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An Analysis of the Impact and Efficacy of Online Emotional Intelligence Coaching as a Support Mechanism for University Students

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As a consequence of the COVID-19 pandemic, many college courses have pivoted to complete online delivery and colleges are also tasked with providing student supports online. It is likely this transition will last beyond any COVID-19 specific restrictions, therefore this small-scale, exploratory study examined the efficacy and impact of the provision of a 5 week online emotional intelligence (EI) coaching programme to a cohort of Irish university students ($n = 19$) studying at Technological University Dublin (TU Dublin). Results revealed that the average overall level of EI increased for participants following the coaching programme. Students reported that they believed the programme provided emotional support and that it also enabled them to manage academic stress more effectively and ultimately that engagement with the programme had a positive impact on their academic engagement. Taken collectively, the results of this study suggest that whilst EI coaching can be successfully delivered online, where possible, a blended approach may be optimal. However, as this is a novel and exploratory study, further confirmatory research is recommended.

Keywords: emotional intelligence, coaching, online therapy, education, student support

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INTRODUCTION

Due to the COVID-19 pandemic, many college courses moved 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. One very well-established means of enabling students to develop their social skills, become more self-aware and manage stress is EI coaching (Slaski and Cartwright, 2003; Boyatzis and Saatchioglu, 2008; Nelis et al., 2009; Dacre Pool and Qualter, 2012; Carthy and McGiloway, 2015). However, to date there has been limited research conducted to investigate the efficacy of and opinions surrounding such online supports for students in third level education. As such, the current research, the first study of its kind, sought to assess the impact of a 5-week EI coaching programme that was delivered to a sample of Irish university students and to evaluate the efficacy of delivering such a course online. The study involved the provision of EI training to a cohort of Irish university students ($n = 19$) studying at TU Dublin, and the programme was evaluated using a mixed method design. Pre- and post- test comparison found

a statistically significant increase in overall levels of EI for students who completed the coaching programme. A focus group was also conducted with a smaller sample of participating students where students not only identified strengths of the programme but made recommendations for ways to enhance student participation moving forward. Ultimately, this novel study suggests that EI coaching can successfully be delivered online to university students. However, further confirmatory research is required.

LITERATURE REVIEW

The COVID-19 pandemic has created unprecedented challenges for third level educators and students and necessitated the creation of new and innovative means of teaching and assessment. In particular, many classes and assessments are now taking place virtually and whilst online instruction is not something new, moving to complete online delivery, particularly for courses that have traditionally been taught face to face, is a new challenge for many students and educators. In a wider context, students are also missing out on the experience of campus life, and the sense of community and the opportunities for social and emotional growth that this offers. In this regard, it is not only teaching and academic supports that need to be delivered online as the COVID-19 pandemic continues to unfold. Colleges are also challenged to virtually provide emotional support and create a sense of connectedness and community for students. However, the effectiveness of the delivery of online supports in educational contexts and the opinions of students regarding such delivery has received scant attention. One particularly well-established support for students is emotional intelligence coaching, which has been demonstrated by a wealth of studies to lead to improved academic attainment (Boyatzis and Saatioglu, 2008; Nelis et al., 2009; Dacre Pool and Qualter, 2012; Stankovska et al., 2018; Zhoc et al., 2020), improved stress management (Slaski and Cartwright, 2003), and decreased levels of attrition (Carthy and McGilloway, 2015). However, the efficacy of online delivery of EI coaching and the attitudes and opinions of students as to engagement with online EI coaching have not previously been assessed.

Emotional Intelligence in Third Level Settings

The contemporary workplace is dynamic and multicultural and employers are increasingly seeking graduates who possess both content specific knowledge related to their area of study and social and emotional skills to enable them to communicate effectively and contribute to multidisciplinary teams (Jameson et al., 2016). Furthermore, an individual's level of EI has been demonstrated to be positively correlated with academic attainment and negatively correlated with levels of academic stress and anxiety (Stankovska et al., 2018; Zhoc et al., 2020). Therefore, third level colleges are increasingly focusing on providing students with rounded instruction that includes the development of social and emotional skills. Many college courses now include dedicated modules in areas such as personal

development that to varying degrees incorporate emotional intelligence coaching (McGinnis, 2018; Wang, 2019). EI coaching is also increasingly being offered to students as an extra-curricular support and there is a growing body of evidence attesting to the value of doing so. Broadly speaking, emotional intelligence consists of two related areas; accurately labeling and managing our own emotions (including competencies such as self-awareness, self-regard and stress management); and, accurately appraising and healthily responding to the emotions of others (including competencies such as emotion perception, interpersonal relations and assertiveness).

