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The Relationships between Emotional Intelligence, Resilience, and Academic Performance during the COVID-19 Pandemic

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Abstract

The adversities inflicted by the ongoing COVID-19 pandemic placed university students at a disadvantage in their pursuit of academic achievement. Previous studies demonstrated that emotional intelligence (EI) and resilience are related to how people react when faced with stress-inducing circumstances (Armstrong et al., 2011; Bermejo et al., 2021; Cleary et al., 2019). Given these findings, the present study aimed to address how EI and resilience relate to university students' academic performance during semesters challenged by the pandemic. Amongst other hypotheses investigated in the study, it was hypothesized that EI and resilience would be related to academic performance, and that students' overall experience with COVID-19 would be associated with their EI, resilience, and academic performance. To test these hypotheses, a variety of questionnaires were utilized to measure participants' EI, resilience, GPA, along with their experiences with the pandemic. Results showed that EI was positively correlated with academic performance, but resilience and academic performance on the other hand, were unrelated. Nonetheless, partial support was found for the hypothesis that students who experienced COVID-19 more negatively will score lower in EI, resilience, and GPA. The study provided important information on the relationships between EI, resilience, and academic performance during the global outbreak. However, future research is necessary to understand whether EI and resilience directly influence how students perform in the midst of an unprecedented adversity.

The Relationships between Emotional Intelligence, Resilience, and Academic Performance during the COVID-19 Pandemic

The COVID-19 outbreak significantly challenged students' academic efforts in unprecedented ways. Although it has been a few years since COVID-19 was declared a global pandemic, there is still much to understand about the various ways the pandemic impacted academic performance and the overall student experience. Numerous researchers have conducted studies on academic performance and its relation to EI and resilience (Lam & Kirby, 2002; Suleman et al., 2019; Hwang & Shin, 2018; Droppert et al., 2019). Considering these studies alongside those that demonstrated relationships between EI, resilience, stress perception, and stress management (Bermejo-Martins et al., 2021; Fullerton et al., 2021), it becomes imperative to examine how EI and resilience both relate to student performance amidst a stress-inducing predicament. Overall, the present study addressed the question: how do EI and resilience relate to university students' academic performance during semesters challenged by the COVID-19 crisis?

COVID-19's Impact on Post-Secondary Students

Students, particularly those at a post-secondary level, are susceptible to a variety of stressors. Therefore, coping with a pandemic in addition to an already demanding lifestyle could be taxing on students especially considering the many ways COVID-19 negatively impacted them. For instance, the pandemic engendered students to resort to remote learning and to confront the difficulties that come with it such as technical issues during classes or limited student-teacher and student-student engagement. Alongside students' learning experience, it seems that the pandemic also interfered with their ability to fulfill both proximal and distal goals. For example, an American study found that 13% of a sample of 1500 students indicated that they

needed to delay graduation while 40% lost a job or an internship offer due to reasons linked to COVID-19 (Aucejo et al., 2020).

Various studies also demonstrated the pandemic's adverse impact on university students' mental wellness. In a study published by the Canadian Psychological Association, an increase in psychological distress was found among post-secondary students with no existing mental health issues prior to the pandemic (Hamza et al., 2020). In another study conducted by Son et al. (2020), 44% of the participants reported having experiences with depressive thoughts during the lockdown, mainly attributed to loneliness, concerns over academic performance, and overthinking. Considering how the pandemic impacted many domains of student life, it becomes imperative to investigate how the outbreak affected academic performance itself.

Academic Performance and COVID-19

There are varying perspectives on what determines academic performance. Historically, general intelligence has been perceived as a major predictor of individual performance in school and work settings (Lam & Kirby, 2002). Yet, in recent decades, there has been a surge in studies demonstrating that general intelligence measured by Intelligent Quotient (IQ) is only one of many factors that contribute to student competence. For instance, increased health-related quality of life representing optimal physical, emotional, mental, and social functioning was found to have a significant association with higher GPA (Spivey et al., 2020). Sleep, in particular, was discovered to be beneficial for academic competence because of its positive impact on students' performance, particularly on the solidification and refinement of information obtained from class (Gomez-Fronsesca & Genzel, 2020). Moreover, bilingualism was investigated in relation to GPA, and it was found that bilingual students who experienced a discrepancy between the language spoken at home and the language in which tests were written performed worse than

their unilingual counterparts (Agudo et al., 2021). Essentially, among the many factors that influence student competence, EI and resilience were found to be significant (Lam & Kirby, 2002; Suleman et al., 2019).

The ongoing pandemic posed various challenges for students' capacity to perform well in higher education. In a study exploring the impacts of the pandemic, conducted by Melgaard et al. (2021), university students reported being challenged by distractions as they studied from home. Another vital finding from this study was that students with procrastinating tendencies reported having less motivation to study, relative to when they were physically attending classes. Sahin and Tuna (2021) also noted that students who experienced higher levels of anxiety during COVID-19 had lower levels of vitality, which pertains to one's excitement about their area of study as well having sufficient energy to fulfill tasks. The transition to online learning may have been well-accepted and perhaps, even beneficial to some. However, several negative impacts of the pandemic on students' academic functioning have been documented.

Emotional Intelligence, Resilience, and Academic Performance

EI and resilience have been frequently investigated in research, both separately (Mayer et al., 2004; Brasseur et al., 2013; Mavroveli et al., 2009) and in relation to one another (Bermejo-Martins et al., 2021; Fullerton et al., 2021; Droppert et al., 2019; Yuan, 2021). Resilience was found to mediate EI's relationship with other constructs (Ramos-Diaz et al., 2018) thereby demonstrating that EI can influence another variable via its impact on resilience. In addition, many investigated EI and resilience with respect to factors that may advance or impede academic performance such as: student's mental wellness (Jayalakshimi & Magdalin, 2015), life satisfaction (Ramos-Diaz et al., 2014) and suicidal ideation (Sojer et al., 2017). Despite the plethora of studies surrounding EI, resilience and academic performance, there is an existing

scarcity of knowledge about how all three constructs relate to one another in the context of a global pandemic.

Emotional Intelligence

EI was formally defined by Salovey and Mayer (1990) as the ability to adequately assess and regulate one's emotions and those of others. For the most part, there are three existing conceptualizations of EI: trait EI, ability EI, and EI that is a mixture of both trait and ability. Trait EI denotes individuals' "emotion-related self-perceptions" and behavioural tendencies related to understanding, processing, and using emotions (Mavroveli et al., 2009, p. 259) while ability EI considers people's actual ability to understand, regulate, and use emotions (Moron & Biolik-Moron, 2021). While trait EI is concerned with what individuals tend to do, ability EI deals with what individuals can do in emotion-related situations (Brasseur et al., 2013). Essentially, trait EI has been noted to consistently predict human behaviour across one's lifespan (Petrides et al., 2016) while ability EI seems to be more dynamic in that people's emotion-related capabilities have been suggested to change over time (Mayer et al., 2004). A major distinction between both EI types is that trait EI is measured by self-report questionnaires whereas ability EI is typically measured by performance tests (Mavroveli et al., 2009). The type of EI measure utilized in a study could depend on how EI is conceptualized.

Ultimately, both perspectives on EI can be valuable and there is no evidence supporting the rejection of ability EI in favour of trait EI, and vice versa (Mikolajczak, 2009). Therefore, considering options that incorporate aspects of both EI types could be beneficial. For instance, Mikolajczak (2009) proposed that EI can be demonstrated on a knowledge, ability, and trait level, thereby presenting a more unifying view of EI. In essence, this three-level model proposes that EI refers to what people know about dealing with emotion-related situations (knowledge), as

well as what they can do (ability) and tend to do (trait) when facing such situations in real life. This model proposes a hierarchical structure which implies that knowledge underlies ability and ability underlies disposition (trait). Mikolajczak (2009) indicates that while all three levels are related, they are distinct from one another since knowledge does not always translate into abilities and abilities are not necessarily translated into practice (trait). For example, an individual may know that managing one's emotions is beneficial during stressful situations but having such knowledge does not necessarily mean that they can manage emotions well when they actually experience stress. In the same way, one might have the ability to calm themselves down when facing a stressor, but this does not mean that the ability is applied on a regular basis.

Similarly, Brasseur et al. (2013) conceptualizes EI as a mixture of trait and ability, thus creating an EI measure that captures both EI types called The Profile of Emotional Competence (PEC). Ultimately, Brasseur et al. (2013) refers to EI as emotional competence (EC). Like EI, EC refers to the perception and processing of personal emotions and those of others. However, Brasseur et al. (2013) used the term "competencies" because they believed that one's competence can be learned and developed, which is a notion seemingly undermined by the term "intelligence." Despite being a self-report measure itself, the PEC measures aspects of both trait and ability models of EI as it measures people's tendency to behave in emotion-laden situations (trait theory) while also acknowledging that EI can be developed (ability theory). Overall, the present study utilized the PEC to measure participants' EI. Additionally, the present study interchangeably refers to EI as EC, particularly when discussing the sample's response to the PEC.

The association between EI and academic performance has become increasingly popular in research. As previously mentioned, general intelligence was perceived by many as the

enduring predictor of individual performance both in school and in the workplace (Lam & Kirby, 2002). Intelligence is seldom associated with human emotion thereby making the suggestion that EI is important for learning all the more intriguing. Building on the initial definition for EI, Mayer et al. (2004) further categorized the construct into four sections: perceiving emotions, use of emotion in facilitating thoughts, understanding emotions, and managing emotions. The dimensions of EI operate on emotional information, which is a vital aspect of both verbal and nonverbal interactions between humans (Mayer et al., 2004). Thus, scholastic success can be affected by students' EI, particularly their ability to utilize emotion-related information, generated from interpersonal communications, in guiding their thinking and behaviour during school-related activities.

The relationships between dimensions of EI and academic performance seem to be inconsistent across different contexts. In a study involving undergraduate students, researchers found that EI, specifically emotional perception and management, contributed to students' performance during cognitive tasks in a manner that cannot be attributed to general intelligence (Lam & Kirby, 2002). In the same study, understanding emotions or the ability to identify how emotions are affected by surrounding experiences did not have significant effects on cognitive-based performance. Although numerous studies found a positive relationship between EI and scholastic performance (Lam & Kirby, 2002; Suleman et al., 2019), it is not reasonable to conclude that all aspects of EI are related to student success. In some cases, such as that of the cross-sectional study conducted by Zirak and Ahmadian (2015), the following subscales included in the ability- based EI questionnaire created by Bradberry and Geaves (2005; as cited in Zirak & Ahmadian,2015) were found to be unrelated to academic achievement: self-awareness, self-management, and relationship management. Hence, there is a discrepancy in the results of

studies investigating the relationship between EI and academic performance. Zirak and Ahmadian (2015) hypothesized that this inconsistency is perhaps due to the broadness of EI as a concept, and the numerous ways it has been operationalized.

Resilience

Resilience, as defined by the American Psychological Association (2020), is the act and result of overcoming adversities, particularly by mentally, behaviourally, and emotionally adjusting to the demands of the situation. Ran et al. (2020) presented resilience as an internal system that alleviates the impact of a detrimental experience, thereby painting the construct as a buffer and defense to distress. Therefore, to be resilient is to have the capacity to successfully overcome challenging situations (Southwick et al., 2014). Overall, the discourse surrounding resilience illustrates a deviation from the emphasis formerly placed on human limitations amidst adverse circumstances (Zautra & Reich, 2012). Contrary to other constructs that measure the adverse effects of stress on an individual, the positive psychological basis for resilience presents humans as capable of enduring and adjusting to challenging situations.

