstrom, 2014). Figure adapted from “An Emerging Model for Transformative Learning” Nerstrom, N., 2014 *Adult Education Research Conference: New Prairie Press*. Retrieved from <https://newprairiepress.org/aerc/2014/papers/55/>

It is also important to note that since transformation and transformative learning implies the internalisation of information, theorists have argued that once an individual has experienced the process of transformative learning, they are not only more receptive to similar events in the future, but they are less likely to revert to the beliefs they held before their transformative experience (Dirkx, 1998; Mezirow, 2003; Nerstrom, 2014; Western Governors University, 2020). More simply, it is believed that through transformative learning individuals taking in new information are able to adapt their worldview through active reflection on and comparison of new information to their previously held beliefs or ideas (Dirkx, 1998; Mezirow, 2003; Nerstrom, 2014; Western Governors University, 2020).

CHAPTER THREE:

Method

3.1 Research Paradigm:

The current project is structured within the critical realist theoretical framework. This framework was chosen particularly due to its emphasis on reductive reasoning. While there are other research paradigms such as positivism or constructivism, which could have been adopted, these frameworks were not seen to fully encompass the breadth of the research and the research questions addressed in this study. For example, while positivism, which takes a realist-objectivist stance, is perfectly suited in some contexts, it focuses on events that occur as a result of universal laws and, as such, can occasionally be limited in explanations of causation (Saunders et al., 2015) Specifically, if an association is found between two events, positivism does not always account for an explanation of how this association occurred, or what external or social factors may be influencing the causation. On the other hand, constructivism, which is an irrealist-subjectivist paradigm, is particularly beneficial in understanding individual experience and finding meaning within a shared story. However, this approach can be limited in its ability to move from experience to cause when considering what impact an individual's discourse might have on the world (Saunders et al., 2015). Taking these limitations into account, critical realism has been considered to be the best fit given the scope and context of the current study.

Critical realism maintains a realist-subjectivist position, holding an ontological stance that believes in a real universe and the epistemological position that knowledge and knowledge acquisition are theory-dependent (Bhacker, 1978; Gorski, 2013; Saunders et al., 2015; Zachariadis, Scott & Barret, 2013). Furthermore, critical realism arguably builds on the frameworks of positivism and constructivism by not only acknowledging the existence of reality but also recognising the importance of meaning and discourse (Bhacker, 1978; Gorski, 2013; Saunders et al., 2015; Zachariadis et al., 2013). As such, critical realism is often seen as a middle ground between empiricism and interpretivism. The theory maintains the belief that the world has three distinct domains as follows: (1) empirical, which describes individual experience of the world; (2) actual, which describes the events (or lack of events) which occur as a result of individual action; and (3) real, which describes the social structure and causal mechanisms that either enable or constrain events to occur within any given setting. It is by exploring and shifting between these domains that rich, more complex and, most importantly, ontologically informed

conclusions about research can be made (Bhacker, 1978; Gorski, 2013; Saunders et al., 2015; Zachariadis et al., 2013).

Finally, in addition to the above, Braun and Clarke (2006) have commented on the relationship between research paradigm and best practice for thematic analysis, noting that utilising a realist ontology can aid in the accurate reporting of participants' experiences, meaning and reality. Furthermore, it has been noted that certain domains of RTA tend to group together. These domains fall into four distinct categories as follows: (1) orientation to the data, where research is either considered inductive or deductive; (2) meaning making, where analysis and coding are either semantic or latent; (3) the qualitative framework, which classifies analysis as either experiential (i.e., focusing on participants' voice and highlighting lived experiences) or critical (i.e., focusing on a specific topic or issue); and (4) the theoretical framework, either realist-essentialist which seeks to find reality and truth within the data or relativist-constructionist which seeks to evaluate the meaning of the dialogue shared within the data. Braun and Clarke (2006) have then noted that inductive analysis, semantic coding, experiential frameworks and realist paradigms tend to be grouped together, and a second group is formed by deductive analysis, latent coding, critical frameworks and the constructivist paradigm. However, these domains are not entirely separate, and research will often contain elements from multiple dimensions. Considering the above and considering the methodologies of the current project, which are discussed in detail below, a realist framework has been adopted.

3.2 Overview of Research Design:

The current project was conducted using a mixed-method (MM) design, and data was collected following a series of three social-emotional modules (i.e., mindfulness, EI and WPR), which were offered to students at TU Dublin during the 2020-21 and 2021-22 academic years. Specifically, the study employed the use of both semi-structured thematic interviews and a variety of questionnaires. Quantitative data was initially collected, followed by qualitative data; however, a convergent parallel approach was adopted, and data was analysed concurrently (Creswell in Caruth, 2013). A MM design was chosen to enable triangulation, thus supporting a more robust analysis, which is particularly useful in social science as researchers must be mindful of biases or perceptions associated with their research (Fielding, 2012). MM research

utilises a rounded approach, thus creating a space where the narrative is created within each interview to help foster a deeper understanding of the pre- and post-assessment data, ultimately enriching their associated meaning (Cronholm & Hjalmarsson, 2011; Haq, 2015). Finally, MM research design can help mitigate potential limitations which might be associated with other single-method designs (Greenwood & Terry, 2014).

Quantitatively, the study utilised pre- and post-test assessments of participating TU Dublin students as a means to determine the relative effectiveness of each module, employing a mix of standardised and survey measures. Qualitative data was collected using semi-structured focus groups, which were conducted with students who attended and those who did not attend relevant training modules, to gain insight into the student experience. These focus groups assessed the following information as it pertained to each individual module: attitudes and opinions surrounding the available modules, motivation for engagement or non-engagement, perceived benefits or limitations of the module and any suggestions for improvement. Further details on the means of data collection, materials and measures are outlined below.

3.3 Summary of Research Phases:

The current project involved the completion of three distinct data collection phases. Three phases were chosen as data collection was dependent on the timeline of each individual social-emotional module. The details of each data collection group are outlined in Table 1 below.

	Group One: Mindfulness	Group Two: Emotional Intelligence	Group Three: Workplace Readiness
Student Cohort	First-year students	Second-year students	Final-year students
Quantitative Analysis	Pre- and post-test assessment via: - Perceived Stress Scale (Cohen et al., 1983) - Brief Resilience Scale (Smith et al., 2008).	Pre- and post-test assessment via: - Trait EI Questionnaire (Petrides, 2009)	Pre- and post-test assessment via: - Trait EI Questionnaire (Petrides, 2009) - CareerEDGE Employability Development Profile (Sewell & Dacre-Pool, 2010).
Qualitative Analysis	Post-intervention focus group with participating (A) and non-participating (B) students.	Post-intervention focus group with participating (C) and non-participating (D) students.	Post-intervention focus group with participating (E) and non-participating (F) students.

Table 1: Outline of data collection groups and summary of methodology.

3.4 Ethical Considerations:

In line with TU Dublin policy for research involving human participants, the current study was reviewed and approved by the Blanchardstown Campus Ethics Committee. The researcher (Wyndham Chalmers) is also a graduate member of the Psychological Society of Ireland and as such is bound by the PSI professional code of ethics.

All participants provided written informed consent to participate in the study. In instances where participants were under 18 years of age, parental/guardian consent was also obtained.

Participation in the study was completely voluntary, and participants were provided with a detailed information sheet and a copy of the informed consent sheet prior to participation.

Considering the nature of the topics being discussed both in the modules and in subsequent focus groups, participants were not considered to be high risk. However, if during the module, or during the collection of the focus group data a participant disclosed information or maintained behaviour concerning to the researcher, appropriate steps would have been taken. This included seeking advice from the project supervisor, Dr Aiden Carthy, who is an experienced researcher as well as a trained EI coach. The TU Dublin college counsellor was also on standby if any participants became distressed or wished to seek out additional supports following the module or focus group.

Participants were asked to provide their email address and phone number which were held for 6-weeks following participation to ensure it was possible to contact them in case any follow-up was necessary. This information was destroyed six weeks after the interview was held. Along with any other identifiers, this information was held separately from the data. As part of the informed consent process, along with assuring confidentiality and anonymity, permission was obtained from all participants to ensure video and audio recording of the interview was okay. Participants were informed that they could withdraw from the study at any time, including during the interview process. The original recordings were transcribed within six weeks of the interview and anonymised by assigning a pseudonym. Following transcription, the original recordings were destroyed; however, interview transcripts will be held for up to 10 years in password

protected computers which only the researcher (Wyndham Chalmers) and the research supervisor (Dr Aiden Carthy) have access to.

3.5 Quantitative Data Collection:

As previously stated, quantitative assessment utilised a series of pre-and post-intervention assessments. Due to low participation, t-tests were used to compare pre- and post-intervention scores for each of the three research cohorts (mindfulness, EI and WPR). Lakens' (2013) article was also consulted to ensure that the most relevant means of assessing effect size was employed.

3.6 Qualitative Data Collection:

Following Braun and Clarke's theoretical framework for thematic analysis, reflexive thematic analysis (RTA) was chosen as a means to assess, organise, describe, and interpret the qualitative data arising from six focus groups (one participant and one non-participant focus group for each of the three research cohorts (Clarke & Braun, 2017; Braun & Clarke, 2006). Each focus group employed a semi-structured approach, and themes were identified for discussion with students based both on pre-existing literature on the topics of mindfulness, EI and graduate employability as well as the aims of the current study. The analysis of the qualitative data employed an inductive and systematic analytic approach, assuming a direct relationship between participants' language and their intended meaning (i.e., it was assumed that coding and theme development reflect the explicit content of the data). Finally, a dual-coder methodology was employed as per Clarke and Braun's recommendation for best practice. During this collaborative process, coders placed a particular emphasis on 'meaning', and both the themes and sub-themes which are highlighted are those that both coders feel best represent the data in a complete way.

RTA was chosen specifically as a means for analysis largely due to its systematic framework of data analysis, which is an approach that enables clear identification and communication of themes and patterns within the data (Braun & Clarke, 2014). RTA, while robust, is also a flexible approach to qualitative data collection and analysis and can be modified to the needs of a variety of different studies while still maintaining a high standard and facilitating the collection of complex and detailed data (Braun & Clarke, 2006; King 2004). Finally, the reflexive element of RTA aims to address potential biases by calling for researchers to be aware of and examine their

own beliefs and assumptions and how these might impact the data collection and analysis process.

3.7 Comment on Sample Size: Although there is limited previous research that has examined the impact of mindfulness EI and WPR modules in third-level education settings, there is ample evidence to suggest that such modules can yield generic benefits, including higher levels of emotional awareness, improvements in mental health and stress management. Therefore, an aim of the current study was to recruit as many participants as possible, so an a-priori sample size calculation was not completed. Instead, it was hoped that a sufficient number of students would participate in the study to achieve a power of .8 or greater, and there was no desire to limit numbers for each module after this level of power was achieved. Rather, we hoped to be able to accommodate as many students as possible given the expected advantage of participation in each available module.

3.8 Group One: Mindfulness:

The first data set for this study relates to the administration of a brief mindfulness intervention to a group of first-year students at TU Dublin. The details of this participant cohort and the associated intervention are outlined below.

3.8.1 Participants:

There was a total of 8,439 first-year students registered at TU Dublin for the first semester of the 2020/2021 academic year. 156 students registered an interest in the mindfulness module and were emailed a participant information sheet, demographic form and consent form. Of these, 57 completed the consent and demographic forms and were registered to attend the module, and 25 completed the mindfulness module. Despite being sent reminders to do so, only 22 students completed both the pre- and post-test questionnaires and only 21 completed the post-intervention survey. With respect to sex, 18 participants (72%) were female, and 7 participants (28%) were male. One participant was aged 17, 15 participants were aged 18-24, 7 participants were aged 15-34, and one participant was aged 35-44.

With respect specifically to the post-intervention focus group, six students who completed the mindfulness module participated in focus group A and four non-participating students (i.e., those who registered an interest but did not complete the module) participated in focus group B. Specific demographic details for these students is provided in Table 2 and Table 3 (see Qualitative Results – Group One: Mindfulness).

3.8.2 Assessment Measures:

Pre- and post-test assessments were conducted using the Brief Resilience Scale and the Perceived Stress Scale. Details of each assessment are provided below.

3.8.2.1 The Brief Resilience Scale (BRS):

Unlike alternative resilience measures, which assess protective factors and personal characteristics which may indicate resilience, the BRS is unique in the fact that it is the first resilience measure to assess resilience as an individual's ability to "bounce back" from or adjust to a stressful situation (Smith et al., 2008). As indicated by the name, the BRS is a short measure consisting of just six items, three positively worded and three negatively worded, rated on a five-point scale where one indicates "strongly disagree" and five indicates "strongly agree". The three negatively worded items are reverse coded. As a means to determine general validity of the measure as well as determine its ability to predict health-related outcomes, during its construction, the BRS was tested with four different normative samples. Sample one was represented by 128 undergraduate students, sample two was represented by a separate sample of 64 undergraduate students, sample three was represented by 112 cardiac rehabilitation students and sample four was represented by 50 women who either had or did not have fibromyalgia (Smith et al., 2008). Through a systemic methodological review, Windle, Bannett and Noyes (2011) further explored the reliability and validity of the nineteen different resilience measures and ranked the BRS in the top three psychometric tests of resilience particularly for an adult population. The BRS was also determined to adequately assess the "bounce back" factor which it originally had sought to measure (Windle et al., 2011).

3.8.2.2 The Perceived Stress Scale (PSS):

Developed as a tool to assess the perception of stressful experiences, the PSS has become the most widely utilised tool to not only assess the relative stressfulness of life events, but also to assess the effectiveness of different stress management modules (Cohen, Kamarck & Mermelstein, 1983). The PSS comprises of a 14-item scale, four positively worded and ten negatively worded, where zero indicates a frequency of "never" and four indicates "very often". The four positively worded items are reverse coded for scoring (Cohen et al., 1983). Three normative samples were used in the development of the PSS. Sample one was made up of 322 first-year college students from the University of Oregon, sample two was represented by 114 university students enrolled in an introductory course in personality psychology, and the final group was made up of 64 individuals who were also participating in a smoking-cessation programme at the University of Oregon. Due to its popularity and wide range of use, the validity of the PSS had been evaluated by several different researchers and has been shown to have adequate reliability and validity across a number of population domains (e.g., students; Denovan et al., 2019; Örucü & Demir, 2009; Roberti, Harrington & Storch, 2006, psychiatric samples; Hewitt, Fleet & Mosher, 1992, and chronically ill individuals; Khalili et al., 2017; Sun et al., 2019).

3.8.3 Procedure:

A mindfulness module consisting of a series of five, one-hour, mindfulness sessions were offered to all first-year students at TU Dublin in semester one of the 2020/2021 academic year. The module was specifically offered to first-year students as a means to combat any transition related stress students may be experiencing and to help prepare further prepare students for their time third-level education (Acharya et al., 2018; Chan et al., 2019; Misra & McKean, 2000; Van Herpen et al., 2020). Due to constraints caused by the coronavirus pandemic, the module was offered online via the online videoconferencing platform Microsoft Teams. There were five iterations of the module on offer to students, each with a maximum of 20 available places. To ensure consistency, each of the five modules were offered to students over the same five-week period, the same mindfulness teacher delivered all twenty-five sessions, and the same content was covered in each iteration. However, to accommodate students' schedules, the times at which the modules were offered varied as follows: Monday 10-11am, Monday 12:30-1:30pm, Tuesday

7:30-8:30pm, Wednesday 1-2pm and Thursday 1-2pm. The mindfulness modules were delivered by an expert mindfulness teacher, hired by The Sanctuary, which is a registered charity in Dublin City, Ireland that specialises in the delivery of MBI. The module was developed by a mindfulness teacher who has a specific background in cyber psychology, and adaptations were made from traditional face-to-face delivery and development of the module to facilitate online delivery as needed. Most notable, these adaptations included exercises within the module to address relevant issues such as 'zoom fatigue' which students might have been experiencing since the strict transition to distance learning (Bailenson, 2021; Bullock et al., 2022). Furthermore, to aide in the facilitation of the module and development of a strong group dynamic, it was requested by the teacher that participants left their cameras on for all sessions.