A wide range of studies have established that students' social and emotional skills can be improved as a result of coaching (Reilly, 2005; Boyatzis and Saatioglu, 2008; Nelis et al., 2009; Dacre Pool and Qualter, 2012; Gilar-Corbí et al., 2018; McGinnis, 2018; Wang, 2019). A particularly robust analysis by Boyatzis and Saatioglu (2008), involved a 20-year review of the provision of EI coaching as part of an MBA programme, synthesizing the results from 17 separate studies that were conducted with current and past students and graduates. The review confirmed that the coaching programme led to increases in emotional and social competencies and importantly that such improvements were still evident up to 7 years post-graduation. In this regard, Nelis et al. (2009) highlight that it is vital in academic settings not only for students to develop key emotional competencies but also for them to demonstrate those competencies and to continue to practise them, stating "results suggest that traits that have shown to be relatively stable over time can be modified through intensive training. However, as these traits are relatively stable, it is possible that people will come back to their "baseline" after a while if the competencies are not practised." In support of Boyatzis and Saatioglu's (2008) original findings, more recent research has confirmed the positive impact that EI coaching can have on individual social and emotional competencies; however, due to the recency of this research the longevity of these effects is still unknown (Gilar-Corbí et al., 2018; McGinnis, 2018; Wang, 2019).

A number of studies have confirmed that in addition to the efficacy of EI coaching as a means to support students' personal development, coaching can positively impact key academic variables and promote graduate employability. For example, Unnikrishnan et al. (2015), assessed the relationship between emotional intelligence and academic achievement for a sample ($n = 532$) of medical students in South India and found a positive correlation between EI and academic achievement and between EI and level of satisfaction with career choice. Hurley et al. (2020) conducted qualitative interviews with a cohort of 12 nursing students following their completion of clinical placements, prior to which they attended an emotional intelligence coaching programme. Analysis revealed that students subjectively reported increased levels of resilience, experiences of greater levels of empathy and compassion and that students felt they were enabled to respond more effectively to the mental health concerns of patients. The authors conclude that an additional advantage of the EI coaching programme was to increase students' work readiness and potential employability. Dacre Pool and Qualter (2012) designed and delivered an 11-week EI coaching program to undergraduate students in England ($n = 134$). Interestingly,

this study measured both EI and emotional self-efficacy, which is one's belief in the ability to effectively recognize and manage emotions. The MSCEIT was employed to measure students' EI, which is based on the Salovey and Mayer model of ability EI consisting of sub-scales which measure emotion perception, using emotion, understanding emotion and managing emotion. Results revealed that there were statistically significant increases with respect to emotional self-efficacy and with respect to the understanding and managing emotions branches of the MSCEIT. However, there were no increases with respect to the perceiving or using emotions branches of the MSCEIT. Although social and emotional competencies do not easily fall into discrete categories such that any given skill can be considered exclusively an 'intrapersonal EI skill' or an 'interpersonal EI skill', there are certainly competencies that are more strongly associated with one branch of EI than the other. For example, managing emotion may be considered more strongly associated with intrapersonal EI as it relates to our ability to manage our stress and regulate our emotional state, whereas perceiving and using emotions may be considered more strongly associated with interpersonal EI as these skills are associated with appreciating and responding to the emotions of others. Although this is a somewhat arbitrary distinction, the results from Dacre Pool and Qualter's study may indicate that EI skills are best developed in stages, with an initial focus on intrapersonal EI, followed by further coaching with respect to interpersonal EI. In fact, Sigmar et al. (2012) suggest that this is a particularly effective means of developing EI skills, citing neurological evidence to support the claim that EI typically develops in stages. Dacre Pool and Qualter's study also raises an important point. Ideally, students should develop both emotional self-efficacy and emotional intelligence, as high levels of emotional self-efficacy in the absence of emotional intelligence may lead students to believe they are dealing with emotional issues more effectively than they in fact are, whereas high levels of emotional intelligence in the absence of emotional self-efficacy may mean that students will have developed emotional competencies but lack the confidence to use them.

Online Delivery of Emotional Intelligence Coaching

Although a thorough search did not find any previous studies that had specifically explored online platforms as a standalone method 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 document with respect to telepsychiatry and college mental health in response to the COVID-19 pandemic and they claim there is "a robust evidence base that shows telepsychiatry leading to improved outcomes and higher patient satisfaction ratings" (American Psychiatric Association [APA], 2020). Berry et al. (2011) surveyed psychologists and counselors ($n = 109$) in the United States, all of whom had delivered coaching both face to face and remotely, to assess whether their perceptions of problem resolution and the quality of the professional relationship they had with clients differed depending on the mode of delivery. They found that there were no significant differences between perceived quality of relationships with clients or the reported level of problem resolution between face to face and remote delivery. However the authors do highlight some limitations with respect to this study such that the survey relied on a convenience sample and that coaches who were more "technologically savvy" may have been more likely to agree to participate as data was collected online. Kruml and Yockey (2011) provide further tentative evidence to support the efficacy of online EI coaching. Participants ($n = 75$) completed a leadership development module as part of an MBA programme in the United States which had two modes of delivery, face to face or a hybrid delivery where the majority of the instruction was delivered online culminating in a final 5 day, face to face component. Whilst the focus of this study was on the development of leadership skills rather than EI coaching *per se*, participants completed tests of EI both prior to and on completion of the leadership development programme and instruction focused on the development of leadership skills related to EI such as stress management and empathy. In essence, this was quite similar to the approach that is taken with respect to most EI coaching programmes. Analysis revealed that there was a statistically significant improvement in EI for participants following their participation in the programme and importantly, there was no significant difference found with respect to the effectiveness of the face to face and hybrid modes of delivery. Notwithstanding the arguably tangential focus of this study, it lends further, if somewhat limited, support to the efficacy of online EI coaching.