While resilience aids one in overcoming threatening experiences, being resilient does not warrant immunity from emotional distress (Allan et al., 2014). In other words, resilience does not imply the absence of stress, but instead represents the maintenance of adequate functioning during stressful times. Resilience and stress are intrinsically tied together because resilience can only operate in situations wherein the individual is challenged to adapt to stress (Zautra & Reich, 2012). In sum, resilience is demonstrated when both adversities and positive adaptation are present (Fletcher & Sarkar, 2015).

Stress generated by challenging and perhaps, even life-threatening events is an inevitable part of the human experience and so, resilience and the ability to positively adapt to adversities is

imperative. Subscales of resilience such as mental toughness, self-esteem and self-efficacy were found to be positively associated with adequate coping strategies like positive thinking and support-seeking (Fullerton et al., 2021). Thus, highly resilient individuals employ practices that heighten their likelihood of overcoming a stressful predicament. In consideration of the idea that resilience fosters positive coping amidst stress (Zautra & Reich, 2012; Fletcher & Sarkar, 2015), resilience was conceptualized in the present study, as the ability to endure adversities using effective coping strategies.

Considering the apparent stressors attached to the university experience, various researchers have taken interest in investigating how resilience aids students in obtaining academic success during stressful times. Anagha and Navyashree (2020) conveyed that positive adaptation relevant to scholastic experiences can be referred to as academic resilience or the ability to succeed academically, despite difficulties such as those concerning confidence, motivation, stress, and relationships. In the past, academic resilience was found to be higher amongst students with higher GPA scores (Hwang & Shin, 2018; Droppert et al., 2019). Resilience was also associated with students' satisfaction with their current major and their interpersonal relationships (Hwang & Shin, 2018), optimal well-being, and university adjustment (Fullerton et al.,2021); all of which are factors that contribute to student performance. Additionally, Droppert et al. (2019) depicted that students with higher academic resilience, particularly those who require less time to recover from being upset and perceive mistakes as a learning experience, are likely to perform better in school.

The Present Study

As previously mentioned, the present study investigated whether academic performance during COVID-19 was significantly correlated with EI and/or resilience. The association

between EI and resilience was also explored in consideration of prior studies that indicated an overlap between the two constructs (Droppert et al., 2019; Yuan, 2021). Furthermore, this study aimed to determine whether resilience has a mediating effect on the relationship between EI and GPA scores, in the sense that EI influenced academic performance during the time of COVID-19 via its impact on resilience. Lastly, this study investigated students' overall experience during the pandemic, with respect to their EI, resilience, and academic performance. Thus, this study specifically investigated the following hypotheses: (1) participants' responses to the Student COVID-19 Survey would differ from neutral in the practical, cognitive, emotional, and physical categories, (2) students with higher EI scores would have higher resilience scores, (3) students with higher EI scores would have higher GPA scores, (4) students with higher resilience scores would have higher GPA scores, (5) resilience would have a mediating effect on the relationship between EI and GPA scores, and finally, (6) students who experienced the COVID-19 pandemic more negatively than others, would have lower EI, resilience, and GPA.

Method

Participants

Through convenience sampling, students from Tyndale University were recruited as the sample for this study. A total of 42 students were recruited, but only 34 completed all aspects of the study. The sample consisted of participants who were between 18 and 55 years of age, but 26 (61.90%) of them were between 18 and 24 years old. Furthermore, the sample consisted of approximately 30 female (71.4%) and four male (9.52%) participants; eight of the participants (19%) did not disclose their gender. In terms of their ethnicity, approximately 20 participants (47.62%) identified as Caucasian, nine (21.42%) identified as African, Black, or Caribbean, and six (1.28%) identified as either Asian, Pacific Islander, Latino, Hispanic, or Native American;

three participants (7.14%) did not disclose their ethnicity. Overall, there was an imbalance in the sample's demographics, especially in gender. However, this imbalance was not expected to significantly affect the study since there were no demographic-related hypotheses made.

To better understand the sample's experience with the pandemic, participants were asked a few questions pertaining to their living situation during the academic year, 2020-2021. Of those who reported their geographical location, 34 participants (80.95%) resided in Canada during that time. In addition, 24 participants (54.76%) lived with their family or parents, seven (16.67%) lived with either a spouse, partner, friend(s) or roommate(s) and two participants (4.76%) lived by themselves.

Since the present study investigated the impacts of the pandemic on university students' learning experiences, all participants in the sample were at least in their second year of university studies. Having at least one year of university experience generated the capacity to recognize the changes the pandemic inflicted on student learning. Therefore, first-year students who would not have known what the university experience was like prior to the pandemic were ineligible to participate in the present study.

Apparatus

Informed Consent

An informed consent form was utilized to brief participants on the implications of their participation. This form conveyed the topic and purpose of the study, as well as an overview of the study's procedures. Through this form, participants were able to recognize the potential benefits and risks of the study, and the ways in which they would be compensated for their participation. Additionally, the form affirmed that their data would be kept confidential and that

they were entitled to withdraw from the study at any point, without receiving penalty. See Appendix A for a copy of the informed consent form.

Student COVID-19 Survey

The Student COVID-19 Survey was developed to examine the participants' academic experiences during the COVID-19 pandemic. This survey assesses the implications of COVID-19 on the participants' practical needs, alongside their cognitive, emotional, and physical experiences. The survey involves a five-point Likert scale, and it includes 23 closed-ended statements to which participants responded by indicating whether they *strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree,* or *strongly agree*. The survey includes statements like: "I was able to concentrate during online classes, in the same way I did during in-person classes (practical);" "During the time of remote learning, I found it harder to concentrate on school work (cognitive);" "I felt unhappy in the environment where I was quarantined (emotional);" and "I got more sleep during the time of remote learning (physical)." See Appendix B for a copy of the Student COVID-19 Survey.

Profile of Emotional Competence

The Profile of Emotional Competence (PEC) was designed to measure EI (Brasseur et al., 2013). In essence, the PEC is a self-report questionnaire that assesses identification, expression, comprehension, regulation, and utilization of emotions. These five subscales are examined both at an intrapersonal and interpersonal level, thereby amounting to a total of ten subscales of EI. The PEC utilizes a five-point Likert scale and includes 50 closed-ended statements (Brasseur et al., 2013). In the present study, participants were instructed to respond by indicating whether each of the statements describe them *never, occasionally, sometimes, frequently, or always*. Some of the items included in the PEC are as follows: "I can tell whether a person is angry, sad

or happy even if they don't talk to me;" "If I dislike something, I manage to say so in a calm manner;" and "My feelings help me to focus on what is important to me." See Appendix C for a copy of the PEC.

The PEC was found to be an adequate scale for measuring EI. For instance, Brasseur et al. (2013) demonstrated that the PEC has convergent validity with a standard instrument used to measure trait EI called Trait Emotional Intelligence Questionnaire (TEIQue-SF) thereby suggesting that the PEC accurately measures EI. The Pearson correlation coefficients between TEIQue-SF and most subscales of the PEC ranged from 0.50 to 0.78, which conveyed that both scales were significantly related to one another. In addition, the PEC has acceptable internal reliability considering that all of its subscales had a Cronbach's alpha that ranged from 0.60 to 0.83 (Brasseur et al.,2013).

The Brief COPE

The Brief COPE is a self-report questionnaire that was designed to measure how individuals cope with a stressful situation (Carver, 1997); the present study used this questionnaire to measure resilience of its participants. The Brief COPE consists of fourteen subscales, and Eisenberg et al. (2010) grouped these scales into two categories: approach and avoidance coping. Approach coping, which is an indicator of resilience, is characterized by the subscales: active coping, use of emotional support, use of instrumental support, positive reframing, religion, planning, and acceptance. On the other hand, avoidance coping, which is an indicator of a lack of resilience, is characterized by the subscales: self-distraction, denial, substance use, behavioural disengagement, venting, humour, and self-blame. Eisenberg et. al (2010) deemed the subscales of religion and humour as ambiguous in that they neither characterize an approach or avoidance coping style. However, for the purpose of this study, the

subscale of religion was associated with approach coping while humour was associated with avoidance coping. Some statements that measure religion and humour in the Brief COPE are "I try to find comfort in my religion or spiritual beliefs" and "I make fun of the situation," respectively.

The Brief COPE (Carver, 1997) consists of 28 statements that indicate the different ways individuals respond to hardships. The apparatus utilizes a 4-point Likert scale, and participants were asked to rate how well each statement described their coping tendencies from 1 to 4; 1 indicated that the statement was not at all applicable to them, while 4 indicated that the statement described their coping methods accurately. The statements included in the initial Brief COPE are written in a progressive tense; however, in this study, the statements will be indicated in a present tense since not all participants may be experiencing a stressful event, at the time of their participation. In addition to the items presented previously, some of the items included in the Brief COPE were as follows: "I get help and advice from other people" and "I turn to work or other activities to take my mind off things." See Appendix D for a copy of the Brief COPE.

The Brief COPE was found to demonstrate adequate internal reliability and discriminant validity. For instance, Carver (1997) noted that the Brief COPE had an acceptable internal consistency given that all of its subscales produced a Cronbach's alpha that ranged from 0.50 to 0.90. Eisenberg et. al (2010) echoed this notion as they demonstrated that subscales of approach coping had a Cronbach's alpha of 0.71, whereas subscales of avoidance coping produced an alpha of 0.70. Furthermore, subscales such as active coping, planning and acceptance were found to have significant discriminant validity (Yusoff et al., 2010) thereby indicating that the Brief COPE can be discriminated from measures of unrelated constructs.

General Demographic Survey

A general demographic survey was utilized to better understand the different demographic characteristics of the sample. This survey asked questions pertaining to general background information such as: age, gender, ethnicity, and marital status. To explore their experiences during the pandemic, participants were asked to report their living situations during the academic year, 2020-2021. In this survey, participants were also instructed to provide their average GPA during the specified academic year. See Appendix E for a copy of the general demographic survey.

Procedure

Participants were recruited from Tyndale University through convenience sampling. For the most part, the sample included Psychology students who were recruited by way of in-class advertisements and emails.

Overall, the recruited participants completed the study digitally, through SurveyMonkey.com. Before commencing with the study, participants were informed about the study's purpose and terms, through a digital copy of the informed consent form; they were required to click "I agree" to convey that they had agreed to participate. Since they completed the study from a remote location, the sample was instructed to find a quiet space that enabled them to effectively complete the questionnaires.

After giving their consent, participants completed the study's measurements and surveys. First, they were tasked to complete the PEC (Brasseur et al., 2013); afterwards, they were asked to respond to the Brief COPE (Carver et al., 1997). Upon completing these scales, they were prompted to complete the Student COVID-19 Survey which was then followed by the General Demographic Survey. Before completing each scale and survey, participants were given brief instructions as to how they ought to approach the following questions. There were no timers

attached to the questionnaires mentioned. However, the participants were advised not to overthink their answers in order to demonstrate a more natural response to the questions at hand.

All participants completed the study in less than an hour. After finishing the study, participants were compensated with either a 1% extra credit in a Psychology class of their choice or an entry into a draw for a $25 Amazon gift card. Those who withdrew from the study were not penalized, and their eligibility to receive compensation was not affected by their withdrawal.

Results

Descriptive Statistics on Primary Variables

The primary variables of this study were: General EC, Intrapersonal EC, Interpersonal EC, Avoidance Coping, Approach Coping, and GPA. In addition, the participants' experiences during COVID-19 which were investigated using the Student COVID-19 Survey, were summarized into four primary variables: practical, cognitive, emotional, and physical.