The modules were not streamed (i.e., any first-year student, in any course could apply to attend any of the modules on offer). This meant that there was a mix of first-year students in each group from across the university's various faculties and courses. The modules were advertised to all first-year students via social media, an email to address all students and an additional email sent by the university's students' union. It is important to note, that first-year in this context refers to any student in the first year of their programme, meaning that any student, undergraduate or postgraduate regardless of age or previous academic experience, could participate in the module provided they were in their first year of study at TU Dublin. Additionally, lecturing staff were contacted and requested to bring the mindfulness module to the attention of first-year students. All of the advertisements for the module contained a participant information sheet and a link that students could use to provide their names and email address to register their interest in the study. Students who registered interest were then contacted separately via email with a consent form (two versions were employed, one for participants aged 18 or over and another for participants under the age of 18 which also required a signature of a parent or guardian). Once consent was confirmed, participants were sent a demographic questionnaire which included questions pertaining to participants' incentive for joining the module and what it was they hoped to gain. It was at this point that students were also sent two pre-test measures, the PSS and BRS. These assessments were redistributed to participants one week after the final mindfulness session along with a questionnaire pertaining to the perceived benefits and barriers related to participating in the module.

With respect to the post-intervention focus group, both focus group A and B took place two weeks after the completion of the mindfulness module. Participants were recruited for each focus group via email and selected on a first-served basis. Specifically, two emails were sent, one to all students who had completed the mindfulness module inviting them to participate in focus group A and another to those students who registered interest in but who did not complete the module inviting them to participate in focus group B. It is important to note, that students who were contacted about participated in focus group B had previously expressed interest in the mindfulness module; however, they did not complete any of the pre-test assessments or attend any of the relevant module training sessions. Due to restrictions imposed by the coronavirus pandemic, all focus groups were held using the platform Microsoft Teams. Furthermore, as the focus groups took place during a particularly busy time during the academic calendar, all focus group participants were offered a €20 shopping voucher as incentive for participation which they received following completion of the interview.

3.9 Group Two: Emotional Intelligence:

The second data set pertains to the administration of a series of EI modules to second-year students at TU Dublin. The details of this participant cohort and the associated intervention are outlined below.

3.9.1 Participants:

There was a total of 5,399 second year students registered at TU Dublin for the first semester of the 2020/2021 academic year. 76 students registered an interest in the EI module and were emailed a participant information sheet, demographic form, and consent form. Of these, 33 completed the consent and demographic forms and were registered to attend the modules with 19 completing the full module and retaking the pre- and post-test questionnaire. With respect to sex, 15 participants (79%) were female, and 4 participants (21%) were male. Ten participants were aged 18-24, five participants were aged 25-34, one participant was aged 35-44, one was aged 45-54 and one participant did not disclose their age.

With respect specifically to the post-intervention focus groups, six students who completed the EI module participated in focus group C and two non-participating students participated in focus group D. Specific demographic details for these students is provided in Table 6 and Table 7 (see Qualitative Results – Group Two: EI).

3.9.2 Assessment Measures:

Pre- and post-test assessment of EI were conducted using the Trait Emotional Intelligence Questionnaire. Details of this assessment are provided below.

3.9.2.1 The Trait Emotional Intelligence Questionnaire (TEIQue):

The TEIQue assumes EI to be a facet of personality and as such seeks to measure respondents' perceived levels of emotional intelligence. The test comprises 153 items, yielding a global EI score, four principal factors (wellbeing, self-control, emotionality and sociability) and 15 facets of EI. The four principals and their associated facets are aligned as follows: well-being (happiness, optimism and self-esteem); self-control (emotion regulation, impulse control and stress management); emotionality (empathy, relationships, emotion expression and emotion perception); and sociability (emotion management, assertiveness and social awareness). Two additional facets (adaptability and self-motivation) contribute to the global trait EI score. The normative sample for the construction of the TEIQue was 1,721 individuals (912 female, 764 male and 61 unreported) and all four factors and 15 facets show strong internal consistency (Petrides, 2009). Gardner and Qualter (2010) explored the concurrent incremental validity of three separate measures of trait EI, the TEIQue, the Schutte Emotional Intelligence Scale and the Multidimensional Emotional Intelligence Assessment with a sample of 307 participants and concluded that the TEIQue was the most effective predictor of multiple psychological criteria including life satisfaction, psychological loneliness and alcohol abuse. The TEIQue was chosen for this study due to the fact that it specifically addresses individual perception of emotional abilities, meaning that it serves as a tool to evaluate how good participants believe they are at regulating, understanding, and expressing their emotions within their everyday environment (Petrides et al., 2016).

3.9.3 Procedure:

An EI module consisting of a series of five one-hour EI sessions were offered to all second-year undergraduate and second-year postgraduate students at TU Dublin in semester one of the 2020/2021 academic year. The module was offered to second-year students to help them develop their own intrapersonal skills, additionally as the modules continue to run, this module will build on the skills learnt during the mindfulness module. Due to restrictions imposed by the coronavirus pandemic, the module was offered online via Microsoft Teams. There were five iterations of the module on offer, each which had a maximum of 20 places. To ensure consistency, each iteration ran across the same five-week period, was delivered by the same EI coach and covered the same content. Particularly, the module focused on one main topic each week as follows: week one – introduction to EI and managing stress; week two – self-awareness; week three – self-regard; week four – building healthy interpersonal relationships; and week five – review and maintaining EI practise moving forward. The module was designed to focus initially on intrapersonal EI with later sessions focused on interpersonal EI, in line with previous research findings as previously outlined (Dacre Pool and Qualter 2012, Sigmar, et al., 2012). Additionally, in line with Dacre Pool and Qualter's findings, the module had an applied focus whereby students were given practical exercises to engage with following each week of the module to enable them to gain both theory and knowledge related to EI and practical skills to improve their emotional self-efficacy. To accommodate students' varying schedules, the times at which the modules were offered varied. The EI module was delivered by a psychologist who is also a qualified EI coach. Much like the mindfulness module, the EI modules were not streamed, meaning any second-year student in any programme could apply to attend any of the sessions on offer leading to a mix of second-year students in each group from across the university. The coaching modules followed the same advertisement and recruitment pathway as the mindfulness module (i.e., social media, email and lecturer endorsement). Once interested students had been contacted and consent was confirmed, participants were sent the demographic questionnaire. Participants were also required to complete the TEIQue and a personalised EI profile was generated and emailed to each participant prior to their first coaching session (See Appendix A – Sample EI Profile). One week after the final EI session participants were requested to re-complete the TEIQue and were also administered a questionnaire pertaining to the perceived benefits and barriers related to participating in the module.

With respect to the post-intervention focus group, both focus groups took place as soon as possible after the module had ended to glean attitudes and opinions from students with regard to the perceived efficacy of the module. Specifically, focus group C took place one week after the completion of the EI module and focus group D took place one month after the module had been completed. The delay in completing focus group D was due to difficulty in participant recruitment. Students were selected for participation in the focus groups on a first-come first-served basis, and students were recruited via email. Similar to the mindfulness group, it is important to note that students who were contacted about participating in focus group D had previously expressed interest in the EI module; however, they did not complete any of the pre-test assessments or attend any of the relevant module training sessions. As the focus groups took place during a period of national lockdown imposed as a result of the COVID-19 pandemic, the focus groups were held virtually via Microsoft Teams. Furthermore, as the focus groups took place during a particularly busy time during the academic calendar, all focus group participants were offered a €20 shopping voucher as incentive for participation which they received following completion of the interview.

3.10 Group Three: Workplace Readiness:

The third and final data collection group is marked by the administration of a WPR module which was offered to students in their final year of study at TU Dublin. Further details of this participant cohort and the associated intervention are outlined below.

3.10.1 Participants:

There were a total of 1162 final year students registered at TU Dublin for the first semester of the 2021/2022 academic year. Final year students in this context were any student who was in the final year of their programme, regardless of programme length and includes both undergraduate and postgraduate students. 93 students registered an interest in the WPR module and were emailed the participant information sheet, demographic form and a consent form. Of these, 70 students completed the consent and demographic forms and were registered to attend the modules with 22 completing the full course. Despite being sent reminders to do so, only 21 of the participants completed both the pre- and post-test assessment. With respect to sex, 12

participants (55%) were female, and 10 participants (45%) were male. 17 participants were aged 18-24 and 5 were aged 25-30.

With respect specifically to the post-intervention focus groups, four students who completed the WPR module participated in focus group E and three non-participating students participated in focus group F. Again, similar to above, those students who were contact to participate in focus group F had previously expressed interest in the WPR module; however, they did not complete any of the pre-test assessments or attend any of the relevant module training sessions.

Specific demographic details for these students is provided in Table 10 and Table 11 (see Qualitative Results – Group Three: WPR).

3.10.2 Assessment Measures:

Pre- and post-test assessment were conducted using the TEIQue and the CareerEDGE Employability Development Profile (EDP). Details of the TEIQue have already been provided above, however, details of the EDP are provided below.

3.10.2.1 CareerEDGE Employability Development Profile (EDP):

The EDP was developed arising from the CareerEDGE model of employability which adopts a multi-layered approach and includes EI as a distinct skills category (Dacre-Pool & Sewell, 2007). The CareerEDGE model of employability focuses specifically on five elements as follows: (1) career development and learning, (2) work and life experiences; (3) degree specific subject knowledge and skills; (4) generic skills; and (5) emotional intelligence (Dacre-Pool & Sewell, 2007). It is these five elements that provide the framework for the EDP as a means to provoke self-reflection amongst participating students (Sewell & Dacre-Pool, 2010). The EDP comprises of a 28-item self-report questionnaire, where students are asked to rate aspects of employability from one, strongly disagree, to seven, strongly disagree, with a score of four or lower on any given item suggesting an area for improvement. These 28-items are designed to align with the five elements of the CareerEDGE model. Following these scaled items, students are presented with an opportunity for further reflection as they are asked to consider their scores and comment both on their strengths as well as suggest ways, they could address the potential areas of improvement (Sewell & Dacre-Pool, 2010). A sample of 807 undergraduate students

from a UK university was used in the development and validation of the EDP (Dacre-Pool, Qualter & Sewell, 2014). This sample combined students both in a control group and those who participated in a career planning module. In conclusion, the EDP was determined as a sufficient measurement tool both for developmental work with students and for evaluation and measurement purposes (Dacre-Pool et al., 2014).

3.10.3 Procedure:

A WPR module consisting of a series of five one-hour sessions were offered to all final year students at TU Dublin in semester one of the 2021/2022 academic year. Final year students were chosen as the target group for this module to firstly help prepare them for the transition out of education and into the workplace, and secondly, to help combat the discrepancy that is present between the importance and current prevalence of soft skill amongst new hires (Jameson et al., 2016; Murphy, 2015). Unlike the previous two modules, the majority of the WPR modules were held in person and on campus. However, as there were still changing restrictions as a result of the coronavirus pandemic, the module remained flexible and there were some elements of the module (e.g., the practice interview) which were held virtually via Microsoft Teams. Similar to other modules, there were five iterations of the WPR module on offer, each of which had a maximum of 20 available places. To ensure consistency, each iteration of the module ran across the same five-week period, was delivered by the same coach and covered the same content. Specifically, the WPR module focused on one main topic each week as follows: week one – teamwork, week two – verbal communication, week three – written communication, week four – interview skills and preparation, week five – facilitation of a practice interview with feedback to follow. The WPR module was delivered by a psychologist with a background in EI coaching. The module was also delivered in conjunction with discipline specific employers. These employers not only spoke directly to students, but also aided in the facilitation of mock interviews and provided students with feedback on those interviews.

To accommodate students' busy schedules, the times during which each iteration of the module varied. Again, this module was not streamed, meaning any final year student could attend any of the sessions on offer. Unlike the mindfulness and the EI module, however, the WPR module was primarily advertised to students in person as the person who would be delivery the modules went

into the classrooms and spoke directly to final-year students about the WPR module. If interested, students then contacted the teacher and were sent further information and a consent form. Once consent was confirmed, participants were sent the demographic questionnaire and asked to complete the TEIQue and EDP. These assessments were redistributed to participants one week after the final WPR session along with a questionnaire pertaining to the perceived benefits and barriers related to participating in the module.

With respect to the post-intervention focus groups, both focus groups took place two weeks after the WPR modules had been completed. Like previous focus groups, students were selected on a first-served basis and students were recruited via email and through on campus recruitment in lectures. For consistency amongst all groups and to ensure ease of access for students, the focus groups continued to be held virtually via Microsoft Teams. Finally, as the focus group took place during a particularly busy time during the academic calendar and recruitment for these groups was found to be especially difficult, each participant was offered a €40 shopping voucher as incentive for participation which they received following completion of the interview.

CHAPTER FOUR:

Results

GROUP ONE: Mindfulness

4.1 Quantitative Findings:

With respect to the Perceived Stress Scale, a dependent t-test demonstrated that there was a significant difference between the results from the pre-test scores ($M = 22.4$; $SD = 6.6$) and post-test scores ($M = 16.9$; $SD = 6.4$), $t(24df) = 4.61$, $p < .001$. Effect size was large ($d_{av} = 0.84$).

With respect to the Brief Resilience Scale, a dependent t-test also demonstrated that there was a significant difference between the results from the pre-test ($M = 17.09$; $SD = 4.22$) and post-test ($M = 19.91$; $SD = 4.74$), $t(21df) = -3.29$, $p = .004$. Effect size was moderate ($d_{av} = .63$).

4.2 Qualitative Findings:

This section serves to highlight, define, and support the major themes identified within the data. Both focus groups were considered individually, with focus group A representing those students who did participate in the available mindfulness module and focus group B representing those students who did not avail of this module. Following the outlined RTA process, the following five themes and relevant subthemes were identified within focus group A: (1) reasons for participation – subtheme one: previous experience of mindfulness and subtheme two: mental health and anxiety; (2) ineffective advertising; (3) perceived benefits – subtheme one: mental health, subtheme two: work-life balance, and subtheme three: dealing with issues caused as a result of the COVID-19 pandemic; (4) timing; and (5) virtual vs in person delivery. Next, the following four themes and relevant subthemes were identified in focus group B: (1) interested yet didn't participate; (2) reasons for non-participation – subtheme one: ineffective advertising and subtheme two: too busy; (3) perceived benefits – subtheme one: stress and anxiety related to college life; and (4) potential improvement – subtheme one: preference for face-to-face instruction and subtheme two: availability and timing.

4.2.1 Focus Group A:

Focus group A represents a group of first-year students ($n = 6$) from TU Dublin who had previously participated in the available mindfulness module. This group of students included one

male and five female students across a range of academic disciplines. Demographic details for each participant, as well as their chosen pseudonym, are outlined in Table 2.

	<i>Participant 1</i>	<i>Participant 2</i>	<i>Participant 3</i>	<i>Participant 4</i>	<i>Participant 5</i>	<i>Participant 6</i>
<i>Male/Female</i>	Female	Female	Female	Female	Female	Male
<i>Age</i>	31	35	20	18	19	18
<i>Course of Study</i>	Social Care	Public Health Nutrition	Engineering	Energy Engineering	Early Years Childhood and Education	International Business and Languages
<i>Pseudonym</i>	Molly Shaw	Eliza Walsh	Karla	Carrol	Dawn O'Brien	Jude

Table 2. Participant information for focus group A, students who participated in mindfulness training.