Summary

Collectively, a wealth of research findings indicate that coaching is a viable means of enabling third level students to develop social and emotional skills and that doing so can have a positive impact on key academic variables and lead to increased levels of work readiness. Previous studies further suggest that coaching programmes are particularly effective when they allow students to develop key social and emotional skills and also provide opportunities for such skills to be demonstrated and encourage continued practise. Online therapy is an established means of clinical support and a range of therapeutic interventions have been demonstrated to be clinically effective. However, a significant gap in knowledge exists, particularly in light of the ongoing global coronavirus pandemic, such that the efficacy of online delivery of EI coaching and the attitudes and opinions of students with respect to online delivery are not known.

RESEARCH QUESTIONS

- (1) Does the provision of online EI coaching to Irish university students lead, on average, to increased levels of emotional intelligence?
- (2) What are the perceived benefits and barriers for Irish second year university students with respect to participating in online EI coaching?

METHODOLOGY

An emotional intelligence coaching programme consisting of a series of five, 1 h, EI workshops was offered to all second year undergraduate and second year postgraduate students at Technological University Dublin in semester one of the 2020/2021 academic year. A separate set of supports is currently on offer to first year students as part of a college induction programme, hence the decision to specifically focus, in this initial study, on providing EI coaching to second year students. Due to constraints caused by the coronavirus pandemic, the programme was offered online through Microsoft Teams. There were five iterations of the programme on offer, each of which had a maximum of 20 places. To ensure consistency, each of the five programmes were offered across the same 5 weeks during the term, the same EI coach delivered all twenty-five sessions and the same content was covered in each of the five programmes. The coaching programme focused on one main topic each week, as follows; week 1 – introduction to EI and managing stress; week 2 – self-awareness; week 3 – self-regard; week 4 – building healthy interpersonal relationships; and week 5 – review and maintaining EI practise moving forward. The programme was designed to focus initially on intrapersonal EI with later workshops focused on interpersonal EI, in line with previous research findings outlined above (Dacre Pool and Qualter, 2012; Sigmar et al., 2012). Also in line with Dacre Pool and Qualter's findings, the programme had an applied focus whereby students were given practical exercises to engage with following each workshop 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 programmes were offered varied. The EI programmes were delivered by a psychologist who is also a qualified EI coach. The coaching programmes were not streamed, i.e., any second year student, in any programme of study could apply to attend any of the programmes on offer. This meant that there was a mix of second year students in each group from across the university's various faculties and courses. The coaching programmes were advertised to all second-year students via social media, an email to all students and an additional email that was sent to students by the university's students' union. Additionally, lecturing staff were contacted and requested to bring the coaching programme to the attention of second year students. All of the advertisements for the coaching programmes contained a participant information sheet and a link that students could use to provide their name and email address to register their interest. Students who registered their interest were then separately contacted and emailed a

consent form. Once consent was confirmed, participants were sent a demographic questionnaire which included questions pertaining to participants motivations for availing of EI coaching and what it was that they hoped to gain from the programme. Participants were also required to complete a test of emotional intelligence (the TEIQue) and a personalized EI profile was generated and emailed to each participant prior to their first coaching session (see **Supplementary Appendix B**). A 1 week after the final EI session participants were requested to complete the TEIQue a second time and were also administered a questionnaire pertaining to the perceived benefits and barriers related to participating in the coaching programme. A focus group was also conducted 1 week after the coaching programme ended with a sample of participants ($n = 6$) who completed the coaching programme to glean attitudes and opinions as to the perceived efficacy of the programme. An email was sent to all students that completed the coaching programme to recruit for the focus group. As the focus group took place during a busy period in the academic calendar and in the midst of a national lockdown imposed as a result of the COVID-19 pandemic, all focus group participants were offered a €20 online shopping voucher as an incentive for participation.

Participants

There were a total of 5,399 second year students registered at TU Dublin for the first semester of the 2021–2022 academic year. 76 students registered an interest in the EI coaching programme 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 coaching sessions and 19 completed the EI coaching programme and retook the TEIQue. 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 give their age. Six participants who completed the coaching programme took part in the focus group.

Technological University Dublin is a recently established university, formed by the merger of three originally independent higher education institutions in Ireland. The university is currently developing a unitary quality framework and therefore, provides a potent test-bed for innovative considerations in strategies for transformative teaching and learning. Emotional intelligence coaching is also key to developing work-ready graduates (Jameson et al., 2016; Wang, 2019; Zhoc et al., 2020), therefore TU Dublin was considered an ideal setting within which to conduct this novel and exploratory study.

Sample Size

Although there is limited previous research that has specifically examined the impact of EI coaching in Irish third level educational settings, there is ample evidence to suggest that EI coaching can yield generic benefits including higher levels of emotional awareness, improvements in mental health and stress management. Therefore, the aim of this study was to recruit as many participants as possible, so an *a priori* sample size calculation was not conducted. It was hoped that a sufficient

number of students would participate in the study to allow a dependent *t* test to be conducted with power of .8 or greater and there was no desire to limit numbers after this level of power was achieved. Rather we hoped to be able to accommodate as many students as possible given the expected advantage to participation. Unfortunately, due to the challenges posed by the COVID-19 pandemic, students were particularly busy and were also grappling with the move to online learning. Therefore recruitment for this study was hampered and the number of participants was less than we had hoped for. Issues related to recruitment and suggestions aimed at improving the participation rate for future coaching programmes are discussed below.