Global EC, Intrapersonal EC, and Interpersonal EC were the three main components of the PEC. Intrapersonal EC included the five subscales of the PEC that measured management of one's own emotions, while Interpersonal EC included the five subscales that measured management of others' emotions. On the other hand, Global EC was the accumulation of both Intrapersonal and Interpersonal EC. See Table 1 for descriptive statistics of all three EC scores. Participants on average, scored above the middle of the range for all three EC scores. Each of the EC scores also had an excellent internal reliability considering that their Cronbach's alpha ranged from 0.76 to 0.92.

Table 1

Descriptive Statistics of Primary EC Scores

	Mean	SD	Min.	Max.	N	α
Global EC	3.43	.46	2.56	4.22	36	0.92
Interpersonal EC	3.50	.47	2.68	4.96	36	0.76
Intrapersonal EC	3.36	.55	2.20	4.52	36	0.81

Note. EC scores could range from 1 to 5, with 1 being the lowest and 5 being the highest. An EC score of 3 would be the middle of the range.

Participants' scores on the ten subscales of the PEC varied greatly. See Table 2 and Table 3 for descriptive statistics of Intrapersonal and Interpersonal EC scores, respectively. The sample's average scores for Intrapersonal EC ranged from 3.09-3.53, scoring the lowest for regulation of own emotions and highest for utilization of own emotions. The sample's average scores for Interpersonal EC ranged from 2.75-3.90, scoring the lowest for utilization of others' emotions and highest for listening to others' emotions. For the most part, internal reliability for both sets of EC subscales were excellent. Most alphas were above 0.70, but three out of the ten subscales (regulation of own emotions, utilization of own emotions, and listening to others' emotions) were in the 0.60 range which was still marginally acceptable. Nonetheless, the hypothesis testing analyses in the next section focused on the Global EC scores, where evidence for reliability was best.

Table 2

Descriptive Statistics of Intrapersonal EC Scores

	Mean	SD	Min	Max	N	α
Identification of own emotions	3.44	.75	2	5	36	0.72

Understanding of own emotions	3.30	.84	1.6	4.8	36	0.82
Expression of own emotions	3.45	.76	2	5	36	0.70
Regulation of own emotions	3.09	.68	1.8	4.8	36	0.66
Utilization of own emotions	3.53	.60	2	5	36	0.68

Note. EC scores could range from 1 to 5, with 1 being the lowest and 5 being the highest. An EC score of 3 would be the middle of the range.

Table 3

Descriptive Statistics of Interpersonal EC Scores

	Mean	SD	Min.	Max	N	α
Identification of others' emotions	3.73	.65	2.2	5	36	0.80
Understanding of others' emotions	3.70	.60	2.6	4.8	36	0.73
Listening to others' emotions	3.90	.61	2.8	5	36	0.64
Regulation of others' emotions	3.38	.62	2.2	5	36	0.72
Utilization of others' emotions	2.75	.82	1.4	5	36	0.80

Note. EC scores could range from 1 to 5, with 1 being the lowest and 5 being the highest. An EC score of 3 would be the middle of the range.

Resilience was measured using participants' scores in the Brief COPE, which involved two primary subscales: approach and avoidance coping. As mentioned previously, approach coping indicated resilience while avoidance coping indicated the lack thereof. Therefore, a

higher score in approach coping suggested more resilience while a higher score in avoidance coping indicated less resilience. Overall, the sample's average score for approach coping was higher than the average score for avoidance coping. See Table 4 for descriptive statistics of the resilience scores. The internal reliability for both subscales were considered acceptable, with avoidance coping producing an alpha score of 0.71 and approach coping producing 0.73.

Table 4

Descriptive Statistics of Resilience Scores

	Mean	SD	Min.	Max.	N	α
Approach Coping	3.00	0.50	2.2	3.9	35	0.73
Avoidance Coping	2.06	0.51	1.3	3.6	35	0.71

Note. Brief COPE (Resilience) scores could range from 1 to 4, with 1 being the lowest and 4 being the highest.

Approach and avoidance coping have seven secondary subscales each. For approach coping, the sample's mean score was highest for planning and lowest for emotional support. For avoidance coping, the sample's mean score was highest for self-distraction and lowest for denial. See Table 5 and Table 6 for descriptive statistics of approach and avoidance subscales scores, respectively. The sample's average score for approach subscales were for the most part, higher than their average scores for avoidance subscales. Moreover, the internal reliability of all fourteen secondary subscales was not calculated given that each included only two items.

Table 5

Descriptive Statistics of Approach Subscales Scores

	Mean	SD	Min	Max	N

Active Coping	3.10	0.69	1.50	4	35
Acceptance	3.10	0.62	1.50	4	35
Planning	3.19	0.68	1.50	4	35
Emotional Support	2.76	0.85	1	4	35
Instrumental Support	2.96	0.93	1	4	35
Religion	3	1.01	1	4	35
Positive Reframing	2.93	0.83	1	4	35

Note. Brief COPE (Resilience) scores could range from 1 to 4, with 1 being the lowest and 4 being the highest.

Table 6

Descriptive Statistics of Avoidance Subscales Scores

	Mean	SD	Min	Max	N
Self-distraction	3.14	0.64	2	4	35
Denial	1.51	0.70	1	3.50	35
Substance Use	1.40	0.84	1	4	35
Behaviour Disengagement	1.84	0.78	1	4	35
Venting	2.41	0.67	1	3.50	35
Humour	2.42	1.02	1	4	35

Self-Blame	2.76	0.83	1	4	35

Note. Brief COPE (Resilience) scores could range from 1 to 4, with 1 being the lowest and 4 being the highest.

In measuring GPA, participants were asked to indicate the range in which their GPA for the academic year 2020-2021 fell. There was a total of ten choices with "below 0.6" being the minimum range and "3.6-4.0" being the maximum. The sample's GPA scores exhibited a bimodal distribution, with 12 participants reporting their GPA in the 3.0-3.4 range, 12 participants reporting their GPA in the 3.6-4.0 range, and with only a few observations in any of the remaining categories. To better analyze the sample's GPA, the collected scores were divided into two categories: "above 3.4" and "below 3.4". Overall, 14 participants scored below 3.4, while 17 scored above 3.4.

Students' overall experience of the pandemic were categorized into the following subscales: practical, cognitive, emotional, and physical. Tables 7-10 include descriptive statistics for each of these different categories of experience, and for the individual items in each category. Survey questions made use of a five-point Likert scale, and some items of the subscales were reverse-coded so that higher scores indicated better experiences in each category. See Table 7, 8, 9, and 10 for descriptive statistics of practical, cognitive, emotional, and physical scores, respectively.

Participants on average, scored 3.32 on the practical subscale which measured how well their practical needs (i.e. availability of resources, teacher assistance and study environment) associated with digital learning were met. Their average scores in the practical subscale were slightly above the middle of the range, which indicated that on average, the sample agreed that their practical needs were met during the time of digital learning. Note that item 2 was

particularly reverse-coded; thus, a mean score below neutral indicated participants' agreement with the item. On average, the sample agreed with all items of the practical subscale, with the exception of item 5. The alpha for the practical subscale was 0.60 thereby suggesting a marginally acceptable internal reliability.

Table 7

Descriptive Statistics of Practical Scores

	Mean	SD	Min	Max	N	α
Practical Subscale	3.32	0.60	2.33	5	37	0.60
1. I had sufficient access to tools required for digital learning.	4.22	0.67	3	5	37	N/A
2. During online classes, I experienced technical issues that impeded my learning experience.*	2.62	1.30	1	5	37	N/A
3. My home environment was conducive to effective learning/studying.	3.14	1.06	1	5	37	N/A
4. During the time of remote learning, I was able to effectively connect with my professors when I need assistance.	3.84	0.87	2	5	37	N/A
5. During the time of remote learning, I was able to effectively connect with my classmates when I need assistance.	2.68	1.11	1	5	37	N/A

6. During the time of remote learning, I was given enough time to complete online coursework.	3.46	1.10	2	5	37	N/A

Note. Practical scores could range from 1-5, with 1 being the lowest and 5 being the highest. The middle range of practical scores would be a 3.

*Item 2 was reverse-coded.

The cognitive subscale measured participants' cognitive functioning during the time of online learning. The sample's average scores in the cognitive subscale were below the middle of the range, which suggested that participants on average, agreed that their cognitive functioning was impeded when they were learning from home. All five items in the cognitive subscale were reverse-coded. Therefore, scores below neutral indicated participants' agreement with the item, while scores above neutral indicated their disagreement. Participants scored below neutral for all items (item 2-4) with the exception of one (item 1) wherein the sample scored slightly above neutral. The cognitive subscale had an alpha score of 0.85 which suggested an excellent internal reliability.

Table 8

Descriptive Statistics of Cognitive Subscale

	Mean	SD	Min	Max	N	α
Cognitive Subscale	2.80	1.08	1	5	37	0.85
1. My learning experience has been negatively impacted by the	3.22	1.23	1	5	37	N/A

transition to remote learning.*						
2. I have become less motivated to study/learn since the transition to remote learning.*	2.84	1.32	1	5	37	N/A
3. During the time of remote learning, I felt more forgetful than usual.*	2.70	1.24	1	5	37	N/A
4. During the time of remote learning, I found it harder to concentrate on school work.*	2.43	1.42	1	5	37	N/A

Note. Cognitive scores could range from 1-5, with 1 being the lowest and 5 being the highest. The middle range of cognitive scores would be a 3.

*All four items were reverse-coded.

The emotional subscale measured the sample's emotional experience during the time of online learning. The sample's average in the emotional subscale was below the middle of the range thereby conveying that participants felt that their overall emotional experience was negatively impacted by reasons related to the pandemic (i.e. restrictions and uncertainty of future plans). All ten items in this subscale were reverse-coded and so, scores below neutral indicated participants' agreement with the item while scores above neutral indicated their disagreement. On average, participants agreed the most when asked whether they felt that they spent more time online than was healthy for them. Conversely, the sample disagreed the most when asked if they experienced grief from losing a loved-one to COVID-19. Ultimately, participants agreed with most items in the emotional category. The alpha for this subscale was 0.76 thereby suggesting an acceptable internal reliability.

Table 9

Descriptive Statistics of Emotional Subscale

	Mean	SD	Min	Max	N	α
Emotional Subscale	2.87	0.75	1	1	36	0.76
1. I felt unhappy in the environment where I was quarantined.*	3.08	1.34	1	5	36	N/A
2. My inability to see my friends/family resulted in feelings of loneliness.*	2.22	1.16	1	5	36	N/A
3. It was difficult to find social support due to the restrictions in place.*	2.39	1.20	1	5	36	N/A
4. I felt significantly anxious about the uncertainty of my academic future.*	2.76	1.42	1	5	36	N/A
5. I felt significantly anxious about the uncertainty of my professional future.*	2.68	1.40	1	5	36	N/A
6. I felt significant levels of stress due to reasons inflicted on me by the pandemic.*	2.49	1.15	1	5	36	N/A
7. I constantly feared that I and/or a loved one will contract COVID-19.*	3.24	1.40	1	5	36	N/A
8. I experienced grief from losing a loved-one to COVID-19.*	4.19	1.37	1	5	36	N/A

9. I experienced emotional distress due to friends and/or family members who contracted COVID-19.*	3.73	1.45	1	5	36	N/A
10. During the time of remote learning, I spent more time online than I feel is healthy for me.*	1.97	1.17	1	5	36	N/A

Note. Emotional scores could range from 1-5, with 1 being the lowest and 5 being the highest. The middle range of emotional scores would be a 3.

*All ten items were reverse-coded.