4.2.1.1 Theme One: Reasons for Participation:

As participating in the mindfulness module was voluntary, it is important to consider students initial interest in the module and their reason for participation. Throughout the data, students expressed a broad range of interest and desire to “give this a whirl” (Eliza Walsh). Four students also stated that the module might be particularly beneficial to them as they tried to manage college related stress and made the argument that the module would help them settle “into college life” (Karla). Mental health and anxiety were also discussed by students as strong influencing factors of participation with two students sharing explicitly that they chose to participate in the module because they “saw it helped with anxiety” (Dawn O’Brien).

Previous experience of mindfulness was also found to be a strong influencing factor to students’ interest in the module. Four students cited previous experience of mindfulness as one of the most influential factors in their decision to participate. Whereas there were two students who noted that they “didn’t really know much about mindfulness at all” (Molly Shaw). Considering students past experiences of mindfulness overall, they noted they had a particular interest in the mindfulness module at TU Dublin because it felt familiar, and they were looking to participate in “something that [they were] used to” (Karla).

4.2.1.2 Theme Two: Ineffective Advertising:

The mindfulness module was advertised to students “through the college email” (Molly Shaw) and while there was one student who felt that the module was advertised well, five of six students noted issues with the way the module was advertised to them. Two students stated that students get “bombarded with emails” (Eliza Walsh) making it easy for them to dismiss an email without giving the content much attention. Furthermore, students cited potential issues with the language used in the initial advertisement, saying that “I don’t know if people know what mindfulness is” (Eliza Walsh). Karla also made the observation that “mindfulness is everywhere now” and considering its increasing prevalence on social media and the often-vague representation of mindfulness and meditation practices on these platforms it is easy to see where students might become confused. All this said, students were very vocal about potential improvements for the advertisement and argued that in future the goal should be to increase student engagement. Students recognised that with restrictions from the COVID-19 pandemic finally easing there are many more options for on campus advertisement campaigns and presented several options which might help increase student engagement. Specifically, two students suggested that “posters would be good for advertising, if you’re in college” (Karla), especially in high traffic areas, one suggested to have “someone actually [come] in and give a little five-to-ten-minute talk” (Molly Shaw), and one suggested “posting something on the TU Dublin website” (Karla).

4.2.1.3 Theme Three: Perceived Benefits:

Looking broadly at student feedback, the module was perceived by students to be “very beneficial” (Dawn O’Brien). Not only did participation in the mindfulness module help increase students’ “understanding of what mindful really is” (Karla) but they experienced a range of impacts across nearly all aspects of their lives. Students explained that participating in the module set the tone for the day and that on the “days that [they] done that, [they were] more productive” (Molly Shaw) and “happier” (Molly Shaw). Similarly, a further three students argued that participation in the mindfulness module not only helped broaden their perspective and “be more aware of things” (Jude), but it helped them be more in touch with “how you’re feeling ... and what triggers you” (Eliza Walsh), suggesting that the module helped with self and emotional awareness. Perceived mental health benefits were mentioned by three students as they commented that after participating in the mindfulness module they noticed “great improvements

in [their] anxiety” (Dawn O’Brien) and that the module taught them how to redirect their thinking in a positive way to help manage “bad thoughts” (Dawn O’Brien).

Furthermore, four students commented on the positive impact the module had on their experience in college. Not only did the mindfulness module help students “deal with stress” (Karla) broadly but participating in the module helped students “get into the exams and [feel] ready to do them” (Dawn O’Brien) a confidence boost that came as a result of student’s not feeling so “bogged down” (Molly Shaw). Students also noted that the module taught them ways in which they could better maintain a healthy work-life balance with two students stating that the module encouraged them to “stop being on autopilot for so long” (Molly Shaw) and make time for themselves each day. A further two students commented that since the mindfulness module they have allowed themselves “permission to step away from [their] work and take a break” (Eliza Walsh) a decision that has allowed them to “be aware of just what’s going on in [their] body” (Eliza Walsh) and “live in the present” (Carrol). Ultimately by forming these new habits and practicing awareness, students explained that they were able to get out of their own heads and felt an increased sense of “productivity” (Jude; Molly Shaw; Eliza Walsh) and motivation in their work.

Finally, students highlighted how the mindfulness module helped them manage challenges associated with the COVID-19 pandemic. The pandemic was and has been a particularly uncertain time for everyone, “the news is bad every day” (Jude), “people are dying, and you can’t leave your house” (Karla). However, even with all this, all six students explained that the “mindfulness module really helped [them] to face a lot of stress” (Carrol) associated with COVID-19. For one student who was separated from her family, the mindfulness module heled her be "in the moment and ... find ways to enjoy being in Ireland” (Karla) and, for another three students, the module helped them feel “more calm” (Molly Shaw). Finally, students noted that the “mindfulness module helped [them] through it all” (Carrol) speaking about perseverance and a shared sense of courage to move through daily life more confidently even in the midst of uncertainty.

The mindfulness module was multi-faceted, and participation had a positive impact across several aspects of students' lives. As a whole, participation in the mindfulness module was an experience of "learning for good" (Carrol) in a way that allowed students to "continue with [their] mindfulness journey" (Carrol) even after the module had finished.

4.2.1.4 Theme Four: Timing:

Though it is evident that students experienced a number of benefits from the module, the module was not without issue or limitation, and the most pressing area of debate for students was the issue of timing. While two students noted that they liked the freedom to "pick a time for themselves" (Karla), that they "liked the once a week" (Karla) and that they felt the timing within the semester was "brilliant" (Dawn O'Brien) as "the course ended the same weeks as [her] studies" (Dawn O'Brien) students were not without their criticism and all students noted that they wish the module "went on longer" (Jude). Whether it be in the form of longer sessions where the module ran for "an hour and a half maybe" (Dawn O'Brien) or a longer overall duration where the module ran "longer than four or five weeks" (Eliza Walsh), students shared the desire to engage with the mindfulness module over a more extended period of time. As one student, Eliza Walsh, explained "it took [her] probably two weeks to properly get into it" so by the time she felt that she had settled into the module it was nearly halfway over. As a result, three students made the suggestion that an "8-week" (Jude, Molly Shaw & Eliza Walsh) module might be preferable, because not only would it allow students more time to find their "stride" (Eliza Walsh) within the module, but it would also allow them more time "to take in all the information" (Dawn O'Brien) and make it more likely that students would "make a habit of it" (Eliza Walsh) and maintain the skills they learned while in the module.

4.2.1.5 Theme Five: Virtual vs In Person Delivery:

The COVID-19 pandemic has rapidly and dramatically changed the landscape of education and the question of preference and efficacy of in-person versus distance learning has become increasingly important. This is particularly important in the context of the current study, as it is important to consider how the virtual delivery of the mindfulness module might have impacted on students' experience. Looking first to student's experience of virtual delivery, all students agreed that the "online delivery was good" (Karla) and felt "safer" (Molly Shaw) than a

traditional classroom setting because you have more control over your own environment. Not only are students more “accustomed to online now” (Eliza Walsh), but “if you had to turn up to an actual building ... there’s so many variables that could maybe stop you from going” (Eliza Walsh) ultimately suggesting that online delivery is often the “easier” (Karla) option. However, virtual delivery was not without its flaws and, as Karla noted, there is an increased possibility for student disengagement as “when it was online you ... can just mute your mic ... then just sit back and say nothing” (Karla). Conversely, considering students perception of in-person module delivery, Karla noted that while she didn’t believe “on campus delivery would differ much from online delivery” she did think that being in-person might have led to “a bit more discussion going on in the class” and make people more likely to “comment or add” on a topic. However, even if in-person classes may have encouraged more participation, as Molly Shaw shared, students may have been more hesitant to attend in-person because they feel “I don’t know anything about this” and “don’t want to go in real life”. Ultimately, students came to the conclusion that since they did not get to experience an in-person delivery of the module, the two delivery methods are relatively difficult to compare. However, most students did share that they would have attended “either way” (Jude).

4.2.2 Focus Group B:

Focus group B represents a group of first-year students ($n = 4$) from TU Dublin who had not participated in the available mindfulness module. This group of students included two male and two female students across a range of academic disciplines. Demographic details for each participant, as well as their chosen pseudonym, are outlined in Table 3.

	<i>Participant 1</i>	<i>Participant 2</i>	<i>Participant 3</i>	<i>Participant 4</i>
<i>Male/Female</i>	Male	Female	Female	Male
<i>Age</i>	34	<i>Not Specified</i>	34	<i>Not Specified</i>
<i>Course of Study</i>	Cybersecurity	<i>Not Specified</i>	Environmental Health	<i>Not Specified</i>
<i>Pseudonym</i>	Peter	Lucy	Fiona	Patrick

Table 3. Participant information for focus group B, students who did not participate in mindfulness training.

4.2.2.1 Theme One: Interested but Did Not Participate:

One of the most interesting elements of this non-participant group was the strong level of interest the group held in the module, even though they ultimately chose not to participate. All four students expressed some interest in the module and a desire to “know more” (Peter). In this group, curiosity seemed to be a driving factor and students explained that they “wanted to learn what [mindfulness] was ...[because] you never get to hear the full overview of it” (Patrick). Beyond simply being curious, other students cited more personal reasons for wanting to become involved in the module. One student, Lucy, explained that she was interested in the module because “it’s [her] first year” and she “wanted to be involved inside like a group inside the college”. Another student, Fiona, explained that she was particularly interested in trying mindfulness to help manage her own stress levels as she could feel her “anxiety ... building up”. All students also expressed that if a similar module were to be offered again in the future, they would “absolutely” (Fiona) want to participate to “learn more about it” (Peter).

4.2.2.2 Theme Two: Reasons for Non-participation:

Students’ interest in the module starkly contrasts with their decision not to participate. Students cited a number of reasons for what ultimately deterred them from participating in the module including that they had issues joining the module like “internet problems” (Fiona) or that they simply would “forget” (Lucy). Additionally, the social aspect of the module also seemed to hold weight for students as Patrick stated that he would have been “more inclined to go” if he knew “more students ... from [his] class” that were also going. Overall, the two biggest reasons that students cited for not participating in the module were insufficient advertising and simply being too busy.

Looking first at advertising, students received the advertisement for the module through their “TUD emails” (Fiona). Now, while this email had “a lot of information” (Peter), as one student pointed out, “when you put like mindfulness it can be a bit scary ... because people ... maybe don’t understand what really it is” (Peter). Lucy also pointed out that the way students choose to communicate is rapidly changing and argued that email may not be the best way to advertise as “not everybody goes to ones that are sent through their emails”. Keeping this in mind, two students suggested that the advertisement be circulated through module “WhatsApp group chats”

(Lucy), two students made the suggestion of using “social media” (Fiona; Patrick), and one made the suggestion of adding “short video” (Peter) links to the advertisement to make it more visual and engaging. Continuing with the idea of making the advertisement “more visual” (Patrick), two students also suggested the use of “posters” (Fiona; Patrick) around the college campuses. Finally, one student, Fiona, suggested having “the student union and the lecturers” endorse the module.

Being too “busy” (Patrick) was another main reason students cited for not engaging with the module and all four students explained that they “didn’t have the time” (Peter) to join the module. Students’ busyness was largely the result of conflict with other college work and as Lucy explained, she “didn’t really know which one to choose” college work or mindfulness. Peter echoed this and reiterated that students “need to prioritise” their time which unfortunately meant that they could not attend the mindfulness sessions. Suggestions regarding the timing of the module are discussed at greater length below.

4.2.2.3 Theme Three: Perceived Benefits:

Even though students were not able to attend the module they were still able to recognise many of the possible benefits of participation and noted that the module “would’ve helped [them] in a lot of things” (Fiona). Of note, Fiona believed that the module would help with her own personal development and help her “learn a lot more about [herself]” (Fiona). There were also three students who suggested that the module might help them “to just calm down” (Lucy) and “relax” (Fiona). Building on this sense of calm and relaxation, one of the biggest potential benefits identified by students was the potential the module had to help them manage any stress or anxiety they were experiencing as a result of their college work. Lucy explained that “as a college student, like, we get pounded with work” and as a result, students argued that the mindfulness module would have helped them to “get out of college stress” (Lucy) and help them “calm down” (Lucy) when everything was “building up” (Patrick). Students also shared that they felt the module would have helped them settle into the module work and “adjustment to new life” (Lucy) after “starting a new course” (Fiona). Ultimately, though they did not participate in the module, students recognised the wide range of potential benefits, and as Fiona commented “it

probably [would] benefit us down the road” suggesting the potential long-term effects of the module as well.

4.2.2.4 Theme Four: Potential improvements:

Considering the previously identified limitations of time and advertising, students shared openly about ways to not only make the module more appealing, but to make it more assessable to a wider range of students moving forward. As we know, due to the restrictions from the COVID-19 pandemic, the module had to be held virtually; however, unlike participants in focus group A who described the virtual environment as “more comfortable” (Molly Shaw), three of four students in focus group B stated that they would have “preferred it to be face-to-face” (Lucy) as it would allow them to “meet the people with the same idea of what they like ... and make new friends” (Peter). An additional piece of advice given by students besides changing the module to “face-to-face ... in the future” (Fiona) was to change “the time” (Lucy) because time is students’ “biggest enemy” (Lucy). Specifically, students suggested to change the module to “a Friday evening or weekends” (Peter) because then students “aren’t in class at all” (Peter). Fiona also suggested doing a “poll just to see who is available” and at what time. She also suggested the possibility of having “one or two courses running at different times of the year” so that students had multiple opportunities to attend the module. Ultimately, the biggest take away from students was the need to recognise students’ busy schedules and try to facilitate “a choice for different times and dates” (Fiona) when the module can be made available to students in the future.

GROUP TWO: Emotional Intelligence

4.3 Quantitative Findings:

The average scores, standard deviations and standard errors of the mean for pre- and post-scores for total EI, the four factors and fifteen facets of the TEIQue are represented in Table 4: Pre and post-test average scores – EI.

DOMAIN	MEASUREMENT	PRE-TEST	POST-TEST	DOMAIN	MEASUREMENT	PRE-TEST	POST-TEST
Total EI	Average Score	4.45	4.89	Stress management	Average Score	3.55	4.07
	Standard Deviation	.54	.5		Standard Deviation	1.01	.96
	Standard Error	.12	.11		Standard Error	.23	.22
Self esteem	Average Score	4.19	4.93	Emotion management	Average Score	4.17	4.39
	Standard Deviation	1.15	.92		Standard Deviation	1.01	.71
	Standard Error	.26	.21		Standard Error	.23	.16
Emotion expression	Average Score	4.56	5.02	Optimism	Average Score	5.11	5.51
	Standard Deviation	.94	1		Standard Deviation	1.06	1.16
	Standard Error	.22	.23		Standard Error	.24	.27
Motivation	Average Score	4.17	4.77	Relationships	Average Score	5.25	5.56
	Standard Deviation	.98	.73		Standard Deviation	.95	.64
	Standard Error	.23	.17		Standard Error	.22	.15
Emotion regulation	Average Score	3.66	4.32	Adaptability	Average Score	4.37	4.67
	Standard Deviation	.79	.66		Standard Deviation	.9	.7
	Standard Error	.18	.15		Standard Error	.2	.16
Happiness	Average Score	5.09	5.81	Assertiveness	Average Score	4.18	4.55
	Standard Deviation	1.19	.89		Standard Deviation	1.28	.96
	Standard Error	.27	.2		Standard Error	.29	.22
Empathy	Average Score	5.2	5.4	Wellbeing (factor)	Average Score	4.79	5.41
	Standard Deviation	1.04	.88		Standard Deviation	.96	.86
	Standard Error	.24	.2		Standard Error	.22	.2
Social awareness	Average Score	4.43	4.87	Self-control (factor)	Average Score	3.83	4.32
	Standard Deviation	1.07	.76		Standard Deviation	.7	.65
	Standard Error	.25	.17		Standard Error	.16	.15
Impulse control	Average Score	4.29	4.56	Emotionality (factor)	Average Score	4.88	5.24
	Standard Deviation	1	1.03		Standard Deviation	.84	.69
	Standard Error	.23	.24		Standard Error	.19	.16
Emotion perception index	Average Score	4.53	4.98	Sociability (factor)	Average Score	4.26	4.6
	Standard Deviation	1.22	.99		Standard Deviation	.87	.56
	Standard Error	.28	.23		Standard Error	.2	.13

Table 4: Emotional intelligence group pre and post-test average scores, standard deviations and standard errors of the mean for total EI and for each factor and facet of the TEIQue (n = 19).