The Trait Emotional Intelligence Questionnaire

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. These 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 directly to the global trait EI score. The normative sample for the construction of the TEIQue was 1721 individuals (912 F; 764 M; 61 unreported) and all four factors and 15 facets show strong internal consistency (Petrides, 2009). Gardner and Qualter (2010) explored the concurrent and 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.

QUANTITATIVE RESULTS

Supplementary Table A1: Pre- and post-test average scores (see **Supplementary Appendix A**) presents 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. Dependent *t*-tests were conducted for each of these and statistically significant results are presented in **Supplementary Table A2:** Statistically significant results of dependent *t*-tests (see **Supplementary Appendix A**). Effect sizes (Cohen's *D*) were also conducted. Results revealed that there were no statistically significant differences 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).

QUALITATIVE RESULTS

Reflexive thematic analysis was employed to analyze qualitative data arising from the focus group, as per Clarke and Braun's (2017) theoretical framework for thematic analysis. A semi-structured approach was employed whereby five themes were chosen for discussion with students based on the existing literature that was reviewed prior to the study commencing and the specific aims of the study. These themes were; (1) reasons for engagement and interest in EI coaching; (2) perceived benefits of participation with EI coaching; (3) perceived challenges and limitations related to participation with EI coaching; (4) virtual delivery; and (5) COVID-19. Analysis leaned heavily toward an inductive and systematic analytic approach, assuming a direct relationship between participant language and their intended meaning (i.e., it was assumed that coding and theme development reflect the explicit content of the data). A dual-coder methodology was employed and as per Clarke and Braun's recommendations for best practise dual coding was collaborative and reflexive with the overall purpose being to derive more robust interpretations of meaning, rather than focusing on reaching consensus of meaning. In this regard, sub-themes within the five principal thematic areas that were explored with participants have not been selected based on frequency or the number of codes associated with them. Rather, there was a specific emphasis on "meaning" and the sub-themes that have been highlighted are those that both coders, collaboratively, understood to communicate meaningful data related to the specific themes that were explored and the specific research questions that have been posed.

Focus Group Results

There were six participants in the focus group, two male and four female students from a range of academic disciplines. Demographic details for each participant are outlined in **Supplementary Table A3:** Participant information (see **Supplementary Appendix A**), as well as their chosen pseudonym.

Reason 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 coaching programme 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 course with a more open-minded outlook and very few expectations. Brittany described herself as a "bit of a joiner" and stated that she signed up for the course 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; Guilmette et al., 2019; Finnerty et al., 2021).

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 course 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 coaching. More 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 coaching programme as what drew her to the course 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.” Emotional intelligence training 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 coaching programme in regards 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 course. 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.

Perceived Benefits of Emotional Intelligence Participation

As previous research has demonstrated, emotional intelligence coaching can act as a tool to help buffer life stress, ease anxiety, improve individual quality of life and enhance academic attainment (Vaillant and Davis, 2000; Parker et al., 2004; Jones et al., 2015). This spectrum of benefits was echoed within the data, with students not only stating that “well for me it was beneficial, like almost immediately” (Hestia) but also that the course “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 course enabled them to make improvements in their personal lives and that once they started attending the workshops they were encouraged to engage in self-reflection “it kind of forced me to think about myself” (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 1 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 workshops, she had been finding it difficult to “get the motivation to actually start on something” however the workshops helped her to “kind of get the motivation . . . rather than just procrastinating.” The emotional intelligence workshops 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 workshops “in regard to the perception of yourself and perception of others as well” and students repeatedly described their sense of attending the emotional intelligence workshops as a “safe space” (Shalz) where they could “share feelings and thoughts about different things.” Students recognized that the conversations they had weren’t 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 realize “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 workshops was the positive impact that doing so had on academic attainment. Previous research on emotional intelligence has shown that high levels of emotional intelligence are correlated with high levels of academic attainment, so it is perhaps unsurprising that those students who participated in the emotional intelligence workshops reported perceived academic improvements as a consequence (Vaillant and Davis, 2000; Parker et al., 2004; Jones et al., 2015). Of course, 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 workshops 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 workshops 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 recognized 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 course helpful “the once a week was definitely beneficial” (Robert) they also stated they would like the course 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 course 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 course slowly starts to slip away as your practice begins to fade. What these comments suggest is that whilst students found the emotional intelligence course to be beneficial as a whole, to maintain these benefits over time, the skills learnt throughout the course need to be meaningfully practised on an ongoing basis. Although the students “very much liked” (Collin) the course, that does not mean it was without any

perceived flaws and indeed perceived challenges and limitations will now be discussed.