The physical subscale measured how well the sample met physical demands attributed to remote learning. The sample's average on the physical subscale was above the middle of the range, which indicated that on average, participants felt that they were keeping up with the physical demands of online learning. With the exception of item 2, all items in the physical subscale were reverse-coded. Relative to other items in the entire survey, the sample's average score was the closest to disagreement when they were asked if they contracted COVID-19 and were symptomatic during the time of online learning. This suggested that the majority of the participants did not physically struggle with COVID-19 infections while learning from home. Overall, the internal reliability of the physical subscale was low ($\alpha = 0.49$). The low alpha score could have been because the physical subscale included only three items. Since the apparatus was novel, those who might wish to use it again should consider including additional questions in the physical category.

Table 10

Descriptive Statistics of Physical Subscale

	Mean	SD	Min	Max	N	α
Physical Subscale	3.67	0.81	1.67	5	37	0.49
1. At some point during the time of remote learning, I contracted COVID-19 and was symptomatic.*	4.59	0.98	1	5	37	N/A
2. I got more sleep during the time of remote learning.	3.27	1.24	1	5	37	N/A
3. My ability to provide for my needs (food, housing, bills, etc.) have been impeded by the pandemic.*	3.14	1.23	1	5	37	N/A

Note. Physical scores could range from 1-5, with 1 being the lowest and 5 being the highest. The middle range of physical scores would be a 3.

*Item 1 and 3 were reverse-coded.

Investigation of Hypotheses

Hypothesis 1

A series of one sample t-tests was conducted to test the hypothesis that participants' responses to the Student COVID-19 Survey differed from neutral in each of the four categories: practical, cognitive, emotional, and physical. The average response to the practical questions ($M=3.32$) was significantly higher than neutral ($\mu=3$), $t(36)= 3.31$, $p < 0.01$. Similarly, the average response to the physical questions ($M=3.67$) was significantly higher than neutral ($\mu=3$), $t(36)= 5$, $p < 0.01$. In contrast, neither average responses to the cognitive ($M= 2.80$) nor

emotional (M=2.87) questions were significantly different from neutral (μ=3), t(36)= -1.14, p >0.10 and t(35)= -1.07, p> 0.10, respectively. Although the mean differences were small for both the practical and physical questions, participants did tend toward agreement with those items. This indicated that when it came to the practical and physical demands of online learning, participants fared reasonably well. The mean differences for cognitive and emotional questions were only somewhat smaller than neutral and not significantly different. Therefore, when it came to their cognitive and emotional experiences during the pandemic, participants did not fare especially well or poorly. Given these results, the hypothesis that responses would differ from neutral was partially supported; participants affirmed that their practical and physical needs were met, but did not show the same pattern for their cognitive and emotional experiences.

Hypothesis 2

A series of Pearson correlation tests was carried out to test the hypothesis that more emotionally intelligent students would be more resilient. See Table 11 for the correlation statistics of EC and resilience scores.

Table 11

Correlation Statistics of EC Scores and Resilience Scores

	Global EC		Interpersonal EC		Intrapersonal EC	
	r	N	r	N	r	N
Approach	0.63**	35	0.50**	35	0.63**	35
Avoidance	-0.45**	35	-0.37*	35	-0.43**	35

Note.

** is significant at the 0.01 level (1-tailed)

* is significant at the 0.05 level (1-tailed)

As an indicator of resilience, approach scores were positively related to all three EC scores (Global r= 0.63, Intrapersonal r= 0.63, Interpersonal r= 0.50). As an indicator of a lack of resilience, avoidance scores were negatively related to all three EC scores (Global r= -0.45, Intrapersonal r= -0.43, Interpersonal r= -0.37). Therefore, as hypothesized, students who were more emotionally intelligent showed greater resilience. See Figure 1 and 2 for a scatterplot of the correlations between Global EC and approach coping scores, and Global EC and avoidance coping scores, respectively (when examined, the scatterplots of the correlation between resilience scores and the other two EC scores were similar in pattern).

Figure 1

Approach Coping Scores by Global EC Scores

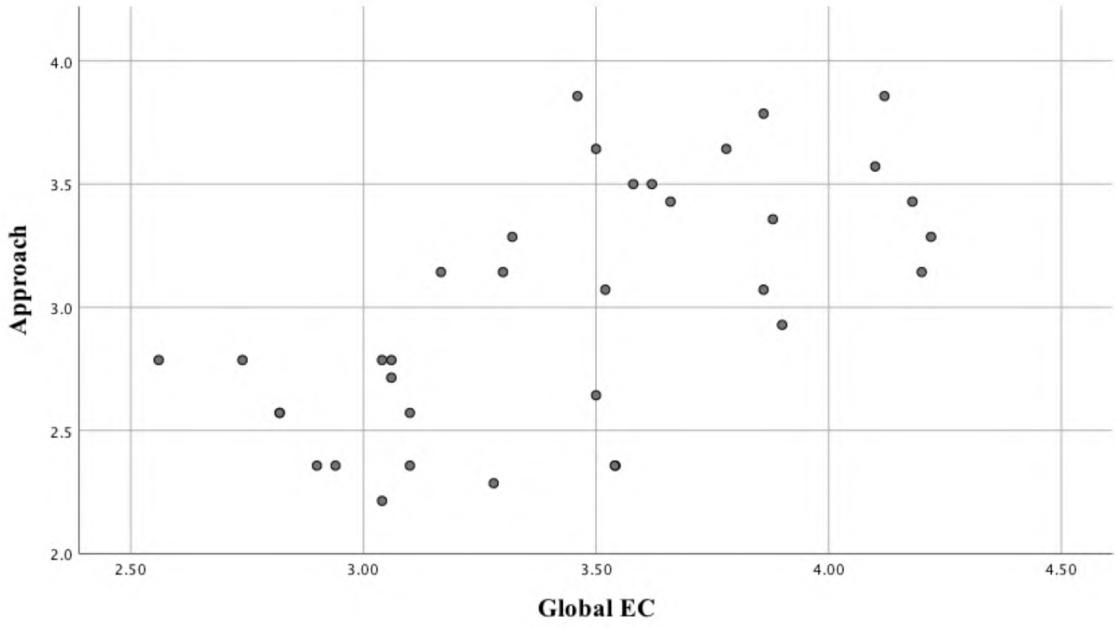
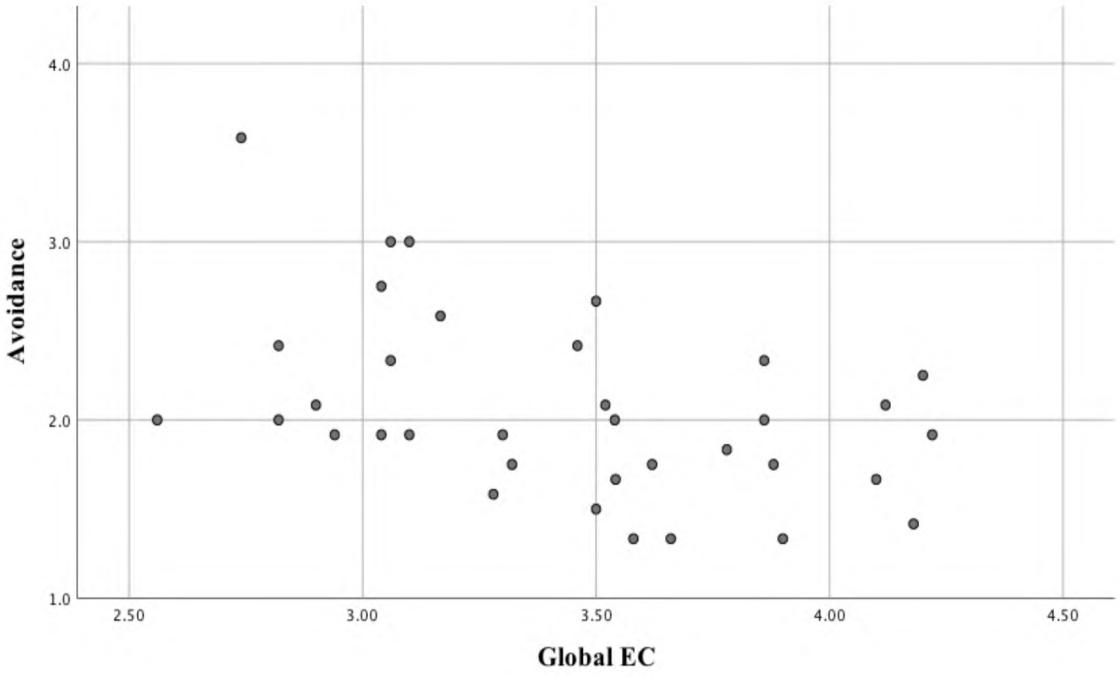


Figure 2

Avoidance Coping Scores by Global EC Scores



Hypothesis 3

Three independent samples t-tests were conducted to test the hypothesis that more emotionally intelligent students would have higher GPA scores. See Table 12 for a comparison of average EC scores in each of the two GPA categories (above 3.4 and below 3.4).

Table 12

Comparison of EC Scores in each GPA Category

	Above 3.4			Below 3.4		
	Mean	SD	N	Mean	SD	N
Global EC	3.64	0.45	17	3.24	0.39	18
Interpersonal EC	3.70	0.56	17	3.31	0.31	18
Intrapersonal EC	3.58	0.54	17	3.17	0.51	18

Note. EC scores could range from 1 to 5, with 1 being the lowest and 5 being the highest. An EC score of 3 would be the middle of the range. All three pairs of means were significantly different.

In all three major subscales of EC, higher EC was associated with higher GPA (Global $t(33)= 2.85$, $p < 0.01$, Intrapersonal $t(33)= 2.36$, $p < 0.05$, Interpersonal $t(33)= 2.67$, $p < 0.01$). Therefore, the results supported the hypothesis that emotionally intelligent students had higher GPA scores.

Hypothesis 4

Two independent samples t-tests were carried out to test the hypothesis that more resilient students would have higher GPA scores. See Table 13 for a comparison of average resilience scores in each of the two GPA categories (above 3.4 and below 3.4). Results demonstrated that in neither case was higher resilience related to GPA (Avoidance $t(33) = -0.61$, $p > 0.05$, Approach $t(33)= 1.41$, $p= > 0.05$). Therefore, the hypothesis that resilience is higher amongst students with higher GPA scores was not supported.

Table 13

Comparison of Resilience Scores in each GPA Category

	Above 3.4			Below 3.4		
	Mean	SD	N	Mean	SD	N
Approach	3.13	0.49	17	2.89	0.57	18
Avoidance	2	0.46	17	2.11	0.50	18

Note. Brief COPE (resilience) scores could range from 1 to 4, with 1 being the lowest and 4 being the highest. Neither type of resilience scores differed significantly by GPA category.

Hypothesis 5

Multiple linear regression was used to test the hypothesis that resilience mediated the relationship between GPA and emotional intelligence. Overall, the model predicted a significant amount of variability, $F(1,33)= 8.13$, $p= 0.007$, $R^2= 0.20$, with Global EC significantly predicting GPA scores ($\beta=-0.49$, $p < 0.01$). On the other hand, resilience did not significantly predict GPA scores (Avoidance $\beta= -0.12$, $p> 0.10$, Approach $\beta= 0.07$, $p> 0.10$). These results indicated that Global EC contributed a significant amount of variability in GPA scores while resilience did not. Thus, ultimately, emotional intelligence predicted GPA scores but not necessarily through resilience as the mediator. Considering this finding, the hypothesis that resilience mediated the relationship between emotional intelligence and GPA was not supported.