With respect to the TEIQue, dependent t-tests were conducted for each of these, and statistically significant results (i.e., 95% confidence intervals, t-value, p-value & effect size) are presented in Table 5: Statistically significant results of dependent t-tests – EI.

Scale	95% C.I.D.		T	Sig. (2 tailed)	Effect Size (Cohen's d)
	Lower	Upper			
Total EI	-.62463	-.26484	-5.194	.000	.85 (large)
Self-esteem	-1.17964	-.30351	-3.557	.002	.71 (moderate)
Emotion expression	-.80927	-.10652	-2.738	.014	.47 (small)
Motivation	-.90987	-.30065	-4.175	.001	.69 (moderate)
Emotion regulation	-.98627	-.34636	-4.375	.000	.91 (large)
Happiness	-1.18590	-.24778	-3.211	.005	.68 (moderate)
Social awareness	-.70537	-.17673	-3.506	.003	.47 (small)
Emotion perception index	-.76099	-.14428	-3.084	.006	.41 (small)
Stress management	-.99080	-.06183	-2.381	.029	.53 (moderate)
Relationships	-.62774	.00037	-2.098	.050	.38 (small)
Wellbeing factor	-.99412	-.25009	-3.513	.002	.68 (moderate)
Self-control factor	-.78308	-.19482	-3.492	.003	.72 (moderate)
Emotionality factor	-.57696	-.13462	-3.380	.003	.47 (small)
Sociability factor	-.61023	-.07609	-2.699	.015	.46 (small)

Table 5: Statistically significant results of dependent t tests for total EI, four factors and nine facets of the TEIQue (n = 19) for the EI group.

Effect sizes (Cohen's *d*) were also conducted. Results revealed that there was no statistically significant difference between pre- and post-test scores for empathy, impulse control, emotion management, adaptability, assertiveness and optimism. Statistically significant differences were found for total EI, all four of the principal EI factors (wellbeing, self-control, emotionality and sociability) and nine of the fifteen facets of EI (self-esteem, emotion expression, motivation, emotion regulation, happiness, social awareness, emotion perception index, stress management and relationships).

Being that there were several individual comparisons made to assess the four factors and nine facets of the TEIQue, there is a minor risk of Type I error. As such all results should be considered with this potential limitation in mind. To account for this possible error, Bonferroni's corrections were considered as a means to help reduce the chances of obtaining a false-positive result. However, it was determined that Bonferroni's corrections were not necessary in this scenario. Firstly, there remains some controversy in relation to the necessity of Bonferroni's corrections within the academic community (Streiner & Norman, 2011). While some would make the argument that such corrections are mandatory due to the potential accumulation of Type I errors (Moyé, 1998; Ottenbacher, 1998) others claim that it is "better to tolerate findings that may later prove to be false than to prematurely discard potentially useful observations because of type II errors caused by corrections for multiplicity" (Rothman in Streiner & Norman, 2011). Furthermore, Bonferroni's corrections can, in some cases, lower the risk of Type I error; however, this method in turn increases the chance of Type II errors. As such, it is believed by many that Bonferroni corrections should not be completed unless "(1) a single test of the 'universal null hypothesis' (H_0) that all tests are not significant is required, (2) it is imperative to avoid a type I error, and (3) a large number of tests are carried out without preplanned hypotheses" (Armstrong, 2014). Ultimately, taking these factors into consideration, Bonferroni's corrections were not utilised in this study and results should be considered with this in mind and in consideration of a potential risk of Type I error.

4.4 Qualitative Findings:

Two focus groups were conducted, with focus group C representing those students who did participate in the available EI module and focus group D representing those students who did not

avail of this module. Following the outlined RTA process, the following five themes and relevant subthemes were identified within focus group C: (1) reasons for engagement and interest – subtheme one: mental health and subtheme two: benefits of life beyond college, (2) perceived benefits of emotional intelligence participation – subtheme one: personal development, subtheme two: academics and subtheme three: ‘use it or lose it’, (3) challenges and limitations – subtheme one: confusion and uncertainty, subtheme two: timing and subtheme three: areas for improvement, (4) virtual delivery, and (5) COVID-19. Next, the following three themes and subthemes were identified in focus group D: (1) reasons for non-engagement – sub-theme one: lack of awareness, sub-theme two: online delivery and sub-theme three: perceived issues with the advertising of the module; (2) perceived benefits – sub-theme one: personal development, sub-theme two: mental health: and (3) COVID-19.

4.4.1 Focus Group C:

Focus group C represents a group of second-year students ($n = 6$) from TU Dublin who had previously participated in the EI module. This group of students included two male and four female students across a range of academic disciplines. Demographic details for each participant, as well as their chosen pseudonym, are outlined in Table 6.

	<i>Participant 1</i>	<i>Participant 2</i>	<i>Participant 3</i>	<i>Participant 4</i>	<i>Participant 5</i>	<i>Participant 6</i>
<i>Male/Female</i>	Female	Male	Male	Female	Female	Female
<i>Age</i>	21	33	25	20	45	33
<i>Course of Study</i>	Computer Science	Computing in Information Technology	Computing - Information Technology	Business & Information Technology	PhD	English & Language Studies
<i>Pseudonym</i>	Hestia	Robert	Collin	Shalz	Jemima	Brittany

Table 6. Participant information for focus group C, students who participated in the EI module.

4.4.1.1 Theme One: Reasons for Engagement and Interest:

Considering the voluntary nature of the EI coaching, it was important to explore the reasons students chose to participate. Students stated they were drawn to the module for a number of different reasons. Four students referred to the desire to have a space where they could share and discuss feelings. For example, Hestia mentioned the desire to have a space to “let everything out

... even if it was just to talk about it”. One of these four students, Shalz, additionally stated that she was looking for something to fill her time, particularly since the start of the COVID-19 pandemic. Another participant, Brittany, approached the module with a more open-mind and very few expectations. Brittany described herself as a “bit of a joiner” and stated that she signed up for the module as a “pure mishap” without taking the time to consider what it was that she had signed up for. It is understandable that students would seek out activities to fill their free time, especially due to continuous lockdowns and unexpected isolation as a consequence of the COVID-19 pandemic. Specific to the college environment, research has demonstrated that participation in extracurricular activities which encourage creativity and wellbeing have been linked to lower levels of burnout and improved emotional self-regulation, ultimately leading to improved academic attainment (Fares et al., 2016; Finnerty et al., 2021; Guilmette et al., 2019).

In contrast to the other participants, Jemima was seeking ways to support and further educate others in her life as opposed to being primarily focused on seeking support for herself. She stated that as she works in the primary school sector, she thought “maybe that would be very helpful for my work with the children that I’m working with at the moment. Using what I might learn with my own work rather than for myself”. Interestingly, she subsequently came to the conclusion that the information she was being presented with may not be of use in her work with young children but decided to stay and complete the module nonetheless and was “very glad that [she] stayed on”.

Mental health was a consistent topic of discussion throughout the focus group and a particularly strong influencing factor for students in choosing to engage with EI module. Specifically, students continuously highlighted their persistent experience of stress, anxiety and a general feeling of being overwhelmed by the combination of the pressures of college life and the additional pressures caused by the COVID-19 pandemic. “I have too much things going on at once. And anxiety and stress were at an all-time high” (Hestia); “there were a ton of things, and I was dealing with a lot of anxiety” (Collin). In fact, Hestia cited the emphasis on stress and stress management in the advertisement for the module as what drew her to the module in the first place. Four students stated that feelings of isolation and stress were exacerbated as a consequence of the COVID-19 pandemic. For example, Shalz stated that “during COVID, like it

was, eh, it was hard to get motivation for anything” and that she “really wanted to figure out how I could use the EI workshop to, um, improve motivation and confidence”. The EI module provided students with the opportunity to engage with and reflect meaningfully on their experiences and “get advice from the group” (Robert). The coaching sessions were a place to “let everything out” (Hestia), speak your mind, reflect, and get away from the sense of “feeling like robots” (Collin) where you “just do and do and do and do” (Collin). Ultimately, the coaching provided a welcoming and supportive environment for students.

Students considered both the immediate and the more long-term impacts that the coaching might have had and a strong motivation for participation was the perceived benefit that coaching may have with respect to seeking employment after college. For example, Robert stated that the fact that “you could use the module in regard to employment” was an enticing factor. Jemima took a more expansive perspective, suggesting that “every, em, student actually should do this as a part of their university module. I think it can be so helpful and in so many ways, like whether it’s for yourself for your future work”. This led naturally to a wider discussion pertaining to the perceived benefits of participation with EI coaching.

4.4.1.2 Theme Two: Perceived Benefits of Emotional Intelligence Participation:

As previous research has demonstrated, EI coaching can act as a tool to help buffer life stress, ease anxiety, improve individual quality of life and enhance academic attainment (Jones et al., 2015; Parker, et al., 2004; Vaillant and Davis, 2010). This spectrum of benefits was echoed within the data, with students not only stating that “it was beneficial, like almost immediately” (Hestia) but also that the module “was very positive, and ... applicable to the majority of people” (Brittany). In fact, there was a strong consensus among students that engaging with EI coaching was an overall positive experience. In this regard, five students commented on feelings of openness and community within the group, stating that it was a welcoming space within which to communicate with peers. For example, Shalz stated that she “found it beneficial because we were all allowed to express our views, and uh, we weren’t judged for it”. Similarly, Robert shared that “we were all actually in a safe space ... and we were allowed to express our views whether we agreed or not on certain things and how we could say them, but we weren’t judged for them”.

Personal development was a strong motivation for students, and they continually referred to how the module enabled them to make improvements in their personal lives and that once they started attending the modules they were encouraged to engage in self-reflection and “it kind of forced [them] to think about [themselves]” (Shalz). Students specifically identified time management as a large area of growth as a result of coaching. For example, Collin remarked that EI coaching helped him to be forgiving with himself and reminded him that “you’re not supposed to do absolutely everything in one day”. Students also commented that the workshops created a necessary break in the week and that “it was nice to just take time out of your day” and “have that moment” (Brittany). Shalz noted that prior to attending the modules, she had been finding it difficult to “get the motivation to actually start on something,” however, the modules helped her to “kind of get the motivation ... rather than just procrastinating”. The EI modules specifically appeared to aid students in the practice of self-reflection and this was highlighted as a particular benefit throughout the focus group; Robert noted that there was a lot of emphasis in the modules “in regard to the perception of yourself and perception of others as well” and students repeatedly described their sense of attending the EI modules as a “safe space” (Shalz) where they could “share feelings and thoughts about different things”. Students recognised that the conversations they had were not the types of conversations they would typically have with their friends from college. Robert specifically noted that these deeper, more meaningful, conversations were what helped him realise “there is resilience in the fact that you can go, okay, I’ve kind of come back down there, how do I move back up again?”. Overall, the students reported a sense of being on a journey of self-discovery and this is summed up by Brittany who stated “...it wasn’t just like general comments, it was also allowing people to grow weekly”.

A second perceived benefit of involvement with the modules was the perceived positive impact that participation had on academic attainment. Previous research on EI has shown that high levels of EI are correlated with high levels of academic attainment, so it is perhaps unsurprising that those students who participated in the EI modules reported perceived academic improvements as a consequence (Jones et al., 2015; Parker et al., 2004; Vaillant and Davis, 2010). Of module, based on self-reports alone, it is impossible to determine if the EI coaching was the sole source for any potential changes in academic performance for these students; however, based on the current data, one can conclude that while it may not be the sole

contributing factor, students certainly found the coaching to have a meaningful impact on their academic experiences. As per the demographic information provided above, students represented a wide range of academic fields. The general consensus was that students' mental health and academic performance had been negatively impacted as a consequence of COVID-19. However, four students noted an improvement in their academic performance after having attended EI coaching sessions. Collin, for example, commented specifically that a perceived benefit of attending the modules was that his "GPA went up" and Shalz went even further, claiming that "I don't think my GPA was ever that high ... I was actually so shocked". It is clear from the data that students directly connected attending the EI modules with their improved academic attainment. Hestia for example simply stated that "the course helped a lot" and Robert added that the ability to take a "step back" give him the space to focus and reflect which ultimately led to improved grades.

A final concept that students discussed related to perceived benefits of engaging with EI coaching was 'use it or lose it' and in this regard, students appreciated that in order to maintain and improve EI, one must actively and continuously engage in the practice of this skill or risk losing it. Students recognised the importance of routine, with Robert remarking that "doing it every week is definitely beneficial (Brittany nodding in agreement) because then you're in a routine of it". Although students found the timing and frequency of the module helpful, saying "the once a week was definitely beneficial" (Robert) they also stated they would like the module to have been longer than it was and that they felt as though there was "not enough of it" (Robert) and that they were "just stopping in the middle of nowhere" (Brittany). Robert further remarked that even though the module was helpful at the time it was taking place, once it ended, "maybe courses take over, maybe stresses take over, maybe life takes over ... and, although you've done it, maybe you've implemented some, but not enough" (Robert) and what you learnt from the module slowly starts to slip away as your practice begins to fade. What these comments suggest is that whilst students found the EI module to be beneficial as a whole, to maintain these benefits over time, the skills learnt throughout the module need to be meaningfully practised on an ongoing basis.

4.4.1.3 Theme Three: Challenges & Limitations:

Although the students “very much liked” (Collin) the module, that does not mean it was without any perceived flaws. Interestingly, one of the primary areas where students perceived improvements could be made was not with respect to the modules directly but rather with respect to how they were advertised. When discussing the advertisement, students noted a particular emphasis on stress and stress management and as Hestia claimed, this might have deterred some students from participating due to a belief that “it was just for stress”. An additional concern for students was the perception that it would consist of a “group talking about problems” (Hestia). Furthermore logistically, a fundamental issue for students was the fact that the module was advertised by email and whilst email is a convenient means of communication and an efficient way to ensure that all students have an equal opportunity to engage, students made it abundantly clear that they get “hundreds of emails” every week (Brittany) and cited this as one of the reasons that some students may not have engaged with the module. Alternatively, students suggested that advertising through social media and presentations in lectures would be preferable and likely a more effective way to advertise future modules.

That there was some confusion as to what exactly EI is was apparent. Brittany stated that although she anticipated the module would outline the “steps in order to, you know, grow it [EI], and how to apply it to your life”, nevertheless “it was a little bit more personal” than she had expected. Shalz mentioned being confused by the “complicated” term “emotional intelligence,” however, three other students noted that they had previously learnt about EI. Both Brittany and Robert said that they had heard about it “in secondary school”, whereas Shalz stated that she had “read a book about emotional intelligence”.