Challenges and Limitations

Interestingly, one of the primary areas where students perceived improvements could be made was not with respect to the workshops directly but rather with respect to how they were advertised. With respect to the content of the advertising, 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 arising from the manner in which the course was advertised was the perception that it would consist of a “group talking about problems” (Hestia). A fundamental issue for students was the fact that the course 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 course. Students suggested that advertising through social media and presentations in lectures would be preferable and likely more effective ways to advertise future courses.

That there was some confusion as to what exactly emotional intelligence is was apparent. Brittany stated that although she anticipated the course would outline the “steps in order to, you know, grow it [emotional intelligence], 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 emotional intelligence. 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 course. The most prominent concern was that it didn’t run for long enough and that it felt “like we’re just stopping in the middle of nowhere, and there was a sense of panic” (Brittany). Students made the argument that it felt as though the course 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 course ended after its allotted 5 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 course began, noting that he “was already spiraling” and made the suggestion that it would have been preferable to have the course 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 coaching programme simply didn’t run for long enough with, Robert suggesting a check-in “4-weeks/5-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 5-week course 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 practice. It is clear from students’ feedback that while the timing wasn’t necessarily a determining factor in whether or not these particular students chose to participate or not, it was a rather important factor in determining their overall experience of the course. Moving forward, it is recommended that some adaptations to the course 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 course.

Virtual Delivery

Due to limitations imposed by the pandemic, the EI coaching programme 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 coaching programme “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 course 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 course 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 recognized 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 general consensus that students felt rather safe and secure in the online workshops, 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 or not they would prefer to attend an in-person or virtual course 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 particular 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.

COVID-19

Considering the timing and context of the current research and, more importantly, the fact that the EI workshops were offered to students in the midst of 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 programme 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 programme.

On a positive note, students reported that the emotional intelligence programme 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 socializing” (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 manner in which the programme 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 programme so that it can continue to be tailored to fit their needs.

DISCUSSION

This study sought to evaluate the impact and efficacy of the provision of an online emotional intelligence coaching programme for Irish undergraduate students. Utilizing a

mixed method design, the study included the completion of pre- and post-tests of an emotional intelligence measure (i.e., the Trait Emotional Intelligence Questionnaire; Petrides, 2009) and a semi-structured focus group with students who availed of EI coaching.

Notwithstanding the fact that there were some areas where coaching did not lead to improved EI scores for students, the findings from this study align with those of previous studies that have demonstrated that emotional intelligence coaching can be beneficial and lead to increases in overall levels of EI (Mayer et al., 1999; Slaski and Cartwright, 2003; Boyatzis and Saatioglu, 2008; Ruiz-Aranda et al., 2012; Gilar-Corbí et al., 2018). Specifically, the findings from this study suggest that online coaching can be an effective means of delivery, although further research is required to confirm this. As previously noted, there has been limited research conducted pertaining to the efficacy of online EI coaching when used in isolation, however, these exploratory findings do align with aspects of the study conducted by Gilar-Corbí et al. (2018), which found benefits of online EI coaching when used in a hybrid setting. In this regard, as a result 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 toward strictly virtual forms of media, connection, and information sharing (Schwab, 2017; Saeed et al., 2020). 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 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 much further confirmatory research is required in this regard. That said, it is important to recognize 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 toward 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.

Although students in this study commented favorably on the content and delivery of the EI coaching programme, there were a number of perceived limitations and areas where improvements could potentially be made. With respect to advertising and recruitment, in light of the positive impact the programme had, it was regrettable that uptake was poor and so few students engaged with the coaching programme. Specific to the manner in which the programme was described to students in

the informational emails and leaflets that were sent to them, students were clearly given the false impression that the principal emphasis of coaching was stress management. Some students may also be unfamiliar with the term “emotional intelligence,” therefore providing a definition of this term in addition to the ways in which the course might help them improve their self-awareness, self-regulation, social skills, empathy and motivation would be beneficial (Craig, 2019). 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 course 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 coaching.

In addition to considering the content of any advertisement it is also vital to consider the means by which it will be communicated to students. A key factor to consider in this regard is how students typically choose to communicate with each other and what their preferences are with respect to receiving communication from their university. Since its development in the early 1970s email has grown in popularity and is now the primary form of communication between businesses and within the higher education sector (Turville, 2019). However, as students in this study pointed out, it is not uncommon for them to have “hundreds of emails” (Brittany) land in their college email account each week, which can easily become overwhelming and likely lead to information overload and important messages being missed. Furthermore, although email is the preferred means of communication for many educators, research has confirmed that in recent years the 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). In fact, research aimed at specifically assessing the communication preferences of university distance learners echoes this and found that, when given a choice, students chose email only 19% percent of the time (Schutte and Andrianatos, 2018). With this in mind, 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 such as shared posts on campus social media or endorsement by lecturers and students who had previously completed the course.