Hypothesis 6

A series of Pearson correlation tests were carried to test the hypothesis that students who experienced the COVID-19 pandemic more negatively would score lower in emotional intelligence. See Table 14 for correlations between EC scores and practical, cognitive, emotional and physical scores.

Table 14

Correlations between EC Scores and Practical, Cognitive, Emotional and Physical Scores

	Global EC		Interpersonal EC		Intrapersonal EC	
	r	N	r	N	r	N
Practical	0.41**	36	0.24	36	0.48**	36
Cognitive	0.13	36	0.002	36	0.22	36
Emotional	0.35*	35	0.12	35	0.48**	35

Physical	0.40**	36	0.21	36	0.48**	36

Note.

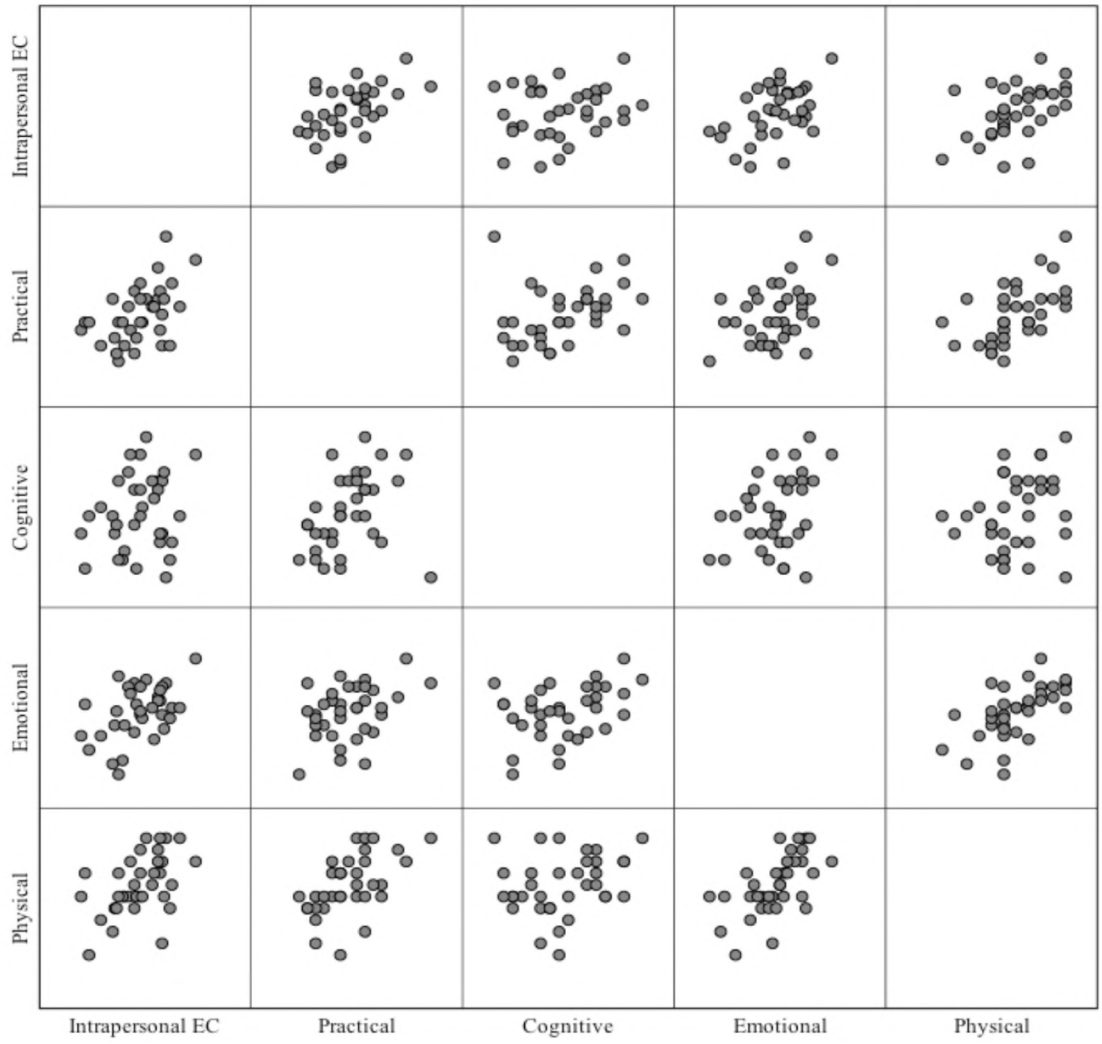
** is significant at the 0.01 level (1-tailed)

* is significant at the 0.05 level (1-tailed)

Global EC was positively related to three of the four categories of the Student COVID-19 Survey, with the exception of the cognitive subscale. Similarly, Intrapersonal EC was positively related to three of the four categories, except the cognitive subscale. This indicated that students who scored lower in Global and Intrapersonal EC experienced COVID-19 more negatively in the practical, emotional and physical level. On the other hand, Interpersonal EC was not significantly correlated with any of the four categories. It appeared that the intrapersonal aspects of emotional intelligence were more important than its interpersonal aspects when it came to the students' experiences during the pandemic. See Figure 3 for a matrix scatterplot of the correlations between Intrapersonal EC score and practical, cognitive, emotional, and physical scores. Given these results, the hypothesis that students who experienced COVID-19 more negatively would score lower in emotional intelligence was supported; this is best understood in terms of the intrapersonal aspects of emotional intelligence. It is possible that interpersonal emotional intelligence was less demonstrated because of the scarcity of interpersonal interactions during the academic year, 2020-2021.

Figure 3

Intrapersonal EC Scores and Practical, Cognitive, Emotional, and Physical Scores



Note. Intrapersonal EC was significantly related to the practical, emotional and physical aspects of students' experience with COVID-19, but not the cognitive aspects of their experience.

A series of Pearson correlation tests were carried out to test the hypothesis that students who experienced the pandemic more negatively would score lower in resilience. See Table 15 for correlations between resilience scores and practical, cognitive, emotional and physical scores.

Table 15

Correlations between Resilience Scores and Practical, Cognitive, Emotional and Physical Scores

	Approach Coping		Avoidance Coping	
	r	N	r	N
Practical	0.53**	37	-0.10	37
Cognitive	0.30**	37	-0.38*	37
Emotional	0.23	36	-0.44**	36
Physical	0.26	37	-0.32*	37

Note.

** is significant at the 0.01 level (1-tailed)

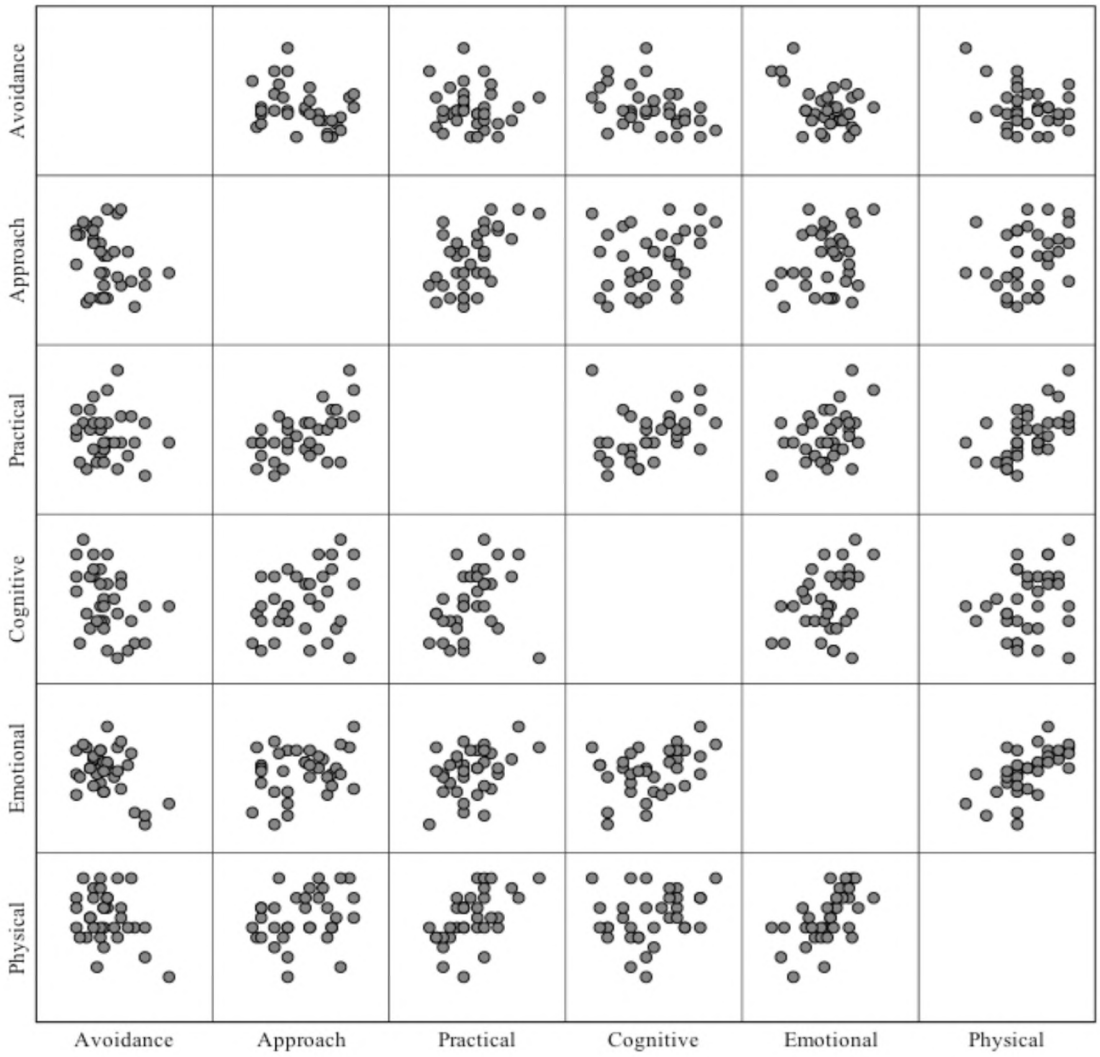
* is significant at the 0.05 level (1-tailed)

As an indicator of resilience, approach scores were positively related to practical and cognitive scores (Practical r= 0.53, Cognitive r= 0.30). However, there were not significant correlations found between approach, emotional and physical scores (Emotional r= 0.23, Physical r= 0.26). Therefore, students who experienced the COVID-19 pandemic less negatively, particularly in the practical and cognitive level, were more resilient. As an indicator of a lack of resilience, avoidance scores were negatively related to cognitive, emotional and physical scores (Cognitive r= -0.38, Emotional r= -0.44, Physical r= -0.32). However, there was no significant correlation found between avoidance and practical scores (Practical r= -0.10). See Figure 4 for a matrix scatterplot of the correlations between resilience scores and practical, cognitive, emotional, and physical scores. In sum, students who experienced the pandemic more negatively, specifically in the cognitive, emotional and physical level, were less resilient because they demonstrated less approach coping and more avoidance coping styles. Given this finding, the

hypothesis that students who experienced COVID-19 more negatively would score lower in resilience was supported.

Figure 4

Resilience Scores and Practical, Cognitive, Emotional, and Physical Scores



Note. Correlations between avoidance scores and cognitive, emotional and physical scores were significant. Correlations between approach scores and practical and cognitive scores were significant.

Four independent samples t-tests were carried out to test the hypothesis that students who experienced the COVID-19 pandemic more negatively would have lower GPA scores. See Table

16 for a comparison of practical, cognitive, emotional, and physical scores in each GPA category.