A second area where students felt improvement could be made, was with respect to the timing of the module. The most prominent concern was that it didn’t run for long enough and students made the argument that it felt as though the module was cut short and that even though it started off “very well and you have it all, and you have a block of it which is fantastic” (Robert) when the module ended after its allotted five weeks there was a perception that students were left with “nothing, (*Shalz nods in agreement*)” (Robert), ultimately leaving them with a sense of “what do we do now?” (Brittany). Additionally, Collin commented on the point in the semester when the

module began, noting that he “was already spiralling” and made the suggestion that it would have been preferable to have the module start at the very beginning of the academic semester. In fact, one of the strongest findings to emerge from this focus group was the sense that the module simply didn’t run for long enough with, Robert suggesting a check-in “four-weeks/five-weeks into your next semester, or even in mid-semester” would have been nice as a way to see “have you used the tools or have you forgotten the tools”. Furthermore, with respect to the ‘use it or lose it’ sub-theme, Robert made the argument that this “refresher” to the longer five-week module would remind students of the importance of practising the skills they had been taught and further encourage students to incorporate these lessons into their daily lives. It is clear from students’ feedback that while the timing was not necessarily a determining factor in whether or not they chose to participate or not, it was a rather important factor in determining their overall experience of the module. Moving forward, it is recommended that some adaptations to the module be made, particularly in relation to the final session or sessions such that a more comprehensive “round off” (Brittany) is included as well as the possibility for “refresher” sessions so that students feel prepared to continue practising the skills they developed even after completing the module.

4.4.1.4 Theme Four: Virtual Delivery:

Due to limitations imposed by the pandemic, the EI module was held virtually via the online video conference platform Microsoft Teams, so this was specifically explored with students. Students initially shared that they started to struggle when classes “went to virtual” as they found that this “new” approach to university and studying left them feeling “very stressed” (Collin). Furthermore, students shared that they found it “very hard to kind of engage on that personal level in the [virtual] classrooms” (Robert), making the argument that due to the virtual classroom format, they felt less connected to their peers and perceived receiving less support than they would in a traditional classroom setting. Interestingly, while students did have difficulties with the transition to virtual education as a whole, they acknowledged that the emotional intelligence module “was delivered very, very well” (Collin) and also noted that they “didn’t have any technical difficulties” (Collin). In this regard, students noted that the EI module was unique in that “it’s different than just maybe attending a zoom meeting where somebody is kind of lecturing, and everyone is listening” (Jemima). Instead, the emotional intelligence module gave

“the space to everyone to talk, and then listen” (Jemima), which ultimately fostered a sense of openness amongst the group, creating a “safe space” (Robert; Shalz; Brittany) for students to come together and share. In contrast to a traditional classroom setting where students might be “sitting in an environment where you were in a bit of a circle chatting” and there would be “a lot more pressure on you” (Brittany), the virtual meetings provided students with the opportunity to “share, um, a lot of personal details and a lot of personal things without feeling as vulnerable” (Collin). Furthermore, in addition to feeling “less pried on” (Brittany), in a virtual setting, students recognised that there was a sense of freedom associated with the virtual delivery such that, “If you didn’t want to talk about your feelings, you could, you know, just back away a bit” (Brittany).

While there was a consensus that students felt rather safe and secure in the online modules, two students did comment on differences they perceived compared to standard, in-person interactions. For example, Jemima compared the abrupt end to each call to “switching off the tele”, whereas Robert suggested that it would be nice “for the whole group to hang on a little bit longer if people wanted to”. So, while virtual delivery is convenient in many ways, it may arguably create a bubble effect and unintentionally isolate participants from each other.

Ultimately, based on feedback, it would seem as though the virtual delivery was very popular, if not for its convenience, then for the comfort and security that it provided students. Furthermore, while some students seemed unsure as to whether they would prefer to attend an in-person or virtual module had they been given a choice, others ventured so far as to say that “it would possibly be better that it’s online, especially managed in the way it was, versus having to be in an actual classroom” (Brittany). Whilst students in this study had mixed views with respect to online delivery, ultimately this data suggests that virtual delivery may be less of a hindrance than previously suspected.

4.4.1.5 Theme Five: COVID-19:

Considering the timing and context of the current research and, more importantly, the fact that the EI modules were offered to students during one of The Republic of Ireland’s COVID-19 national lockdowns, the pandemic was unsurprisingly a reoccurring topic of conversation for a

number of reasons. COVID-19 not only impacted the way in which the module was delivered to students (i.e., virtual instead of in person), it also had a large impact on students' reasons for participating and their overall experience of the module.

On a positive note, students reported that the EI module helped them better process the effects of the pandemic, “deal with the fact that you were having an awful lot of difficulties in that respect” (Robert) and provided them with a space to “express your thoughts and feelings that you wouldn't really talk about” (Shalz). This seemed to be particularly important as students like Shalz noted that they would not have shared so openly with their friends and that the emotional intelligence group was a much-needed release from the stress they were feeling. This was of particular importance to students given the restrictions imposed as a result of COVID-19 and the fact that they were no longer able to experience daily interactions with peers “agreeing, disagreeing, laughing like, just being like interacting and socialising” (Collin). The pandemic took an emotional toll, with some students noting that they were “feeling like more insecure” (Shalz) after almost a year of social distancing and national lockdowns and that “being around people seems more different now” (Shalz).

The pandemic necessitated quick adjustments and adaptations to be made to the way the module was delivered and for students the pandemic necessitated fundamental changes with respect to their college lives and how they interacted with staff and fellow students. Ultimately, it is hoped that the feedback gleaned from students will aid in the development of the module so that it can continue to be tailored to fit their needs.

4.4.2 Focus Group D:

Focus group D represents a group of second-year students ($n = 2$) from TU Dublin who had not previously participated in the available EI module. Both students were female, however, were from different academic disciplines. Demographic details for each participant, as well as their chosen pseudonym, are outlined in Table 7.

	<i>Participant 1</i>	<i>Participant 2</i>
<i>Male/Female</i>	Female	Female
<i>Age</i>	44	20
<i>Course of Study</i>	Social Care	Economics & Finance
<i>Pseudonym</i>	Sabina	Meabh

Table 7. Participant information for focus group D, students who did not participate in EI module.

4.4.2.1 Theme One: Reason for Non-engagement:

Given the voluntary nature of the EI module, it is important to consider the reasons why students may have chosen not to take part. In a broad sense, students were unsure about the module, saying that they did not think they would “truly benefit from it” (Meabh) and “what am I going to participate? I don’t even know what they are talking about” (Sabina). The consensus of both students was that they were unsure how the module could specifically benefit them and fundamentally they were unsure about what emotional intelligence was in the first place.

Uncertainty therefore emerged as a subtheme within this overall theme of non-engagement.

Sabina explained that she did not “know too much about” EI, whereas Meabh did have some prior knowledge of EI as she explained that her “therapist is always talking about like emotional intelligence and how to be like more thoughtful about your own emotions”. However, Meabh also admitted that she still did not “really know that much” and was unsure exactly what EI might mean in the context of the module.

To combat this feeling of uncertainty, both students expressed a desire for more information and to feel prepared. Specifically, Sabina explained that she “would like to have more information”. Meabh echoed this and stated that because she has “an anxiety disorder, so always wants to know everything before it happens, just cause, like [she] wants to be prepared for it”. Ultimately, students made the argument that knowledge is power and that “if there was a little bit more of a description [they’d] be more comfortable to go” (Meabh). This echoes the feedback given in focus group C and suggests that the focusing the advertising solely on stress management was a little misleading and that a more rounded explanation would be of benefit to potential participants.

An additional concern students had was the module timing. For example, Meabh stated that she “just [had] so much to do all the time” that it never felt like the right time to take on another activity. Furthermore, both students felt that if they had taken part in the module, this might have taken up valuable free time where they could have been studying or completing other necessary work, leading to a sense that they should “like leave the programme, I need to finish my assignment” (Sabina).

Whereas participants in focus group C, almost unanimously found the online delivery of the module to be “delivered very very well” (Collin), both students in focus group D agreed that the online delivery method acted as a deterrent for them, saying that “uh yeah, I think it make[s] it sometimes more hard” (Sabina). Students in this group were hyperaware of their daily screentime, making the point that they were “mainly just like exhausted from doing things online at that time ... and just didn’t want to spend another minute like on laptops and on screen” (Meabh). Meabh additionally commented that she was concerned about how this lifestyle change might be impacting physical health because of the amount of time she had to “spend sitting down” as a result of “doing college online”. Additionally, Sabina made the argument that an in-person group would not only hold them more accountable but that it would encourage them to “have more commitment” and “push more hard ... [to] interact with people around,” instead of “feeling like ... leave it for another time”.

The final factor in why students chose not to participate in the EI module was the way the module was advertised to them. Meabh explained that the advertisement she received only included simple details such as the “time, date, um, who’d be doing it and then why it was important” (Meabh), suggesting that the advertisement missed a valuable opportunity to clarify any uncertainty students might have had about EI prior to the module. Interestingly, both students stated that “there was nothing wrong with the advertisement” (Meabh) as a whole and that it seemed to be “very clear” (Sabina). However, they remained unsure about the term EI and suggested that having “a little bit more of a description” (Meabh) in the advertisement would have helped make them feel “more comfortable to go” (Meabh). Additionally, as Meabh succinctly noted, the main issue was that “it’s an email format, and we’re college students, so

you know, we tend to ignore them”. It was further suggested then that it may be more beneficial to “put it up as an Instagram post or something on the STU (students’ union)”.

4.4.2.2 Theme Two: Perceived Benefits:

Despite being unsure as to what exactly EI is, both students recognised that EI is a valuable skill and made the point that “you’d always have to do things that would require confidence and understanding of your own emotions” (Meabh) and that the module would be “helpful for life” (Sabina). “Strength” (Sabina) and “confidence” (Meabh) were keywords that were used as students explained how participating in the module might have been of benefit to them, particularly in their own personal development. Both students also recognised that the challenges posed by living through a global pandemic can impact mental health and that during the pandemic, it was harder to connect with their peers as “you don’t have a social life” (Sabina). Based on this, students made the argument that the EI module could have been particularly beneficial in helping to manage the stressors associated with the COVID-19 pandemic, which is interesting given their choice not to attend the module on offer. Specifically, Meabh shared that she believed the EI module would encourage students like herself to appreciate that with respect to many life issues it is important to learn “not to obsess over it cause you can’t control that”. Meabh believed that the module would be the perfect space to take a step back and reflect, recognise potential life stressors, and confidently move forward, knowing she had the tools to overcome the challenges ahead. Meabh also mentioned potential advantages with respect to employability, specifically mentioning the benefit of confidence and self-awareness in situations “such as like a job interview or things like that”. Overall, both students felt the module would give a much-needed boost to their “motivation and confidence” (Meabh) that they felt they needed to “finish college” (Meabh). Again, this is an interesting finding given the ultimate choice that these students made not to participate. Ironically, it seems that although these students were acutely aware that participation in the module would enable them to better manage the stresses and issues associated with the COVID-19 pandemic and college life in general, it was as a consequence of these very pressures that they ultimately decided not to do so. This very much emphasises the necessity of highlighting the value of participating with EI coaching to students and promoting their engagement wherever possible.

GROUP THREE: Workplace Readiness

4.5 Quantitative Findings:

The average scores, standard deviations and standard errors of the mean for pre- and post-scores total EI, the four factors and fifteen facets of the TEIQue are represented in Table 8: Pre and post-test average scores – WPR.

DOMAIN	MEASUREMENT	PRE-TEST	POST-TEST	DOMAIN	MEASUREMENT	PRE-TEST	POST-TEST
Total EI	Average Score	4.89	5.19	Stress management	Average Score	4.19	4.48
	Standard Deviation	.58	.55		Standard Deviation	.90	1.11
	Standard Error	.12	.12		Standard Error	.19	.24
Self esteem	Average Score	4.89	5.43	Emotion management	Average Score	4.54	4.94
	Standard Deviation	1.20	.90		Standard Deviation	.98	.92
	Standard Error	.26	.19		Standard Error	.21	.20
Emotion expression	Average Score	5.05	5.35	Optimism	Average Score	5.27	5.66
	Standard Deviation	1.42	1.15		Standard Deviation	.89	.89
	Standard Error	.30	.25		Standard Error	.19	.19
Motivation	Average Score	4.43	4.91	Relationships	Average Score	5.76	5.77
	Standard Deviation	.78	.67		Standard Deviation	.65	.64
	Standard Error	.17	.14		Standard Error	.14	.14
Emotion regulation	Average Score	4.61	4.89	Adaptability	Average Score	4.36	4.61
	Standard Deviation	.94	.78		Standard Deviation	.99	.67
	Standard Error	.20	.17		Standard Error	.21	.14
Happiness	Average Score	5.70	5.93	Assertiveness	Average Score	4.44	4.67
	Standard Deviation	1.00	.97		Standard Deviation	1.29	1.14
	Standard Error	.21	.21		Standard Error	.28	.24
Empathy	Average Score	5.32	5.51	Wellbeing	Average Score	5.28	5.67
	Standard Deviation	.98	.90		Standard Deviation	.80	.72
	Standard Error	.21	.20		Standard Error	.17	.15
Social awareness	Average Score	4.91	5.43	Self-control	Average Score	4.53	4.73
	Standard Deviation	1.01	.83		Standard Deviation	.66	.83
	Standard Error	.22	.18		Standard Error	.14	.18
Impulse control	Average Score	4.78	4.80	Emotionality	Average Score	5.29	5.52
	Standard Deviation	1.01	1.04		Standard Deviation	.84	.72
	Standard Error	.22	.22		Standard Error	.18	.15
Emotion perception index	Average Score	5.03	5.44	Sociability	Average Score	4.63	5.01
	Standard Deviation	1.17	.99		Standard Deviation	.87	.78
	Standard Error	.25	.21		Standard Error	.18	.17

Table 8: Workplace readiness pre and post-test average scores, standard deviations and standard errors of the mean for total EI and for each factor and facet of the TEIQue (n = 22).

With respect to the TEIQue, dependent t-test were conducted for each of these, and statistically significant results (i.e., 95% confidence intervals, t-value, p-value & effect size) are presented in Table 9: Statistically significant results of t-test – WPR.

Scale	95% C.I.D.		T	Sig. (2 tailed)	Effect Size (Cohen's d)
	Lower	Upper			
Total EI	-.52027	-.08246	-2.863	.009	.49 (small)
Self esteem	-.96787	-1.2213	-2.680	.014	.95 (large)
Motivation	-.86038	-0.09417	-2.591	.017	.88 (large)
Social awareness	-.82006	-.22994	-3.700	.001	.68 (moderate)
Emotion management	-.63117	-.17701	-3.701	.001	.51 (moderate)
Optimism	-.69096	-.09358	-2.731	.013	.67 (moderate)
Wellbeing factor	-.67629	-.10098	-2.810	.010	.65 (moderate)
Sociability factor	-.60965	-.15944	-3.553	.002	.50 (moderate)

Table 9: Statistically significant results of dependent t tests for total EI, four factors and nine facets of the TEIQue (n = 22) for the WPR group.

Effect sizes (Cohen's d) were also conducted. Results revealed that there was no statistically significant difference between pre- and post-test scores for ten of the fifteen facets of EI (emotion expression, emotion regulation, happiness, empathy, impulse control, emotion perception index, stress management, relationships, adaptability and assertiveness) and two of the principal EI factors (self-control and emotionality). Statistically significant differences were found for total EI, two of the principal EI factors (wellbeing and sociability) and five of the fifteen facets of EI (self-esteem, motivation, social awareness, emotion management & optimism).

With respect to the CareerEDGE Employability Profile, a dependent t-test demonstrated that there was a significant difference between the results from the pre-test scores ($M = 151.86$; $SD = 18.73$) and post-test scores ($M = 163.55$; $SD = 19.52$), $t(21df) = -2.88$, $p = .009$. The effect size was moderate ($d_{av} = .61$).

Being that there were several individual comparisons made to assess the four factors and nine facets of the TEIQue, there is a minor risk of Type I error. As such all results should be considered with this potential limitation in mind. To account for this possible error, Bonferroni's corrections were considered as a means to help reduce the chances of obtaining a false-positive result. However, as was discussed above, it was determined that Bonferroni's corrections were not necessary in this scenario.