A particularly novel element of this study was the delivery of EI coaching to students online. 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. Participants commented that the online nature of the programme made it convenient and specifically highlighted that they felt they had been provided with a space that was “safe” (Robert; Shalz; Brittany). In light of the dramatic shift in recent years toward online communication, the findings from this, admittedly small-scale study, support the assertion that we are arguably transitioning toward a new normal where students are more

comfortable and confident engaging online and increasingly opt for this medium over traditional face to face instruction. These findings, however, contradict more recent research pertaining to students' preference for virtual or face-to-face learning which has found that while some students did find online learning to be an opportunity to explore through technology, the majority of students preferred in person learning as they believed that it allowed for greater connection to peers and instructors as well as helping to increase productivity (Bali and Liu, 2018; Alawamleh et al., 2020). That said, there remains limited research on the topic, suggesting that further research is required. As stated above however, the results from this study are nuanced and it is worth noting that there were several concerns raised by students, including the fact that engagement with online coaching can feel less personal and a particularly important finding arising from this study is that students reported feeling less accountable than they believed they would have been had they attended coaching in person. While this finding echoes the results of Bali and Liu (2018), Alawamleh et al. (2020), it is complicated by the fact that although students reported feeling less accountable, a perceived benefit of online coaching for students was that they felt they could more easily "just back away a bit" when they felt emotionally challenged or overwhelmed and that they were "less pried on" (Brittany).

Considering the above, there are two possible solutions to address the concerns raised by students whilst maintaining the perceived benefits of online delivery. The first is to offer a blended delivery, such that an initial workshop takes place in person followed by a number of online workshops and another final in person concluding workshop. This again falls in line with the research conducted by Gilar-Corbí et al. (2018) and would be an opportunity to expand on their initial findings and further explore the efficacy of hybrid coaching methods. Alternatively, and a likely simpler option, would be to allow students when registering for a course of this kind to select a delivery preference, either virtual or face-to-face. Further research is of course required and in particular the efficacy of online versus face to face delivery could be compared.

With respect to the timing and duration of the coaching programme, the general consensus amongst students was that the timing was "brilliant" (Brittany), although one student did state a preference for the programme to begin at the very start of semester one. The most pressing concern for students and a strong finding that was gleaned from the qualitative data was that on completion of the coaching programme students were left with a sense of wanting more and with an overwhelming feeling of "what do we do now?" (Brittany). Furthermore, students recognized 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). Students' recognition of the importance of "routine" (Robert) echoes findings in recent research which highlight the importance of habit formation, and particularly the importance of repetition and reinforcement during social-emotional and psychological learning (Fiorella, 2020; Harvey et al., 2021). This is a particularly important finding 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 with respect to this particular programme given the feedback from our students in this regard. To address this ethical concern in addition to students concerns regarding falling out of practice on completion of a coaching programme, there are two proposed solutions. Firstly, the course could simply be extended from 5- to 6-weeks, with the 6th week of the course focusing on future planning and what students might do on their own to maintain the skills they learned during the previous workshops. Although this was touched upon in the final week of this iteration of the programme, 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 emotional intelligence, but as students approach the end of the programme it would frame emotional intelligence 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. The second option would be to provide a follow-up session for students several weeks after the completion of the initial course to check-in, ensure they have continued to use the skills they developed, and to answer any questions that students might have about emotional intelligence at that time. These options are not mutually exclusive and could of course be employed concurrently.

Taken collectively, the results of this exploratory study indicate that EI coaching can be effectively delivered online to undergraduate students and that doing so can enable students to benefit personally and academically. Although coaching, in this instance, was delivered online as a response to the COVID-19 pandemic and it had been anticipated that future iterations of the coaching programme would revert to in person delivery, feedback from students was generally positive and there were in fact some specific benefits that were highlighted. For example, students stated that they felt less exposed in an online environment and the option to switch off their monitor and take a step back when necessary made online engagement a preferable option to in person coaching. Further research is recommended to explore this area in detail. For example, future research could ascertain whether there are specific student cohorts for whom online delivery is most appealing and future research could also compare the efficacy of online versus in person delivery for specific student cohorts.

LIMITATIONS

The most notable challenges with respect to conducting this study were the difficulties with participant recruitment due to the issues caused by the COVID-19 pandemic, and as a consequence of this, the study's small sample size. While the study did utilize convenience sampling and the EI coaching was available to all second-year students at TU Dublin, recruitment was lower than originally anticipated and, as we heard from

students, advertisement of the course could have been more effective. Another key area of concern when considering sample size is the possibility for generalization. While these exploratory findings are promising, given the study's small sample size and limited population demographics, further research will need to be conducted to assess the generalizability of these results. 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.

CONCLUSION

Extensive research has demonstrated that EI coaching can lead to improvements in stress management and enhanced social and emotional competencies. However, relatively few studies have specifically assessed the provision of EI training to students in third level educational settings, and even less research has been conducted to assess the online delivery of EI training. With that in mind and considering that the present study worked with a limited sample size, it is advised that further confirmatory research be conducted to assess the efficacy of online EI coaching in third level settings, in particular by employing an expanded sample in terms of both size and diversity. For example, it would be worthwhile assessing the impact and efficacy of online EI coaching across variables such as ethnicity, age and course of study. Based on the findings from this study, a blended delivery is recommended, where possible, and the importance of follow up engagement with participants has been highlighted. Ultimately, the unique virtual component of this study called attention to the ways in which course delivery has rapidly changed over the course of the COVID-19 pandemic, and given that this is a novel area of research, much further investigation is required.