Table 16

Comparison of Practical, Cognitive, Emotional and Physical Scores in each GPA Category

	Above 3.4			Below 3.4		
	Mean	SD	N	Mean	SD	N
Practical	3.53	0.56	17	3.20	0.59	18
Cognitive	3.04	1.04	17	2.72	1.07	18
Emotional	3.03	0.73	17	2.76	0.78	18
Physical	4	0.62	17	3.37	0.91	18

Note. Practical, cognitive, emotional, and physical scores could range from 1-5, with 1 being the lowest and 5 being the highest. The middle range of all categories would be a 3.

At the practical, cognitive and emotional level, higher scores were not associated with higher GPA (Practical $t(33)= 1.67$, $p > 0.05$, Cognitive $t(33)= 0.91$, $p > 0.10$, Emotional $t(32)= 21.04$, $p > 0.10$). Conversely, higher scores at the physical level were associated with higher GPA (Physical $t(33)= 2.38$, $p < 0.05$). These results suggested that students who experienced the pandemic more negatively, particularly in the physical level, scored lower in GPA. Therefore, the hypothesis that students who experienced COVID-19 more negatively would have lower GPA scores was partially supported, specifically in terms of their physical experiences. As indicated previously, some of the items in the physical category are as follows: "At some point during the time of remote learning, I contracted COVID-19 and was symptomatic" and "I got more sleep during the time of remote learning."

In conclusion, the hypotheses that students who experienced the COVID-19 pandemic more negatively would score lower in emotional intelligence, resilience, and GPA were supported.

Discussion

The current study investigated a total of six hypotheses. Hypothesis (1) predicted that participants' responses to the Student COVID-19 Survey differed from neutral in each of the four categories: practical, cognitive, emotional and physical. This hypothesis was supported in terms of the physical and practical categories wherein scores differed from neutral; a difference was not found in the cognitive and emotional categories. Hypothesis (2) predicted that more emotionally intelligent students would be more resilient. This hypothesis was also supported considering that approach scores (an indicator of resilience) were positively related to EC scores while avoidance scores (an indicator of lack of resilience) were negatively related to EC scores. The association found between higher EI and higher GPA, supported hypothesis (3) which predicted that more emotionally intelligent students would have higher GPA scores. On the other hand, because there was no association found between resilience and GPA, hypothesis (4) which predicted that students with higher resilience will have higher GPA was not supported. Similarly, hypothesis (5) which predicted that resilience would mediate the relationship between EI and GPA was not supported. Results showed that EI contributed a significant amount of variability in GPA scores while resilience did not. Finally, hypothesis (6) predicted that students who experienced the pandemic more negatively would score lower in EI, resilience, and GPA. This hypothesis was supported by the relationships found between: practical, emotional, physical functioning and intrapersonal EI; practical, cognitive, emotional and physical functioning and resilience; and finally, physical functioning and GPA scores.

Students' Experiences during COVID-19

For the most part, participants felt that their practical needs associated with academic success in the digital setting were sufficiently met. Practical needs included aspects of remote learning such as having a good studying environment and having sufficient access to professors when assistance was needed. The association between practical needs and academic performance could be attributed to the notion that all participants resided in Canada during the academic year, 2020-2021. Relative to those living in underdeveloped countries, people residing in a developed country like Canada would have more access to resources needed to succeed in digital learning such as a viable internet connection and a working electronic device. Participants also felt that they received sufficient assistance from their faculty in terms of having access to professors when they needed help and being granted enough time to complete online schoolwork. Hence, scoring relatively high in the practical category could also be related to the quality of assistance provided by the school in which participants were enrolled.

Moreover, participants fared reasonably well on a physical level during the time of COVID-19. Many of the participants did not contract the virus or experience its symptoms which would have in turn, impeded their physical capability to manage schoolwork. Participants could have followed COVID-19-related mandates or generally practiced caution thereby protecting themselves from contracting the virus. The Centre for Disease Control and Prevention (2021) suggests that the risk of getting sick from being infected by the virus was greater among those who are beyond 50-years of age. Seventy-six percent of the participants were below 50-years old while 61% were either in their late teens or early twenties. Thus, for the most part, the sample was relatively young and would not be considered at risk for the severe, physical ramifications of COVID-19. In addition, 57% of the participants were living with their parents or family during

2020-2021; hence, meeting their physical needs (i.e. food and shelter) could have been more feasible relative to someone who lived on their own.

On the other hand, the sample fared neither poorly or well in terms of their cognitive and emotional experiences during the pandemic. At the cognitive level, participants expressed that they were more forgetful, less motivated and focused since their transition to remote learning. Despite this, the sample did not think that their learning experience was impeded by the transition. Therefore, although participants felt that the pandemic had negatively impacted their cognitive functioning, it seemed that their overall learning experience was not negatively affected. Perhaps, their experiences with forgetfulness, loss of motivation and impeded focus were not significant enough to affect their capacity to effectively learn class content while studying from home. It is also important to note that participants might have had more time to compensate for these cognitive challenges since they might not have been able to engage in other activities (i.e. going to work or attending social gatherings) that can distract them from learning.

Participants did not fare especially poorly or well on the emotional level potentially because they experienced negative emotions only in some matters related to the pandemic and not in others. The sample seemed to have minimal negative emotional experiences in respect to the direct consequences of the virus such as grief due to losing a loved one to COVID-19 or anxiety caused by the possibility of contracting the virus themselves. Nonetheless, they experienced negative emotions pertaining to the more indirect aftermath of the pandemic such as loneliness due to social isolation or anxiety due to the unpredictability of their academic and professional future. Although participants reported having negative emotions due to circumstances inflicted by the pandemic, their less negative experiences pertaining to other matters contributed to their overall emotional experience being neither negative nor positive.

EI and Resilience

In the sample, greater EI was associated with greater resilience, both at the intrapersonal and interpersonal level of EI. Certain attributes of intrapersonal EI seemed to be more closely related to particular aspects of resilience. For instance, regulation of one's emotions was outstandingly associated to active coping which is an attribute of high resilience. A statement in the Brief COPE that measured active coping was, "I concentrate my efforts on doing something about the situation I'm in." This makes sense considering that individuals who can effectively regulate negative emotions such as those inflicted by a stressful situation are more likely to not let emotions interfere with their efforts to solve problems at hand. Therefore, participants who were proficient in regulating personal emotions could have been more likely to approach pandemic-related issues in a level-headed manner. In addition, understanding one's emotions was especially related to positive reframing. A statement in the Brief COPE that measured positive reframing was, "I look for something good in what is happening." Individuals who understand their own emotions more readily could be better equipped to positively reframe negative thoughts and attitudes that surface in the midst of stress. On the other hand, those who cannot effectively discern why they experience negative emotions might be less capable to identify how they could change their perspective on a stressful situation. Ultimately, the participants' likelihood of adapting positively and eventually demonstrating resilience may have been influenced by their proficiency in managing and facilitating their own emotions.

Interpersonal EI has been theorized to contribute to support-seeking behaviours in managing stress (Chan, 2008 as cited in Okwudubu, 2021). In the present study, understanding others' emotions was especially tied to obtaining emotional and instrumental support during a stressful event; both of which are indicators of high resilience. Participants who were good at

understanding others' emotions would have been able to discern if they have people in their circle who were prepared to help when they needed assistance. By understanding that there are supportive people at their disposal, one could be more inclined to ask for help and in turn, receive the support they need. If an individual lacked in interpersonal EI, they could mistakenly perceive a scarcity of emotional and instrumental assistance available to them, and consequently never seek support at all. Overall, participants' ability to discern whether or not others were willing to provide them with support may have affected their decision to actively ask for assistance. Considering all of this, interpersonal skills such as understanding others' emotions could influence support-seeking behaviours associated with high resilience.

EI and Academic Performance

The study's results demonstrated that higher EI was associated with higher academic performance, which is consistent with the findings of other studies that explored the relationship between EI and academic success (Lam & Kirby, 2002; Suleman et al., 2019). In the intrapersonal level, the utilization of one's own emotions was particularly related to GPA. This makes sense given that emotions can be strategically utilized to achieve particular aims. Izard et al. (2008) echoed this sentiment by suggesting that negative emotions harness adaptive functionality especially for those who can utilize them well. For instance, anger can motivate one to demonstrate positive self-assertion while sadness can motivate a person to reach out to their peers for support (Izard et al., 2008). In a similar manner, participants who utilized their own emotions well could have employed feelings of anxiety and distress as motivation to study better; those who lacked in this intrapersonal skill could have allowed emotions to negatively affect their academic decisions. A statement in the PEC that measured utilization of personal emotions was, "I use my feelings to improve my choices in life." Overall, participants who demonstrated

this statement during the time of remote learning may have effectively utilized emotions, including those that are negative, to their own advantage thereby producing better academic results.

Higher interpersonal EI was also associated with higher academic performance. The study particularly indicated that understanding others' emotions was closely tied to higher GPA. These results could be attributed to the idea that being more empathetic allows for better communication when working with other students. Due to the shortage of student interactions during the pandemic, students were deliberately prompted to engage in digital, small-group discussions to supplement their learning. People who were more empathetic and overall, interpersonally competent would have been able to maintain better conversations with their peers and in turn, learn more effectively. Similarly, those who were more interpersonally intelligent would have been better equipped to approach their professors when they needed assistance. Essentially, interpersonal competence engenders pro-social skills that could contribute to academic success.

Resilience and Academic Performance

There was no association found between resilience and academic performance thereby contradicting studies that previously found a link between both constructs (Hwang & Shin, 2018; Droppert et al., 2019). However, it is worth noting that in the present study, seeking emotional support and instrumental support were the only indicators of resilience found to be associated with GPA. It is possible that resilience was not related to academic performance because participants did not deem the implications of the pandemic as a significant adversity. As previously stated, resilience is at play when adversities and positive adaptation are present (Fletcher & Sarkar, 2015). Overall, resilience may have not been at play as participants tried to

academically succeed during the pandemic. This is not to say that the pandemic induced little to no strain on the students' academic efforts and that positive adaptation was not present. However, Rudd and colleagues (2021) indicate that resilience, particularly in the context of academic success, is only necessary when a circumstance heightens students' likelihood for failure. Considering this idea, it is possible that participants did not appraise pandemic-related circumstances as a serious threat to their academic success which in turn, dismissed the need for resilience to be demonstrated when participants navigated through online learning.

It is worth noting that there was a lack of lower GPA scores in the sample. Out of the 35 participants who reported their GPA, 29(82.85%) had a GPA of 3.0-4.0 and only 6 participants (11.15%) reported scoring lower. Perhaps, a relationship between resilience and academic performance would have been present if there was more variability in GPA scores. In addition, it is possible that individuals who perceived implications of the pandemic as a threat to their academic functioning may have opted out of online education when the study's data was collected.

Resilience's Mediating Effect

The sample demonstrated that EI predicted GPA the most but not necessarily through resilience. In other words, EI seemed to have had a direct relationship with academic performance instead of one that was facilitated or mediated by an intervening variable like resilience. The lack of support for the mediating effect of resilience on the relationship between EI and GPA could be attributed to the same reason why resilience was not related to academic performance in the first place; the stressors induced by COVID-19 may not have been significant enough for resilience to be demonstrated. Furthermore, it is possible that relative to resilience, EI has a more persistent influence on an individual which in turn, makes its influence more

prominent when combatting daily stressors and less severe setbacks. In contrast, resilience can be perceived as "a time-variable component" (Bittmann, 2021, pg. 2) exhibited when a significant adversity calls for it. Therefore, the influence of resilience on GPA might only be expected in situations where students become significantly disadvantaged. If students found online learning to be stressful but not to the point where their chances for academic success were alarmingly threatened, it can be inferred that EI influenced academic performance more than resilience did. Essentially, the adaptive behaviours participants demonstrated to manage schoolwork amidst a pandemic seemed to be attributed to EI, rather than resilience.