4.6 Qualitative Findings:

Focus group E represents those students who did participate in the module, while focus group F represents those students who did not. Again, following the outline RTA process, the following three themes were identified within focus group E: (1) reasons for engagement; (2) preparation for the workplace – subtheme: importance of empathy; and (3) encouraging engagement. Next, the following two themes were identified for focus group F: (1) reasons for non-engagement and (2) suggestions for improvement.

4.6.1 Focus Group E:

Focus group E represents a group of final year students ($n = 4$) from TU Dublin who had previously participated in the available WPR modules. This group of students was entirely female; however, represented three distinct academic disciplines. Demographic details for each participant, as well as their chosen pseudonym, are outlined in Table 10.

	<i>Participant 1</i>	<i>Participant 2</i>	<i>Participant 3</i>	<i>Participant 4</i>
<i>Sex</i>	Female	Female	Female	Female
<i>Age</i>	23	21	21	33
<i>Course of Study</i>	Product Design	Marketing	Creative Digital Media	Creative Digital Media
<i>Pseudonym</i>	Shena Kelly	Amelia	Eleanor Stone	Aoife Higgins

Table 10. Participant information for focus group E, students who participated in the WPR module.

4.6.1.1 Theme One: Reasons for Engagement:

Throughout the data students expressed a broad range of reasons for wanting to participate in the WPR modules including one student who stated they were “already into the idea of social-emotional learning and wanted to see if [they] could learn more” (Aoife Higgins) and another who said that she had done “profession practice ... a year or two ago and wanted to just like brush it up again” (Eleanor Stone). However, the most common reason given by students for wanting to engage with the module was the opportunity for career advancement. When prompted about their postgraduate plans, two students stated that prior to the WPR modules they felt unprepared and as if their module left them “flying blind, not knowing what’s out there after graduation” (Shena Kelly). To echo this, while one student commented that TU Dublin does a good job “in comparison to other colleges” (Amelia), two students shared that they felt as though college has not adequately prepared them for life and work after university. Specifically, these students made the argument that in their final year they have “realised that actually [they] don’t have what [they] need” (Aoife Higgins) and that thinking back on their module “you’re kind of being taught the content rather than being taught anything about what you’re gonna do with it once you graduate” (Shena Kelly). This sense of uncertainty appeared to fuel a desire for improvement as three of four students stated that they were interested to participate in the module due to its emphasis on employability and the development of employment related skills. Specifically, students cited interest in the module due to the fact it provided the “opportunity to do something extra and add to [their] CV” (Amelia) which they found particularly appealing. Furthermore, the opportunity for students to receive advice on and practice “interview skills” (Shena Kelly) was another key point of interest for students. Ultimately, students were eager to expand their knowledge of the postgraduate workplace as well as further develop the skills they would need to succeed in such an environment.

4.6.1.2 Theme Two: Preparation for the Workplace:

It is important to consider whether the WPR met student needs and expectations particularly regarding career advancement and skill development. Looking broadly at student feedback, the module was perceived by all students to be a “very beneficial” (Eleanor Stone) addition to their final year of study. Students noted that the module gave the opportunity for personal development, and Aoife Higgins also noted that the module would be “especially [good] for

those with low self-confidence”. Beyond personal growth, throughout the data students also highlighted three specific areas of professional growth which they attributed to their participation in the WRP modules: interview skills, an understanding of the importance of social-emotional skills, and the particular importance of empathy within the workplace.

Considering first the development of interview skills, students discussed their previous interview experience lamenting the nervousness associated with interviews while still recognising their importance by stating that “if you don’t do well in interviews, you won’t get the job” (Shena Kelly). One student, Amelia, also commented on the importance of soft skills in an interview setting, noting that “hard skills, they’re good but they’re not the fundamentals of what gets you the job” because interviews focus more on “if you can communicate how well or how developed your soft skills are”. After completion of the WPR module, all four students shared that having the opportunity to practice their interview skills “was amazing” (Aoife Higgins) and that being “given the privilege of having a practice interview was really good” (Amelia). As Aoife Higgins further explained, the practice interview “gave [her] the space to make mistakes” and learn “exactly where [she’d] gone wrong”. This direct feedback not only provided students with invaluable information about their performance, but it provided them with areas for improvement and advice on “the things that [they] can’t see” (Amelia) about themselves. Beyond feedback following the practice interview, students also commented on the general interview skills they learned through participation in the WPR modules. General feedback from students centred on the fact that they now felt they had a “strategy” (Amelia) for approaching interviews subsequently leading them to feel “more prepared” (Eleanor Stone; Amelia). For example, one student, Shena Kelly, cited the “STAR” (i.e., situation, task, action, result) as a particularly useful interview tool to help provide “evidence, like in a structured way” and one that she shared has “shown up in interview’s [she’s] done since” the completion of the modules. Ultimately, through the skills and information they learnt, students found that they had “a lot more power” (Amelia) in an interview setting so “it’s worth putting in the extra time” (Amelia) to prepare.

In addition to recognising the importance of soft skills within an interview setting, students also recognised the general importance of these soft social-emotional skills within the workplace as a whole. In their discussion of social emotional skills, three students noted that they “knew

employers looked for soft skills” (Shena Kelly) when hiring prior to participating in the module. However, on the flip side of this, one student, Eleanor Stone, also noted that many students “don’t realise how like valuable their soft skills are” and that even “when a lecturer tells you” the importance “you just kind of nod your head” but “don’t really take it in”. After completing the module however and having a chance to “talk to an employer” (Eleanor Stone) it was noted that the importance of these soft skills “just kind of clicked” (Eleanor Stone). Another student, Amelia, noted that while she previously had thought that employers “would value hard skills over soft skills” she learnt through the module that in many cases it was “the soft skills that you already have that’s what [employers] value and want to see”. Building on this, student’s, now with increased understanding of the value and importance of not only developing soft skills but being able to “communicate how well ... developed” (Amelia) they are, identified several soft skills which they felt might be beneficial in the workplace including “being able to work in a team” (Shena Kelly), “communication” (Eleanor Stone; Aoife Higgins), “assertiveness” (Aoife Higgins) and “problem solving” (Aoife Higgins). Ultimately, students recognised the increasing importance of soft skills within the workplace and through the modules were able to work on their development of such skills as well as their ability to communicate effectively which skills they possess.

With respect to the importance of soft skills, the importance of empathy emerged as a distinct sub-theme, with two students highlighting “empathy” (Amelia; Aoife Higgins) as an additional soft skill that may be beneficial in the workplace. When discussing this further, one student, Amelia, commented that “sometimes [empathy] is seen as a bad thing especially like in jobs and there is this view that you should be overly competitive and stomp on everyone else,” however, upon reflection and after completing the module she came to the realisation that “it’s actually good to be empathetic”. To further her argument, Amelia noted the particular importance of empathy within jobs such as sales and marketing arguing that “the ability to put yourself into somebody else’s shoes” is an invaluable skill. Aoife Higgins echoed Amelia’s arguments in favour of empathy stating that “it’s about understanding as well, having compassion for people too”. What these students understood is that every individual’s experience is not the same and that it is important to take this individuality into consideration when interacting with peers or

developing marketing campaigns to better “understand what other people are going through” (Aoife Higgins) and respond in an appropriate way.

4.6.1.3 Theme Three: Encouraging Engagement:

The current iteration of the WPR modules was advertised to students in person when the module instructor “came around to classes and explained what [the module] was” (Shena Kelly). Three students also commented that they received a “QR code” (Shena Kelly; Eleanor Stone; Aoife Higgins) and two students noted that they received “an email” (Aoife Higgins) to follow-up on the initial in-person advertisement. While in person advertisement was confirmed by all four students, this advertisement method was not necessarily perceived as the ideal method of advertisement by all students and there was much discussion around the ways to best encourage student engagement in future modules, with one student explaining that “you just really have to get that buy in” (Aoife Higgins) from students to increase engagement and excitement about a workshop. Continuing their discussion on improving engagement, two students also made the observation that while they found the modules “very valuable” (Amelia) there are a lot of students who wouldn’t attend because they might not see the value of the module and aren’t “in the mindset of we’re actually leaving and we’re actually gonna have to get a job” (Aoife Higgins). To counteract this disinterest in the module and encourage “buy in” (Aoife Higgins) from students it was suggested that the modules focus on being “able to connect with people on an emotional level” (Aoife Higgins) and explain why the modules would be beneficial for them specifically.

As was previously noted, not all students found the in-person advertisement to be the most effective. As such, students had several suggestions for improving advertising the module and subsequently module engagement. Beyond “investing in a bigger marketing campaign” (Aoife Higgins), one of the most strongly presented suggestions was to build excitement for the module by introducing “it in second and third year” (Aoife Higgins) so that students are aware of the upcoming opportunity and its value. Additional advice from students centred around the idea that most individuals “are into short, snackable content” (Aoife Higgins). Aoife Higgins also suggested that the advertisement be made “more visual” and utilise social media platforms like “Tik Tok or Instagram... and just give live updates” about the module to provide student

testimonials and grow excitement about the modules. Finally, one student, Shena Kelly, advised that the advertisement should emphasise that the modules ‘will look good on your CV’.

In addition to concerns about advertising, students noted an issue of timing as a possible reason for low module engagement. Two students noted that “time is limited” (Amelia) and that “if [the module] takes too long a lot of people just won’t go because they think oh, I could be studying with this time” (Amelia). To counter this, three students noted that it would be best to “make [the modules] as easy to attend as possible” (Amelia). Specifically, to address issues of timing, it was suggested by one student, Shena Kelly, that the modules take place “during lunch” or “reading week” when students are “actually free”. Alternatively, Shena Kelly, suggested that the module be run across “less days and just do lengthier blocks” or “across two weekends” so that the time commitment is condensed. However, while this condensation of the module might be appealing to some, there were other students who noted that they “wouldn’t’ve gone if it was on the weekend” (Amelia) as it would not have suited their personal schedule. Ultimately, the consensus in relation to timing was to “condense” (Amelia) the module down in either length or in days to accommodate students’ busy schedules.

4.6.2 Focus Group F:

Focus group F represents a group of final year students ($n = 3$) from TU Dublin who did not participate in the available WPR modules. This group of students included one male and two female students from two different academic disciplines. Demographic details for each participant, as well as their chosen pseudonym, are outlined in Table 11.

	<i>Participant 1</i>	<i>Participant 2</i>	<i>Participant 3</i>
<i>Sex</i>	Male	Female	Female
<i>Age</i>	29	23	23
<i>Course of Study</i>	Automation Engineering	International Business & Languages	International Business & Languages
<i>Pseudonym</i>	Ruben	Trixie	Olive

Table 11. Participant information for focus group F, students who did not participated in the WPR module.

4.6.2.1 Theme One: Reasons for Non-engagement:

In contrast to those students who had participated in the WPR modules, students in focus group F were much less specific when asked about their interest in the modules, offering vague reasons and simply suggesting that they “like to achieve more experience in all the fields possible” (Trixie) or that they were “just curious on the new knowledge” (Trixie). What is even more interesting to note however, is that while these students expressed some general interest in the module, as discussion progressed, they appeared unable to communicate the value of the module at all. There was one student, Trixie, who did comment that she was interested in the module to gain understanding about her “emotions better” as well as a way to “understand what employers want” however, beyond this, students were limited in their ability to draw connections between the module and its potential positive impact on their ability to seek out and secure employment after graduation. Even further, and again opposite to focus group E, students in focus group F appeared to be very limited in their understanding of soft skills as a whole and even less so when asked about the perceived importance of soft skills in the workplace. When speaking about the relative importance of social-emotional skills all three students used non-specific language such as “they are very important” (Trixie) or “they are very valuable for an employer” (Trixie) and appeared unable to verbalise any specific skills other than those that had been already given as an example by the researcher (e.g., “communication” (Trixie), the ability to “work in a team” (Ruben), and “time management” (Trixie)). One potential reason for this inability to distinguish soft skills and articulate their importance that was highlighted by two students was that “there is no course to teach [students] practical things” (Trixie) as they are taught technical “knowledge” (Trixie) about their chosen subjects with social-emotional skills seemingly taking a backseat. Additionally, all three students at some point also expressed some level of uncertainty in relationship to their postgraduate plans, with one student saying, “I myself don’t know what job I can get to do with my degree” (Olive), which could have also impacted on students’ inability to articulate potential benefits of the module.

Beyond students lack of awareness of the module and its importance for both their academic and postgraduate development, all three students also cited timing as a barrier to attendance. Specifically, students explained that “first semester was really busy” (Ruben) and they simply “couldn’t join anything, anything at all” (Ruben). The issue of time was exacerbated by the fact

that students were in “college Monday to Friday from nine to five, every day” (Ruben) as well as “working almost full-time” (Trixie). Managing these very busy schedules, particularly in their first semester, meant that students felt as though “everything’s kind of wild” (Olive) and that “it was impossible” (Ruben) to add another commitment on top of an already full workload, even if they might have had an interest in the module and its potential benefits.

4.6.2.2 Theme Two: Suggestions for Improvement:

As a whole student feedback focused on three central areas, timing of the module, the module advertisement, and finally its delivery method.

Looking first to the timing of the module, we already heard from students that they were largely unable to attend the module due to the large time commitment associated with attendance and the fact that they were “really busy” (Ruben). Bearing this in mind, two students suggested that future iterations of the module focus on improving the timing of the module so that students would attend during a time when they were not so “crazy mad busy” (Ruben). One suggestion made by Olive stressed the importance of making the module more accessible and suggested that the module be delivered at a different time in the academic year either “late in semester one” or in second semester after students have gotten more of a chance to settle into their coursework and get back “into the flow” of daily college life. In future, being mindful of student’s busy schedules will need to be an important element of planning and delivery of the WPR modules.

Considering the advertisement of the module, while one student did acknowledge that he had “heard about it” (Ruben) after a “lecturer came to talk” (Ruben) to his class, the other two students noted that had not heard of the WPR modules prior to participating in the focus group but “wish [they] had heard about it” (Olive). With this in mind, and as with group A, students in this group had several suggestions for the advertisement of the module which focused on student engagement and getting students not only interested but ensuring that all students were aware of it and thus had “same opportunity” (Trixie). Specific suggestions included advertisement through “class reps” (Olive), in course specific “group chats” (Olive), and the use of on-campus advertising and a creative “slogan” (Trixie).

While the module was not delivered during a period of national lockdown in Ireland, the COVID-19 pandemic has drastically changed how students and educators interact, with distance learning becoming more predominant in third level settings. With this in mind, while one student, Olive, stated that the delivery method, online or in person, “wouldn’t’ve affected [her] choice” whether to attend, there was still discussion amongst students regarding the benefits and limitations of both virtual and in person delivery of the WPR modules. Amongst these students, there appeared to be a divided preference as two students believed the module “would have been better online” (Trixie) and that it would be “much easier online” (Ruben). Conversely, Olive, noted that she does not “really like online stuff” as she finds it difficult to “engage with it” and believes that it is “bad for ... mental health”. In addition to discussion of delivery method, students also commented on the possibility of integrating the module into students’ traditional curriculum with one student commenting that they “think it should be there already” (Olive) and “don’t know why it’s not already imbedded in [the] curriculum” (Olive). Trixie echoed this by noting that “everybody should have the same opportunity” and that “all the courses should have it” or something similar that helps prepare students for “the real world”.

Ultimately, students concluded that an emphasis be placed on accessibility and engagement as a means to encourage participation in the WPR modules. Furthermore, students emphasised the importance of equal opportunity for all students and suggested that the modules be tailored to fit within the demanding schedules of final years students and be advertised sufficiently so that all students who wish to, might avail of their potential benefits.