REFERENCES

- Alawamleh, M., Al-Twait, L. M., and Al-Saht, G. R. (2020). The effect of online learning on communication between instructors and students during Covid-19 pandemic. *Asian Educ. Dev. Stud.* [Online ahead of print] doi: 10.1108/AEDS-06-2020-0131
- American Psychiatric Association [APA] (2020). *College Mental Health, Telepsychiatry: Best Practises, Policy Considerations & COVID-19*. Available online at: <https://www.psychiatry.org/psychiatrists/practice/telepsychiatry> (accessed January 20, 2022).
- Bali, S., and Liu, M. C. (2018). Students' perceptions toward online learning and face-to-face learning courses. *J. Phys. Conf. Ser.* 1108:12094. doi: 10.1088/1742-6596/1108/1/012094
- Berry, R., Ashby, J., Gnilka, P., and Matheny, K. (2011). A comparison of face-to-face and distance coaching practices: coaches' perceptions of the role of the working alliance in problem resolution. *Consult. Psychol. J.: Pract. Res.* 63, 243–253.
- Boyatzis, R., and Saatioglu, A. (2008). A 20-year view of trying to develop emotional, social and cognitive intelligence competencies in graduate management education. *J. Manage. Dev.* 27, 92–108. doi: 10.1108/02621710810840785
- Carthy, A., and McGilloway, S. (2015). 'Thinking outside the box' – engaging students and promoting learning through emotional and social skills development. *Proc. Soc. Behav. Sci.* 191c, 2655–2600. doi: 10.1016/j.sbspro.2015.04.647
- Clarke, V., and Braun, V. (2017). Thematic analysis. *J. Positive Psychol.* 12, 297–298.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by the Blanchardstown Campus Ethics Committee. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct, and intellectual contribution to the work, and approved it for publication.

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SUPPLEMENTARY MATERIAL

The Supplementary Material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/feduc.2022.861564/full#supplementary-material>

- Craig, H. (2019). *The Theories of Emotional Intelligence Explained*. Available online at: <https://positivepsychology.com/emotional-intelligence-theories/> (accessed January 21, 2022).
- Dacre Pool, L., and Qualter, P. (2012). Improving emotional intelligence and emotional self efficacy through a teaching intervention or university students. *Learn. Individ. Differ.* 22, 306–312. doi: 10.1016/j.lindif.2012.01.010
- Fares, J., Saadeddin, Z., Al Tabosh, H., Aridi, H., El Mouhayyar, C., Koleilat, M., et al. (2016). Extracurricular activities associated with stress and burnout in preclinical medical students. *J. Epidemiol. Glob. Health* 6, 177–185. doi: 10.1016/j.jegh.2015.10.003
- Finnerty, R., Marshall, S., Imbault, C., and Trainor, L. (2021). Extracurricular activities and wellbeing: results from a survey of undergraduate university students during COVID-19 lockdown restrictions. *Front. Psychol.* 12:647402. doi: 10.3389/fpsyg.2021.647402
- Fiorella, L. (2020). The science of habit and its implications for student learning and well-being. *Educ. Psychol. Rev.* 32, 603–625. doi: 10.1007/s10648-020-09525-1
- Gardner, J., and Qualter, P. (2010). Concurrent and incremental validity of three emotional intelligence (EI) measures. *Australian J. Psychol.* 62, 5–13. doi: 10.1080/00049530903312857
- Gilar-Corbí, R., Pozo-Rico, T., Sánchez, B., and Castejón, J. L. (2018). Can emotional competence be taught in higher education? A randomized experimental study of an emotional intelligence training program using a multimethodological approach. *Front. Psychol.* 9:1039. doi: 10.3389/fpsyg.2018.01039
- Guilmette, M., Mulvihill, K., Villemaire-Krajden, R., and Barker, E. (2019). Past and present participation in extracurricular activities is associated with adaptive