Students' COVID-19 Experience, EI, Resilience and Academic Performance

Students who experienced the COVID-19 pandemic more negatively on the practical and physical level were found to have lower intrapersonal EI. This association could be due to the notion that those with higher intrapersonal EI are more self-aware. Self-awareness can be demonstrated in the way individuals readily recognize matters in their life that trouble them. Overall, when one understands their personal areas of concern, they try to address them perhaps more readily than others. Therefore, at the practical level, it is plausible that participants with higher intrapersonal EI were more likely to engage in proactive behaviours. For example, those who understood that a shorter quiz period could make them too anxious to complete the quiz on time could have been more active in asking teachers to lengthen the duration of online quizzes. At the physical level, those who recognized personal feelings of fear related to contracting the virus could have been more active in practicing caution. Ultimately, participants with lower intrapersonal EI might have not been as equipped to advocate for their practical and physical needs compared to those with higher intrapersonal EI.

The sample also demonstrated a relationship between negative emotional experiences with COVID-19 and lower intrapersonal competence. This could be attributed to EI's effect on stress appraisal. Individuals with higher EI appraise threats less negatively than others (Moron & Biolik-Moron, 2021). Thus, having a higher EI could reduce negative emotions such as fear, anxiety, and loneliness that are induced by pandemic-related stressors. Conversely, it is possible that those with lower intrapersonal EI were less likely to employ emotion regulation strategies in reducing the intensity of negative emotions evoked by the pandemic (Moron & Biolik-Moron, 2021).

On the other hand, there was no relationship found between intrapersonal EI and cognitive functioning. It is plausible that when it came to students' experience during the pandemic, cognitive processes such as those related to memory recall and concentration were unrelated to EI, which tends to be influential in more emotion-related circumstances. To be specific, management and facilitation of personal emotions may not have been at play when it came to recalling concepts or maintaining focus during class thereby eliminating any potential relationship between intrapersonal EI and cognitive functioning.

There were also no relationships found between all categories of the Student COVID-19 Survey and interpersonal EI. This finding could be associated with the shortage of interpersonal communication caused by gathering restrictions during 2020-2021. Overall, insufficient opportunities for social connections could have caused intrapersonal EI to be demonstrated more prominently than interpersonal EI in all four categories of students' pandemic experiences. The sample was not completely deprived of opportunities for interpersonal communication considering that professor-student and student-student interactions proceeded in an online context. However, although students were given opportunities for online communication, there is

still much to understand about the ways in which interpersonal intelligence translates similarly in digital encounters as it does in face-to-face settings.

The results suggested that lower resilience was related to having a more negative practical, cognitive, emotional, and physical experiences during the pandemic. To begin, approach coping was lower amongst those who scored lower in the practical category. It is likely that those who did not demonstrate problem-focused coping strategies (planning and seeking instrumental support) might have been more vulnerable to issues that surfaced during online learning such as having a distractive study space, internet connection issues, and insufficient quiz times. Overall, the absence of an approach coping style could negatively affect how well students' practical needs related to online learning were met.

On the other hand, avoidance coping was higher amongst those who scored lower in the cognitive, emotional, and physical categories. At the cognitive level, individuals who exhibit maladaptive coping methods such as behavioural disengagement could have detached themselves from school-related activities. This might have contributed to a decline in cognitive stimulation thereby resulting in forgetfulness and loss of focus and motivation. At the emotional level, dysfunctional methods such as self-blaming and denial could have heightened anxiety and fear, as well as inflated people's negative appraisal of a situation, which resulted in distress. In addition, lower physical functioning during the pandemic could be attributed to negative coping strategies such as denial. Being in denial of the ramifications of the virus could have impaired individuals' perception of its severity. Overall, those who were dismissive of the dangers inflicted by the virus could have maintained social distance and cared for their physical health to a lesser degree.

GPA was found to be lower amongst those who fared poorly in the physical category. The relationship between GPA and physical functioning could be attributed to the idea that being physically well enough to sit through online classes and complete schoolwork directly impacts academic outcomes. Hence, those who were symptomatic and were therefore, physically unable to do schoolwork may have had lower GPA outcomes. As stated earlier, getting an adequate amount of sleep also promotes academic competence (Gomez-Fronsesca & Genzel, 2020). Therefore, it is likely that students who slept less during the pandemic could have performed less adequately when attempting school-related tasks.

Lower scores at the practical, cognitive and emotional level were not associated with lower GPA. One possible reason for this is that physical functioning may have had a more direct impact on GPA than practical, cognitive and emotional experiences. Contacting professors when assistance is needed (practical), concentrating adequately during class (cognitive), and identifying why one feels anxious about a test (emotional) could have affected academic performance in the short term, but perhaps not sufficiently to impact students' GPA scores.

Limitations to the Study

The study's intention to investigate the relationships between EI, resilience and GPA was anchored in the idea that students' learning experiences were negatively impacted by the pandemic. Therefore, although it is generally good news that the sample fared better than predicted, the lack of evidence of the negative impact of the pandemic on the students practical, cognitive, emotional, and physical experiences was problematic for testing resilience-related hypotheses. One reason for this unexpected finding is that there could have been a limitation in the apparatus used to assess student's experiences with COVID-19. Aside from the practical, cognitive, emotional, and physical experiences explicitly expressed here, there might be other

areas left to be considered when studying the pandemic's impact on the university experience. The Student COVID-19 Survey could be re-constructed so that questions better encapsulate the fullness of the pandemic's impact on students. Also, a more exhaustive preliminary research on the ramifications of the pandemic might have been possible prior to making the survey. However, it is worth noting that at the onset of the study, research surrounding the impact of the pandemic on higher education was scarce. It is also important to indicate that although the sample overall fared reasonably well during the pandemic, some participants reported being negatively affected by the pandemic in one way or another.

Another limitation of the Student COVID-19 Survey was that it was retrospective; it prompted students to report the impact of COVID-19 by looking back at their experiences during the previous academic year. Participants completed the study from September until December 2021 thereby placing the gap between the end of the previous academic year and their time of participation at around five months. Therefore, their memory of their experiences with online learning could have been inaccurate. By the time of the study, students were probably more accepting and well-adjusted to the changes inflicted on them by the pandemic which in turn, made them recall their experience more positively (or those with the most negative experiences may have withdrawn from classes at this point). Although the time constraints of the research did not permit it, conducting the study closer to the onset of the pandemic would have been useful in accurately capturing the impact of the pandemic and more importantly, the transition to remote learning. Alternatively, a study conducted closer to the end of the pandemic might have better captured the long-term psychological impacts of the pandemic. In any case, it is important to remember that these findings pertain to a specific point in roughly the middle of the two-and-a-half-year period of online learning.

The study's methodology was also limited given that it was purely correlational. Although it seemed intuitive to perceive EI and resilience as causal variables to academic performance, the correlational design means that it is not justified to conclude that better academic performance during a stress-inducing crisis was indeed a consequence of having higher EI and resilience. Moreover, despite the relationship found between EI and resilience, the findings cannot be used to argue that greater EI begets greater resilience or vice versa. Overall, it is possible for some relationships to be inverse or for other variable(s) to be at play in producing the relationships found between these variables. For instance, it may be that academic performance before the dates of the study impacted who continued to register for classes. Perhaps, only the most successful students persisted and were able to be recruited for the present study. Additionally, other variables such as students' financial situations, self-efficacy, introverted or extraverted tendencies, or how well they stayed connected with their social support groups during isolation may have impacted the study's findings.

Future Research Directions

Employing a more diverse and larger sample would be beneficial if anyone were to replicate the present study. The sample was relatively small and was not diverse in terms of gender, age, ethnicity, and geographical location. In summary, participants were predominantly female, Caucasian and between 18-24 years of age. Furthermore, all participants resided in Canada during the time of the COVID-19 pandemic wherein there is relatively heightened access to resources essential to surviving the outbreak. Ultimately, demographic characteristics could influence the severity of one's experience of the pandemic as well as their competence in coping with pandemic-related stressors. Therefore, it might be valuable to conduct a similar study in a different geographical context with a larger and more diverse sample. In addition, efforts could

be made to connect with people who were students during the pandemic but opted to withdraw from school because of their experiences; their response to the same measures utilized in the study might be different from the sample recruited.

An experimental research design would also be valuable in understanding whether EI and resilience actually influence GPA. EI or resilience could be manipulated to see how students differ in academic performance. For instance, an experimental group could be invited to participate in EI and/or resilience training in order to heighten competence in either category. Afterwards, both experimental and control groups could undergo a series of academic tests to investigate whether higher EI or resilience actually engender better academic performance. Ultimately, an experimental design like this could provide a clearer understanding of the cause-and-effect relationships between EI, resilience and academic performance. Moreover, a more concrete evidence of EI and resilience's influence on GPA could also showcase whether there is a need to implement appropriate EI and resilience training programs that could potentially prepare post-secondary students for adversities that threaten their academic success.

Many studies conducted after the outbreak utilized standard measures of resilience when investigating resilience in relation to the challenges posed by pandemic (Elliot et al., 2021; Park et al., 2021; Salah et al., 2021; Nelson et al., 2022; Tavel et al., 2022). It is likely that pre-pandemic resilience scales such as the one used in the study were created in consideration of obviously threatening adversities thereby disregarding the more implicitly challenging circumstances experienced during the pandemic such as social isolation and the lack of stimulation. To better understand how people demonstrate resilience amidst a global pandemic, efforts could be made to create a resilience measure that is specific to pandemic-related adversities.

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Appendix A

Informed Consent

You are being invited to participate in this research study. Please read the following information carefully before you agree to participate.

The Relationship Between Emotional Intelligence, Resilience, and Academic Performance During COVID-19

INVESTIGATOR: This study will be conducted by Kendra Jalmasco and will be supervised by the Department Head of Psychology at Tyndale University, Dr. Nancy Ross.

PURPOSE: This study aims to examine the relationship between emotional intelligence, individual resilience and academic performance during semesters challenged by the COVID-19 pandemic. Participants of the study must be at least 18 years old.

PROCEDURES: If you decide to participate, you will be asked to do the following: (1) You will complete an emotional competence scale called the Profile of Emotional Competence (Brasseur et al., 2013), (2) you will complete a coping style scale called the Brief COPE Inventory (Carver et al., 1997), (3) you will complete the Student COVID-19 Survey which includes questions about your academic experience during the time of the pandemic, and (4) a Demographic Survey. Participants are expected to take approximately an hour to an hour and a half to complete the study.

POTENTIAL BENEFITS: By participating in this study, you could get a better understanding of yourself, particularly how you manage your emotions and the ways in which you approach stressful situations. This study allows you to reflect on your student experience during COVID-19 which could allow you to better understand how you responded to the changes the pandemic inflicted on your life as a student.

POTENTIAL RISKS: While completing the scales, you may feel uneasiness as you reflect on the negative ways you may deal with your emotions or respond to stress. You may also feel unpleasant emotions while completing the COVID-19 Survey wherein you will be asked to answer questions regarding negative experiences you may have had during the pandemic. If you feel discomfort at any point of the study and would need help in dealing with it, please contact Tyndale Counselling Services at

COMPENSATION: If you are enrolled in a Psychology class at Tyndale University, you will be compensated with a 1% extra credit in a Psychology course of your choice. If you choose not to accept extra credit, you will instead be compensated with one entry in a draw for a $25 Amazon gift card.