CHAPTER FIVE:

Discussion

5.1 Overview:

The current study sought to assess the impact and efficacy of mindfulness, EI and WPR modules for Irish undergraduate students. Utilising a mixed method design, the study included the completion of pre- and post-tests assessment (the PSS, Cohen et al., 1983; the BRS, Smith et al., 2008; the TEIQue, Petrides, 2009; and the CareerEDGE, Dacre Pool et al., 2014) and a series of six semi-structured focus groups with students who either participated or who did not participate in the available modules.

In line with findings of previous mindfulness research, the results of the current study support the idea that participation in a brief mindfulness intervention can be beneficial in the reduction of stress, increased awareness and increased levels of resilience (Johnson et al, 2019; Lindsay et al., 2019; Lindsay et al., 2018; Parsons et al., 2022; Yuan, 2020). These findings also support previous research which found MBIs to be particularly beneficial for university students (Dawson et al., 2020). Furthermore, considering both the EI and the WPR modules, notwithstanding the fact that there were some areas where these modules did not lead to improved EI scores for students, the findings from this study align with previous studies which demonstrate that EI coaching can be beneficial and lead to increases in overall levels of EI (Boyatzis & Saaticioglu, 2008; Gilar-Corbi et al., 2018; Mayer et al., 1999; Ruiz- Aranda et al., 2012; Slaski & Cartwright, 2003). Finally, with regard to the WPR module, while, as previously stated, the concept of WPR training in higher education is relatively new, the current study supports preliminary research from the University of Central Oklahoma which has shown that student involvement in the transformative learning process not only empowers students to effectively assess their own strengths and weaknesses, but also allows students space for growth so that they feel confident to effectively communicate with employers as they move into the workplace (Farrell, 2019).

Moving forward, each of the of the principal themes which were previously highlighted by students will be further discussed and integrated with findings from previous research.

Furthermore, recommendations arising from this study will be made to help ensure that students SEL is optimally promoted.

5.2 Delivery Method:

With regard to delivery of each individual module, the study faced many challenges as a result of the COVID-19 pandemic which necessitated a shift to virtual delivery in many cases, most notably with respect to the full online delivery of the mindfulness and EI modules. That said, findings from this study support the use of virtual delivery methods in both cases and suggest that online coaching can be an effective means of delivery, although further research is required to confirm this. Regarding mindfulness, while the current study was not particularly novel in its utilisation of a virtual delivery platform, the study did expand on existing research on the topic and support the use of videoconferencing as a viable method of mindfulness module delivery. Specifically, this finding supports research conducted by Krägeloh et al. (2018) and Lim et al. (2021) who both found MBIs delivered via videoconferencing platforms to be just as effective as traditional face-to-face delivery methods. On the other hand, regarding EI, a thorough search did not find any previous studies that had specifically explored online delivery as a standalone method of EI coaching in third level education settings. However, a study conducted by Gilar-Corbí et al. (2018) introduced the possibility of online training through the use of a multimethodological approach where they implemented the used of blended EI coaching, ultimately combining online and classroom learning. These exploratory findings do align with aspects of the study conducted by Gilar-Corbí et al. (2018), which ultimately found benefits of online EI coaching when used in a hybrid setting.

Taken collectively, these results are particularly promising considering the recent push towards strictly digital forms of learning, education and connection that have arisen as a result of the COVID-19 pandemic and the need for students, teachers, employers and society as a whole to rapidly adjust to new forms of online communication (Saeed et al., 2020). Furthermore, because of recent technological advancements and what some scholars are referring to as the ‘fourth industrial revolution’ and as a response to the COVID-19 pandemic there has been a push towards strictly virtual forms of media, connection, and information sharing (Saeed et al., 2020; Schwab, 2017). Within educational contexts, educators have had to make the challenging transition to distance learning, finding new ways to engage with students in a meaningful manner not only with respect to teaching and learning but also in terms of pastoral care and emotional support (Ortiz-Rodríguez et al., 2005). Particularly given the continuing constraints arising from

COVID-19 the results of this study are welcome in that they not only provide continued support for the efficacy of online mindfulness training delivered via videoconferencing platforms, but they also demonstrate tentative support for the efficacy of online EI coaching as a social and emotional support for students and suggest that such coaching may potentially positively impact academic attainment, although further confirmatory research is required in this regard. That said, it is important to recognise that whilst the COVID-19 pandemic necessitated rapid and wide-ranging changes to be made to teaching and learning practises, arguably many such changes were trends that had already been established and the COVID-19 pandemic simply hastened their adoption. For example, prior to the pandemic, as per above, there was already a move towards increased use of online learning and increased use of technology in learning environments. At the very least, these changes have stimulated reflection and debate and it is likely that blended learning and the use of online engagement will increase even when the COVID-19 pandemic hopefully ends. Therefore, the findings from this study extend beyond the impact of the ongoing pandemic.

An additional area to consider regarding the use of videoconferencing for the delivery of the mindfulness and EI modules is students' attitudes and opinions regarding this delivery method. This is particularly relevant considering that a particularly novel element of this study was the online delivery of EI coaching to students. Traditionally, education and training has involved face-to-face and in person instruction and as such, it was anticipated that moving forward this would be the preference for students once the restrictions imposed by the COVID-19 pandemic hopefully come to an end. However, students' views in this regard were nuanced and there were mixed opinions with respect to virtual versus in person delivery. With regard to the EI module, participants commented that the online nature of the module made it convenient and specifically highlighted that they felt they had been provided with a space that was "safe" (Robert; Shalz; Brittany). Similarly, regarding the mindfulness module, the consensus amongst participating students was that the "online delivery was good" (Karla) and felt "safer" (Molly Shaw) than a traditional classroom setting; although, these students did not feel changing the delivery of the module to an in-person method would have differed much. Conversely, non-participating students from all three cohorts, were much more vocal about their desire for the module to be

moved to in-person delivery as they believed it would increase their opportunity to interact with their peers and form meaningful connections.

Considering the dramatic shift in recent years towards online communication, the findings from this study not only support the assertion that we are transitioning towards a new normal where students and educators are more comfortable engaging in online learning and increasingly opt for this medium over traditional face-to-face instruction, but that this transition was undoubtedly accelerated by the coronavirus pandemic. As a result of the pandemic lockdowns and restrictions were put in place globally, disrupting traditional education and meaning that more than 1.2 billion students in 186 countries were affected by school closures globally (Li & Lalani, 2020). This rapid shift towards distance learning has led to a surge in education technology usage (Li & Lalani, 2020). Beyond this, there has been rapid investment in education technology, and it has been predicted that by 2025 the Online Education Market will reach US\$ 350 Billion (Research and Markets, 2019). While online learning provides increased flexibility and comfort for many, there is still much to learn about this platform. For example, how might teaching in an online environment impact staff motivation or the necessity for specific training and development? Furthermore, how might long-term online learning impact on the effective development of social and emotional skills for students? While this study has certainly shown that these skills can be taught effectively online, further comparative research would be needed to determine if an in person or online setting is best for such skills development.

Considering the above, there are two possible solutions to address concerns raised by students whilst maintaining the perceived benefits of online delivery. The first is to offer a blended delivery, such that an initial module takes place in-person followed by a number of online modules and another final in-person concluding module. This would fall in line with the research completed by Gilar-Corbí et al. (2018) and would be an opportunity to expand on their initial findings and further explore the efficacy of hybrid teaching methods, particularly in relation to the EI module. Alternatively, and a likely simpler option, would be to allow students, when registering for the mindfulness, EI and WPR modules, to select a delivery preference, either virtual or face-to-face. This would not only allow the opportunity to facilitate a wider range of student needs and preferences but would allow for the possibility of direct comparison between

virtual and in-person delivery of each module both in efficacy and student perception. Further research is of course required and in particular, the efficacy of online versus face-to-face delivery could be compared.

5.3 Advertisement:

Considering the positive impact that each module had individually, it was regrettable that uptake was poor and so few students engaged with the available modules. Considering first the mindfulness and EI modules specifically, both participants and non-participants remarked that while the content of the advertisement seemed to be sufficient, there were some issues with respect to the clarity of the messages being communicated and students were given in some instances a false impression of what the modules would entail (e.g., that the EI module pertained only to stress management). Some students may also be unfamiliar with the terms ‘mindfulness’ and ‘emotional intelligence’, therefore providing a definition of this term would be beneficial. This unfamiliarity was further highlighted by two students from the mindfulness group who noted that “mindfulness is everywhere now” (Karla) and it might be seen as a “buzz word” (Eliza Walsh) by some, making the true definition or meaning of mindfulness difficult to distinguish. Particularly regarding mindfulness, although the practices of mindfulness and meditation have a long-standing history, they have become increasingly popular from the 1990s onward (Misitzis, 2020; Nisbet, 2017). More recently, mindfulness has gained popularity colloquially, becoming a topic of conversation across several social media platforms and showing increased prevalence in schools and workplaces worldwide (Misitzis, 2020). As a result of this rapid increase in popularity, it is possible that the purpose of mindfulness has become muddled, making it difficult for individuals to distinguish the true meaning of mindfulness and more importantly in this case, imagine what a mindfulness module might involve. Similarly, EI has only gained popularity within the academic community relatively recently however, there has yet to be consensus about a definition of EI which may lead to some of the confusion colloquially (Sharma, 2008). To counteract any potential confusion and encourage student engagement, it is vital to ensure clarity in the initial advertisement and provide students with not only a brief definition of mindfulness or EI but an outline of what will be covered in these modules. Outlining the ways in which the modules might help students improve their self-awareness, self-regulation, social skills, empathy and motivation may also be beneficial in addressing issues of clarity.

In addition to the issues of clarity and low engagement, students also identified issues with the means of advertisement. This was particularly true for the mindfulness and EI groups where the module advertisement relied heavily on communication via email. Since its development in the early 1970s email has rapidly grown in popularity and is now the primary form of communication amongst businesses and within the higher education sector (Turville, 2019). However, students were not shy to point out that they get “bombarded with emails” (Eliza Walsh) and often have “hundreds of emails” (Brittany) in their university email account each week something which can easily become overwhelming and likely lead to information overload or important messages being missed. Bearing in mind the quantity of emails students receive, it is important to consider the ways students choose to communicate with each other and how this can inform adaptations to the advertisement of the modules moving forward. While email may be the preferred method of communication for many administrators and educators, research has confirmed that in recent years that communication preferences of teenagers and young adults have changed particularly due to the availability of more expansive social media platforms such as Instagram and Facebook (Subramanian, 2017; Vidhya and Kalaiselvi, 2020). Even further, research specifically considering the communication preferences of university distance learners echoes this and found that, when given a choice, students chose email only 19% of the time compared to other communication options (Schutte and Andrianatos, 2018). Whilst email remains an effective means of ensuring all students receive a given message, it is recommended that a primary advertisement should be supplemented by alternative methods as a means to not only ensure students are aware of the available modules but to hopefully encourage engagement.

Taken collectively, student feedback regarding the advertisement focused primarily on clarity and delivery. However, a final area of concern which was particularly highlighted by students in the WPR group was the issue of student engagement. Particularly, it was noted that to increase student engagement you must encourage “buy in” (Aoife Higgins) from students while also trying “to connect with people on an emotional level” (Aoife Higgins). This perceived need to find a hook and draw students in to increase module engagement aligns with current research on student engagement which suggests that students in higher education often exhibit low engagement in extracurricular activities due to perceived limitations which these activities may

impose (Bathmaker, Ingram & Waller, 2013; Dickinson, Griffiths & Bredice, 2021; Stuart, Lido, Morgan, Solomon & May, 2011). Particularly, research has shown that in recent years, students in higher education are spending more time in paid employment and subsequently less time engaging with extracurricular activities (Stuart et al., 2011). Even further, in addition to students lacking confidence to participate, research on student engagement found low student engagement in extracurricular activities to often be the result of students' perception that these activities would adversely affect their academic study by taking away time and increasing stress (Bathmaker et al., 2013; Dickinson et al., 2021). To counteract this disinterest in extracurriculars, moving forward, it is suggested that alternative means to communicate with students are considered (e.g., on campus lectures, social media advertisement, or posters). Furthermore, to make the advertisement more accessible it is suggested that more visual aids, videos, and creative "slogans" (Trixie) be utilised to grab students' attention and encourage participation. It may also be beneficial to include testimonials in any advertisements from students who had previously participated, as they could provide a unique perspective on the module that researchers and developers might not be able to. In addition to reducing the possibility for confusion this may also encourage students to seek further information prior to engaging with each module. Furthermore, these testimonials, provide the opportunity for students to create an emotional connection to the modules which might further promote participation.

5.4 Timing:

With respect to timing and duration of the modules, the feedback was mixed amongst students. While some students thought the timing of their module was "brilliant" (Brittany), others expressed that they wished their module "went on longer" (Jude). Conversely, non-participating students were very vocal stating that they could not attend simply because of "time" (Ruben) and the fact that they were too "busy" (Patrick).

Considering first the desire for a lengthier module, students who participated in the mindfulness module explained that they felt they were benefiting from the module and expressed a desire to engage with the mindfulness module over a more extended period. It was also shared by one student that it took time to properly settle into the module so having an extended module would allow students time to fine their "stride" (Eliza Walsh) and give more time to "make a habit of it"

(Eliza Walsh). This feedback was echoed by students who participated in the EI module who explained that they were left with a sense of wanting more and with an overwhelming feeling of “what do we do now?” (Brittany). Furthermore, these students, like those in the mindfulness group, recognised the importance of having a “routine” (Robert) which relates to the concept of ‘use it or lose it’ such that in order to maintain and develop a new skill, one must actively and continuously engage in the practice of the skill in question (McDonough, 2016). Student feedback and recognition of the importance of time as a factor in habit formation echoes the results of recent research which highlight the importance of repetition and reinforcement during social-emotional and psychological learning (Fiorella, 2020; Harvey et al., 2021). These are particularly important findings as there are both practical and ethical concerns to be considered. Arguably from an ethical standpoint, to provide support of any kind to students only to have them feel a sense of loss or, at worst, a sense of abandonment, once that support is withdrawn, is highly problematic. This is certainly something that needs to be addressed, particularly with respect to the EI module, given the feedback from students in that regard.

To address these ethical concerns in addition to student concerns regarding falling out of practice and providing increased contact time with the modules, there are a series of proposed solutions specific to each module to address timing issues. Firstly, with respect to the mindfulness module, the module could simply be extended from five-weeks to eight-weeks as was suggested by three students. A second option for the mindfulness module is that the module could be kept at five-weeks, however, session length could be extended from one-hour to ninety minutes to allow more time for students to settle into the module at the beginning and to ask questions at the end of each session. Finally, it is important to keep in mind that while MBIs have gained popularity, there is no standardisation for the length of time a module should run. As such, further research is suggested to determine an optimal module length. Secondly, with regard to the EI, like solutions for the mindfulness module, the module could be extended from five-weeks to six-weeks, with the sixth week of the module focusing on future planning and what students might do on their own to maintain the skills they learned during the previous modules. Although this was touched upon in the final week of this iteration of the module, qualitative data suggests it may have been rushed and could be afforded greater emphasis. This would not only allow students to ask any final questions they might have about EI, but as students approach the end of

the module it would frame EI as a life skill and highlight the importance of taking steps to promote positive mental health on an ongoing basis as part of a healthy lifestyle. Alternatively, an option would be to provide a follow-up session for students several weeks after the completion of the initial module to check-in, ensure they have continued to use the skills they developed and to answer any questions that students might have about EI at that time. These options are not mutually exclusive and could be employed concurrently. Finally, while timing was not as large of a concern for students who participated in the WPR module, students in the cohort emphasised the importance of making the module “as easy to attend as possible” (Amelia). With this in mind it is recommended that future iterations of the WPR module emphasise accessibility by ensuring that the module is run during a period of time when students are “actually free” (Shena Kelly) (e.g., lunch, evenings or weekends) or over a condensed period of time (e.g., longer sessions over fewer days). Alternatively, it is suggested that instead of being offered at the start of semester one of final year, the WPR module instead be offered toward the end of the first semester or in second semester “after students have gotten more of a chance to settle” (Olive) into their busy schedules.