- self-regulation of goals, academic success, and emotional wellbeing among university students. *Learn. Individ. Differ.* 73, 8–15. doi: 10.1016/j.lindif.2019.04.006
- Harvey, A. G., Callaway, C. A., Zieve, G. G., Gumpert, N. B., and Armstrong, C. C. (2021). Applying the science of habit formation to evidence-based psychological treatments for mental illness. *Perspect. Psychol. Sci. [Online ahead of print]* doi: 10.1177/1745691621995752
- Hurley, J., Hutchinson, M., Kozlowski, D., Gadd, M., and Van Vorst, S. (2020). Emotional intelligence as a mechanism to build resilience and non-technical skills in undergraduate nurses undertaking clinical placement. *Int. J. Ment. Health Nurs.* 29, 47–55. doi: 10.1111/inm.12607
- Jameson, A., Carthy, A., McGuinness, C., and McSweeney, F. (2016). Emotional intelligence and graduates – employers' perspectives. *Proc. Soc. Behav. Sci.* 228, 515–522. doi: 10.1016/j.sbspro.2016.07.079
- Jones, D., Greenberg, M., and Crowley, M. (2015). Early social-emotional functioning and public health: the relationship between kindergarten social competence and future wellness. *Am. J. Public Health* 105, 2283–2290. doi: 10.2105/AJPH.2015.302630
- Kruml, S., and Yockey, M. (2011). Developing the emotionally intelligent leader: instructional issues. *J. Leadership Organ. Stud.* 18, 207–215. doi: 10.1111/j.1365-2834.2008.00957.x
- Mayer, J., Caruso, D., and Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence* 27, 267–298. doi: 10.1016/s0160-2896(99)00016-1
- McDonough, I. (2016). *Use It or Lose It: Redefining an Old Idea*. Available online at: <https://www.todaygeriatricmedicine.com/archive/MJ16p5.shtml> (accessed January 22, 2022).
- McGinnis, E. J. (2018). Developing the emotional intelligence of undergraduate music education majors: an exploratory study using bradberry and greaves' (2009) emotional intelligence 2.0. *J. Music Teacher Educ.* 27, 11–22. doi: 10.1177/1057083717723919
- Nelis, D., Quoidbach, J., Mikolajczak, M., and Hansenne, M. (2009). Increasing emotional intelligence: (how) is it possible? *Pers. Individ. Differ.* 47, 36–41. doi: 10.1016/j.paid.2009.01.046
- Ortiz-Rodríguez, M., Telg, R., Irani, T., Roberts, T., and Rhoades, E. (2005). College students' perceptions of quality in distance education: the importance of communication. *Q. Rev. Distance Educ.* 6, 97–105.
- Parker, J., Summerfeldt, L., Hogan, M., and Majeski, S. (2004). Emotional intelligence and academic success: examining the transition from high school to university. *Pers. Individ. Differ.* 36, 163–172.
- Petrides, K. V. (2009). "Psychometric properties of the trait emotional intelligence questionnaire," in *Advances in the Assessment of Emotional Intelligence*, eds C. Stough, D. H. Saklofske, and J. D. Parker (New York, NY: Springer).
- Reilly, P. (2005). Teaching law students how to feel: using negotiations training to increase emotional intelligence. *Negotiation J.* 21, 301–314. doi: 10.1111/j.1571-9979.2005.00065.x
- Ruiz-Aranda, D., Castillo, R., Salguero, J., Cabello, R., Fernández-Berrocal, P., and Balluerka, N. (2012). Short and midterm effects of emotional intelligence training on adolescent mental health. *J. Adolescent Health* 51, 462–467. doi: 10.1016/j.jadohealth.2012.02.00
- Saeed, N., Bader, A., Al-Naffouri, T., and Alouini, M. (2020). When wireless communication responds to covid-19: combating the pandemic and saving the economy. *Front. Commun. Netw.* 1:566853. doi: 10.3389/frcmn.2020.566853
- Schutte, B. J., and Andrianatos, A. A. (2018). *Identifying the Communication Preferences of Distance Education Students at the Unit for Open Distance Learning*. NWU. Available online at: <https://repository.nwu.ac.za/handle/10394/31054> (accessed February 7, 2022).
- Schwab, K. (2017). *The Fourth Industrial Revolution*. New York, NY: Penguin.
- Sigmar, L., Hynes, G., and Hill, K. (2012). Strategies for teaching social and emotional intelligence in business communication. *Bus. Commun. Q.* 75, 301–317. doi: 10.1177/1080569912450312
- Slaski, M., and Cartwright, S. (2003). Emotional intelligence training and its implications for stress, health and performance. *Stress Health* 19, 233–239. doi: 10.1002/smi.979
- Stankovska, G., Dimitrovski, D., Angelkoska, S., Ibraimi, Z., and Uka, V. (2018). Emotional intelligence, test anxiety and academic stress among university students. *BCES Conference Books* 16, 157–164.
- Subramanian, K. (2017). Influence of social media in interpersonal communication. *Int. J. Sci. Progr. Res.* 109, 70–75. doi: 10.3390/ijerph17061883
- Turville, J. (2019). From "you've got mail" to email overload. *Techné: Res. Philos. Technol.* 23, 1–25. doi: 10.5840/techné201951093
- Unnikrishnan, B., Darshan, B., Kulkarni, V., Thapar, R., Mithra, P., Kumar, N., et al. (2015). Association of emotional intelligence with academic performance among medical students in South India. *Asian J. Pharmaceutical Clin. Res.* 8, 300–302.
- Vaillant, G., and Davis, J. (2000). Social/Emotional intelligence and midlife resilience in schoolboys with low tested intelligence. *Am. J. Orthopsychiatry* 70, 215–222. doi: 10.1037/h0087783
- Vidhya, R., and Kalaiselvi, K. (2020). A study on influence of social media in interpersonal communication. *Ann. Roman. Soc. Cell Biol.* 24, 948–954.
- Wang, C. (2019). Facilitating the emotional intelligence development of students: use of technological pedagogical content knowledge (TPACK). *J. Hospital. Leisure Sport Tourism Educ.* 25:100198. doi: 10.1016/j.jhlste.2019.10.0198
- Zhoc, K. C. H., King, R. B., Chung, T. S. H., and Chen, J. (2020). Emotionally intelligent students are more engaged and successful: examining the role of emotional intelligence in higher education. *Eur. J. Psychol. Educ.* 35, 839–863. doi: 10.1007/s10212-019-00458-0

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