CONFIDENTIALITY: All results taken from the scales and surveys will be kept confidential. Your name will be randomly assigned a number; thus, your responses will not be traceable to you. The investigator will also keep all records in a securely locked device. All information collected in this study will not be permanently stored.

VOLUNTARY PARTICIPATION: Your decision to participate in this study is completely voluntary. You will not be required to participate or respond to questions you wish not to respond to. Your refusal to participate will not affect your relationship with the investigator or Tyndale University.

RIGHT TO WITHDRAW FROM STUDY: If you decide to participate, you can withdraw your participation at any point by leaving Surveymonkey.com. Your withdrawal will not be penalized and will not affect your relationship with the investigator or Tyndale University.

QUESTIONS ABOUT THE STUDY: If you have any question or concern about the study, please contact either of the following:

Kendra Jalmasco:

Nancy Ross:

This study is pending approval of Tyndale's Research Ethics Board. If you have any question or concern about your rights as a participant, please contact:

Tyndale's Research Ethics Board:

SECONDARY USE OF DATA: The data collected in this study might be reanalyzed by other researchers. However, your results will remain confidential and will not be attributed to your identity. Do you consent to future secondary use of your data?

Yes No

AGREEMENT: By signing below, you are indicating that you have read the information provided above and that you are agreeing to participate in this study. Your signature will convey that you are aware of the potential risks of your participation and that you are entitled to withdraw at any time without penalty. By signing, you are agreeing to have your results examined, based on the terms of confidentiality listed above.

Your consent does not mean that you are giving up any of your legal rights.

_____ _____

Signature of Participant Date

Appendix B

Student COVID-19 Survey

This survey is designed to better understand your academic experience during the time of COVID-19. Please complete the survey by circling the number that best describes your point of view on the following statements. Please keep in mind that your responses will be kept confidential.

	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
I had sufficient access to tools required for digital learning (internet, laptop/computer, video conferencing software, library sources, etc.).	1	2	3	4	5
During online classes, I experienced technical issues that impeded my learning experience.	1	2	3	4	5
My home environment was conducive to effective learning/studying.	1	2	3	4	5
During the time of remote learning, I was able to effectively connect with my professors when I need assistance.	1	2	3	4	5
During the time of remote learning, I was able to effectively connect with my classmates when I need assistance.	1	2	3	4	5
During the time of remote learning, I was given enough time to complete online coursework (quizzes, forums, etc.).	1	2	3	4	5
My learning experience has been negatively impacted by the transition to remote learning.	1	2	3	4	5
I have become less motivated to study/learn since the transition to remote learning.	1	2	3	4	5
During the time of remote learning, I felt more	1	2	3	4	5

forgetful than usual.					
During the time of remote learning, I found it harder to concentrate on school work.	1	2	3	4	5
I felt unhappy in the environment where I was quarantined.	1	2	3	4	5
My inability to see my friends/family resulted to feelings of loneliness.	1	2	3	4	5
It was difficult to find social support (from church, friends, family, etc.), due to the restrictions in place.	1	2	3	4	5
I felt significantly anxious about the uncertainty of my academic future.	1	2	3	4	5
I felt significantly anxious about the uncertainty of my professional future.	1	2	3	4	5
I felt significant levels of stress due to reasons inflicted on me by the pandemic (transition to remote learning, financial setbacks, food/housing insecurity, etc.).	1	2	3	4	5
I constantly feared that I and/or a loved one will contract COVID-19.	1	2	3	4	5
I experienced grief from losing a loved-one to COVID-19.	1	2	3	4	5
I experienced emotional distress due to friends and/or family members who contracted COVID-19.	1	2	3	4	5
At some point during the time of remote learning, I contracted COVID-19 and was symptomatic.	1	2	3	4	5
I got more sleep during the time of remote learning.	1	2	3	4	5
My ability to provide for my needs (food, housing, bills, etc.) have been impeded by the pandemic.	1	2	3	4	5

During the time of remote learning, I spent more time online than I feel is healthy for me.	1	2	3	4	5

Appendix C

Profile of Emotional Competence

The following statements relate to the ways you may deal with your emotions, as well as that of other people. For each item, you will rate how much each statement applies to you from a scale of 1 to 5. Please respond simultaneously while keeping in mind how you would naturally respond to each statement.

	Never	Occasionally	Sometimes	Frequently	Always
As my emotions arise I don't understand where they come from.	1	2	3	4	5
I don't always understand why I respond in the way I do.	1	2	3	4	5
If I wanted, I could easily influence other people's emotions to achieve what I want.	1	2	3	4	5
I know what to do to win people over to my cause.	1	2	3	4	5
I am often at a loss to understand other people's emotional responses.	1	2	3	4	5
When I feel good, I can easily tell whether it is due to being proud of myself, happy or relaxed.	1	2	3	4	5
I can tell whether a person is angry, sad or happy even if they don't talk to me.	1	2	3	4	5
I am good at describing my feelings.	1	2	3	4	5
I never base my personal life choices on my emotions.	1	2	3	4	5
When I am feeling low, I easily make a link between my feelings and a situation that affected me.	1	2	3	4	5
I can easily get what I want from others.	1	2	3	4	5

I easily manage to calm myself down after a difficult experience.	1	2	3	4	5
I can easily explain the emotional responses of the people around me.	1	2	3	4	5
Most of the time I understand why people feel the way they do.	1	2	3	4	5
When I am sad, I find it easy to cheer myself up.	1	2	3	4	5
When I am touched by something, I immediately know what I feel.	1	2	3	4	5
If I dislike something, I manage to say so in a calm manner.	1	2	3	4	5
I do not understand why the people around me respond the way they do.	1	2	3	4	5
When I see someone who is stressed or anxious, I can easily calm them down.	1	2	3	4	5
During an argument I do not know whether I am angry or sad.	1	2	3	4	5
I use my feelings to improve my choices in life.	1	2	3	4	5
I try to learn from difficult situations or emotions.	1	2	3	4	5
Other people tend to confide in me about personal issues.	1	2	3	4	5
My emotions inform me about changes I should make in my life.	1	2	3	4	5
I find it difficult to explain my feelings to others even if I want to.	1	2	3	4	5
I don't always understand why I am stressed.	1	2	3	4	5
If someone came to me in tears, I would not know what to do.	1	2	3	4	5
I find it difficult to listen to people who	1	2	3	4	5

are complaining.					
I often take the wrong attitude to people because I was not aware of their emotional state.	1	2	3	4	5
I am good at sensing what others are feeling.	1	2	3	4	5
I feel uncomfortable if people tell me about their problems, so I avoid it.	1	2	3	4	5
I know what to do to motivate people.	1	2	3	4	5
I am good at lifting other people's spirits.	1	2	3	4	5
I find it difficult to establish a link between a person's response and their personal circumstances.	1	2	3	4	5
I am usually able to influence the way other people feel.	1	2	3	4	5
If I wanted, I could easily make someone feel uneasy.	1	2	3	4	5
I find it difficult to handle my emotions.	1	2	3	4	5
The people around me tell me I don't express my feelings openly.	1	2	3	4	5
When I am angry, I find it easy to calm myself down.	1	2	3	4	5
I am often surprised by people's responses because I was not aware they were in a bad mood.	1	2	3	4	5
My feelings help me to focus on what is important to me.	1	2	3	4	5
Others don't accept the way I express my emotions.	1	2	3	4	5
When I am sad, I often don't know why.	1	2	3	4	5

Quite often I am not aware of people's emotional state.	1	2	3	4	5
Other people tell me I make a good confidant.	1	2	3	4	5
I feel uneasy when other people tell me about something that is difficult for them.	1	2	3	4	5
When I am confronted with an angry person, I can easily calm them down.	1	2	3	4	5
I am aware of my emotions as soon as they arise.	1	2	3	4	5
When I am feeling low, I find it difficult to know exactly what kind of emotion it is I am feeling.	1	2	3	4	5
In a stressful situation I usually think in a way that helps me stay calm.	1	2	3	4	5

Appendix D

Brief COPE

The following statements relate to the ways you may cope with a stressful situation. For each item, you will rate how each statement applies to you from a scale of 1 to 4, with 1 meaning that the statement does not describe you at all and 4 meaning that the statement describes you very well. Please respond simultaneously while keeping in mind how you naturally respond when you face a hardship in your life.

	I don't do this at all	**I do this a little bit**	**I do this a medium amount**	**I do this a lot**
I turn to work or other activities to take my mind off things.	1	2	3	4
I concentrate my efforts on doing something about the situation I'm in.	1	2	3	4
I say to myself "this isn't" real	1	2	3	4
I use alcohol or other drugs to myself feel better.	1	2	3	4
I get emotional support from others.	1	2	3	4
I give up trying to deal with it.	1	2	3	4
I take action to try to make the situation better.	1	2	3	4
I refuse to believe that it has happened.	1	2	3	4
I say things to let my unpleasant feeling escape.	1	2	3	4
I get help and advice from other people.	1	2	3	4
I use alcohol or other drugs to help me get through it.	1	2	3	4
I try to see it in a different light, to make it seem more positive.	1	2	3	4
I criticize myself.	1	2	3	4

I try to come up with a strategy about what to do.	1	2	3	4
I get comfort and understanding from someone.	1	2	3	4
I give up the attempt to cope.	1	2	3	4
I look for something good in what is happening.	1	2	3	4
I make jokes about it.	1	2	3	4
I do something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping or shopping.	1	2	3	4
I accept the reality of the fact that it has happened.	1	2	3	4
I express my negative feelings.	1	2	3	4
I try to find comfort in my religion or spiritual beliefs.	1	2	3	4
I try to get advice or help from other people about what to do.	1	2	3	4
I learn to live with it.	1	2	3	4
I think about what steps to take.	1	2	3	4
I blame myself for thing that happened.	1	2	3	4
I pray or meditate.	1	2	3	4
I make fun of the situation.	1	2	3	4

Appendix E

General Demographic Survey

Please answer the following questions as accurately as you can.

1. **How old are you?**

   - ❑ 18-24 yrs. old
   - ❑ 25-34 yrs. old
   - ❑ 35-44 yrs. old
   - ❑ 45-54 yrs. old
   - ❑ 55 yrs. old and above

2. **What is your gender?**

   - ❑ Male
   - ❑ Female
   - ❑ Non-binary
   - ❑ Prefer not to say
   - ❑ Other: _____

3. **What is your race/ethnicity? (you can choose more than one)**

   - ❑ African/ Black/ Caribbean
   - ❑ Asian/ Pacific Islander
   - ❑ Caucasian/ White
   - ❑ Hispanic/ Latino
   - ❑ Native American
   - ❑ Other: _____

4. **Please indicate your marital status:**

- ❑ Single
- ❑ Married
- ❑ Separated/Divorce
- ❑ Living Together/Common-Law
- ❑ Widowed

5. **Which of the following best describes your living situation during the academic year, 2020-2021?**
   - ❑ With my parents/ family
   - ❑ With my spouse/ partner
   - ❑ With roommates or friends
   - ❑ Alone
   - ❑ Other: _____

6. **Which country did you reside in during the academic year, 2020-2021?**

   _____

7. **What is your average GPA during the academic year, 2020-2021?**
   - ❑ 3.6-4.0
   - ❑ 3.4-3.6
   - ❑ 3.0-3.4
   - ❑ 2.6-3.0
   - ❑ 2.2-2.6
   - ❑ 1.8-2.2
   - ❑ 1.4-1.8
   - ❑ 1.0-1.4

- ❑ 0.6-1.0
- ❑ below 0.6