Related to this, students who did not participate in the available modules were clear in stating that one of the main reasons they chose not to participate was lack of time. In stark contrast to participating students who were eager to engage with each module option, non-participating students shared that as students they “need time to prioritise” (Peter) their time to ensure they are able to complete all mandatory module work and assessments to a high standard. This sentiment was echoed by non-participating students from the EI and WPR groups who noted that they “just [had] so much to do all the time” (Meabh) and that “everything’s kind of wild” (Olive) making “it ... impossible” (Ruben) to add another commitment on top of an already full workload. Students across all groups, and particularly the non-participating students, expressed a sense of being torn between college work and the available modules as they were interested in the modules and their potential benefits but were constantly pulled back to the obligations of college lectures or work. The sense of feeling overwhelmed by responsibility, with little to no free time is one that is common amongst university students and research has shown time management ability as a key component in perceived stress levels amongst students at the third level (Khatib, 2014; Misra & McKean, 2000). To address this issue and make the module not only more

accessible to students, but potentially more enticing, it is suggested that the timing of the module be adjusted to accommodate students already very busy schedules. While this iteration of the module did provide some flexibility in that students were able to choose a time from a list that they felt would fit into their schedules, providing a choice to take the module in the evening or even on weekends might increase the likelihood that students would be able to attend. An additional solution could be to convert some elements of the module to a self-paced online module, following a model used by Cavanagh et al. (2018) for mindfulness intervention for example, and combining this with taught lessons that are shorter in length so that it may be easier for students to attend. While this solution does contradict suggestions to lengthen the module, by providing students with self-taught modules in addition to exercises they are asked to complete outside of each module, students would have as much or more time to engage with each module during the week and would have the bonus of completing this work at their own pace.

5.5 Employability:

Finally, considering the current studies emphasis on graduate employability it is important to consider how each module related to the elements of employment characteristics. As a whole, students commented that the modules addressed issues of stress management as well as helping students to feel more confident and prepared. Particularly, students who participated in the EI module commented that “every, em, student should do this as a part of their university course” (Jemima) as it can be particularly helpful for yourself and for “your future work” (Jemima). Students in the WPR echoed this and highlighted growth of their employability skills as one of the key reasons they chose to participate specifically highlighting the WPR modules emphasis on CV review and “interview skills” (Shena Kelly). With respect specifically to the WPR module, students who participated in the module noted that they left the module feeling empowered, self-assured and with a new appreciation for the importance of soft skills within the workplace. These findings align with current research which have shown that adapting higher education to focus on teaching students how to navigate an increasingly complex labour market rather than strictly teaching technical skills can not only lead to increased confidence as students leave higher education but increase students’ ability to communicate about their soft skills as well as adapt to a dynamic and ever-changing work environment (Bennett, 2018).

In stark contrast to this, students who did not participate in the WPR module appeared unable to communicate the value of the module or the importance of soft skills at all. This general unawareness further highlights the potential of WPR module within a higher education setting as the inability of students in the non-participation group to communicate the importance of soft skills within the workplace shows a clear gap between students' current knowledge of and employers desire for such skills within their employees (Jameson et al., 2016). That said, as students did note, education, and particularly higher education, has historically largely focused on students' technical abilities and "there is no course to teach [students] practical things" (Trixie). In fact, it is only recently that universities have started to transition to consider the integration of transformative learning into the student experience (e.g., STAR, University of Aberdeen, n.d.; STLR, Farrell, 2019). It is recommended that an emphasis be placed on the advertisement of all social-emotional supports for students so that students are made aware of what opportunities are available to them while on campus. Further, it is recommended that the possible integration of the mindfulness, EI and WPR modules into student curriculum be further explored.

To further address students desire for practical learning, it is recommended that the CareerEDGE employability model be implemented during students' final year of study. The CareerEDGE model provides a unique, reflective, space for students to develop graduate employability characteristics. Furthermore, while other models of employability have alluded to the importance of EI in the workplace, the CareerEDGE model was the first to truly stress the importance of EI as an essential factor in graduate employability (Dacre Pool, Gurbutt & Houston, 2019; Fugate, Kinicki & Ashforth, 2004; Knight & Yorke, 2004). Research on graduate employability has shown, that the best chance students have at reaching their full potential and being able to develop necessary hard and soft skills is by having access to activities and modules within the university that allow them to not only gain experience but also to think critically about what experience they already have. As we have already seen, incorporation of EI is an essential factor in WPR and success in later life as it can be linked with, higher levels of academic attainment, increased social-emotional skills and has even been shown to help students during job interviews (Boyatzis & Saatcioglu, 2008; Jones et al., 2015; Parker et al., 2004; Vaillant & Davis, 2010; Nelis et al., 2011). The current research further supports the implementation of the CareerEDGE

model, as students' scores on the EDP increased at a significant level after having completed the WPR module. Ultimately, by either incorporating the CareerEDGE model into the existing academic framework or by incorporating it via an employability specific module like the WPR module that was offered in this study, universities would not only be answering students desire to learn "practical things" (Trixie) but would provide students a reflexive space to evaluate what they have learnt during university and prepare to implement this knowledge into practice.

5.6 Summary:

Taken collectively, results of this study continue to support existing research and suggest that MBI, EI, and WPR modules can effectively enable students to benefit personally, academically and professionally. Furthermore, results show continued support for the effective delivery of MBI via online video conferencing while also providing preliminary results which indicate that an EI module can also be effectively delivered to undergraduate students virtually. Although the mindfulness and EI modules, in this instance, were delivered online as a response to the COVID-19 pandemic and it had been anticipated that future iterations would revert to in-person delivery, feedback from students who experienced virtual delivery was generally positive and there were in fact some specific benefits that were highlighted. Further research is recommended to explore optimal delivery methods as well as optimal timing of the module so that the module is best structured to fit student's needs. With respect specifically to the WPR module, results of this study also expand on current research and support the benefits of a WPR module in the development of graduate employability characteristics. Ultimately, with appropriate advertisement and integration, the mindfulness, EI and WPR modules which have been offered to students show promising potential as social-emotional supports for students not only transitioning into higher education but transitioning into the workplace as well. As this was a preliminary and exploratory study, further research is recommended to determine the best means of advertisement and delivery as well as the further impact of the project at a larger scale.

5.7 Summary of Recommendations:

Following feedback from students and the results of the study as a whole, a summary of recommendations is provided below which were discussed above. With regard to delivery method, the following two recommendations have been made:

- Offer a blended, or hybrid delivery, of each module (e.g., the initial module takes place in-person, followed by a number of virtual sessions and finishing with another in-person session).
- Provide students the opportunity to select a preference for either virtual or face-to-face when registering for the mindfulness, EI and WPR module and run both on campus and distance versions of each module concurrently.

Regarding advertisement of each module, four recommendations were made as follows:

- Ensure the clarity of the initial advertisement by providing students with a brief definition of mindfulness, EI or WPR, an outline of what will be covered in the module and the relevance or importance of each module for student life.
- Similarly, to further address any issue of clarity, outlining the ways in which each module might help students improve their self-awareness, self-regulation, stress management, empathy and motivation, to name a few, may also be beneficial.
- Regarding means of advertising, it is recommended that a primary advertisement (e.g., email) be supplemented by alternative methods (e.g., in-person advertisement in lectures, advertisement through campus social media or poster advertisement on campus) to ensure that all students are aware of available modules and to encourage engagement.
- It may be beneficial to include testimonials from students who had previously participated in each module in any advertisements. These could provide a unique perspective on the module and provide the opportunity for emotional connection.

With respect to timing, and considering both individual modules as well as the project as a whole, the following set of recommendations were made:

- With respect to the mindfulness module, a possible solution is to extend the module from five-weeks to eight-weeks, as was suggested by three students, as a means to increase the amount of time students have to engage with the module. Alternatively, the module could be kept at five-weeks, however, session-length could be extended from one-hour to ninety minutes to allow more time for students to settle into the module at the beginning and to ask questions at the end of each session.

- With respect to the EI module, a possible solution to address students concerns of “what do we do now?” (Brittany) is to extend the module from five-weeks to six-weeks, with the sixth week of the module focusing on future planning and what students might do on their own to maintain the skills they have learned during the previous modules. Alternatively, a follow-up session for students could be held several weeks after the completion of the initial module to check-in with students and answer any questions they might have regarding EI at that time. It is important to note that these recommendations are not mutually exclusive and could of module be employed concurrently.
- Finally, with respect to the WPR module the emphasis was on accessibility, and it is recommended that future iterations of the module run during a period when students are “actually free” (Shena Kelly) (e.g., lunch, evenings or weekends) or over a condensed period of time (e.g., longer sessions over fewer days). Alternatively, it is suggested that instead of being offered at the start of semester one of final year, the WPR module instead be offered toward the end of the first semester or in second semester.
- Alternative suggestions with regard to timing which address the issue of accessibility and could be employed across all three modules include providing students with an option to take the module in the evening or on a weekend or converting some elements of the module to a self-paced online module.

Finally, with respect to employability,

- It is recommended that an emphasis be placed on advertisement of all modules, so all students are aware of potential social-emotional supports, taking into consideration the above advertisement related recommendations.
- It is recommended that further consideration for the possible integration of the mindfulness, EI and WPR modules into student curriculum be explored.
- It is recommended that the CareerEDGE model be incorporated during students’ final year of study. This could be done by either incorporating the model into the existing curriculum or by offering a separate employability specific model like the WPR module that was offered in this study.

5.8 Limitations:

Regrettably, the most notable limitation to conducting the current study was the difficulty with participant recruitment and as a result, the study's small sample size, an issue which arose largely as a consequence of the COVID-19 pandemic and secondly due to students' busy schedules. While the study utilised convenience sampling and the modules were available to all students at TU Dublin within the appropriate academic cohorts (i.e., any first-year student could register for the mindfulness module, any second year for EI, and any final year for WPR module), recruitment for each module was unfortunately lower than anticipated which and although this was largely due to the COVID-19 pandemic, it was also likely impacted by ineffective advertising. An additional area of concern regarding the limited sample size for each group is the possibility for generalisation. Finally, since students who did not complete each module also did not complete the associated pre-assessment (i.e., the PSS, BRS, TEIQue and the CareerEDGE), there was not a control group by which to directly compare the post-test participant scores with. If similar research is conducted in the future, it is recommended that a control group be utilised. As such, it is not possible to directly attribute any change in these assessments to the modules alone. Finally, it is important to note that given the number of t-tests conducted there is an inflated risk that type 1 error may have occurred. Ultimately, while these exploratory findings are promising, given the study's small sample size and limited population demographics, further research is recommended to assess the generalisability of the results to a wider and more diverse population.

5.9 Conclusion:

Extensive research has demonstrated that SEL can lead to improvements in stress management and enhanced social and emotional competencies. However, few studies have specifically assessed the provision of SEL modules to students in third level education, and even fewer have assessed the provision of online training. All this considered and given the positive results of the current study with a small sample size, further confirmatory research is recommended, in particular by employing an expanded sample in terms of both size and diversity. Based on the findings from the current study, new advertising tactics are recommended which implement methods of communication more commonly utilised by students today. Additionally, it is recommended that developers explore the possibility of a hybrid delivery model, and the

importance of follow up engagement with participants has been highlighted. Finally, it is recommended that developers consider the possibility for integration of the SEL modules into the existing academic framework. Ultimately, this study has highlighted the ways in which course delivery has rapidly changed over the course of the COVID-19 pandemic, and even with limited sample size, the results from this study are very promising and merit further investigation.

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Appendix A. Sample EI Profile

Emotional Intelligence Profile & Feedback

Overview: This report will provide you with a summary of your emotional intelligence (EI) profile and some feedback as to how best to capitalise on your emotional strengths and make improvements where limitations have been highlighted. This report is intended to be used in conjunction with attendance at EI workshops and engagement with your EI coach. If you have any questions about any of the information that is contained in this report, please feel free to speak with your EI coach. If any of the information contained in this report causes personal distress, please contact one of your college counsellors, who provide a completely free and confidential counselling service.

Emotional Intelligence: There are two primary facets of emotional intelligence; (1) recognising and dealing healthily with our own emotions and (2) recognising and dealing healthily with the emotions of others. However, there are also specific skills that emotional intelligence entails, as follows:

Self-esteem	The belief that we are successful and self-confident
Emotion expression	Effectively communicating our feelings to others
Self-motivation	Being driven and unlikely to give up in the face of adversity
Emotion regulation	The capacity to control our emotions
Trait happiness	Being cheerful and satisfied with our lives
Trait empathy	The ability to take someone else's perspective
Social awareness	Being accomplished networkers with excellent social skills
Impulse control	Being able to be reflective and not give in to basic urges
Emotion perception	Correctly labelling own emotions and those of others
Stress management	The capacity to withstanding pressure and regulate stress
Emotion management	The ability to effectively deal with other people's feelings
Trait optimism	Being confident and likely to "look on the bright side" of life
Relationships	The capacity to have fulfilling personal relationships
Adaptability	Being able to be flexible and willing to adapt to new conditions
Assertiveness	Being forthright, frank and willing to stand up for one's rights

Below, you will find your personalised EI profile. This will include scores for each of the aspects of EI that are listed above as well as your overall level of EI. The range for all scores is between 1 and 7 with 1 being the minimum possible score and 7 being the maximum possible score that you can achieve for any given category. The average score for each category is 3.5 (NOTE: this is a 'theoretical' average, as scores can vary very slightly according to age, gender and cultural background). Lower scores indicate areas that you are advised to work towards improving and higher scores areas of strength.

Important note: We all have both strengths and limitations. This is simply what it means to be human. Therefore, everyone's profile will contain higher and lower scores. Most importantly, please remember

that if you have one or more scores that are low or that you are concerned about, you can work to improve them. This is what the coaching process is all about. As per above, if you feel the need to, you can also contact the college counsellor in complete confidence about this, or indeed any other matter that is troubling you.

Why should I work towards improving my social and emotional skills? Many research studies have demonstrated that individuals with higher levels of EI experience a wide range of benefits. Specific to educational contexts, research has demonstrated that:

- Students with higher levels of EI are less likely to drop out of college (Parker et al. 2006; Carthy et al. 2013) and
- Students with higher levels of EI tend to achieve higher grades (Darshn et al. 2015; Newsome, Day and Catano 2000).

Most importantly, a large number of research studies have demonstrated that, at least to some extent, EI is skill-based (Boyatzis and Saatchioglou 2008; Carthy et al. 2013). What this means is that just as with any other skills such as playing a sport, or a musical instrument, *with practise, we can improve our emotional and social skills.*

Trait Emotional Intelligence Profile

Name:

Student Number:

EI Competency	Score	
Total EI		
Self-esteem		The belief that we are successful and self-confident
Emotion expression		Effectively communicating our feelings to others
Self-motivation		Being driven and unlikely to give up in the face of adversity
Emotion regulation		The capacity to control our emotions
Trait happiness		Being cheerful and satisfied with our lives
Trait empathy		The ability to take someone else's perspective
Social awareness		Being accomplished networkers with excellent social skills
Impulse control		Being able to be reflective and not give in to basic urges
Emotion perception		Correctly labelling own emotions and those of others
Stress management		The capacity to withstanding pressure and regulate stress
Emotion management		The ability to effectively deal with other people's feelings
Trait optimism		Being confident and likely to "look on the bright side" of life
Relationships		The capacity to have fulfilling personal relationships
Adaptability		Being able to be flexible and willing to adapt to new conditions
Assertiveness		Being forthright, frank and willing to stand up for one's rights