

Interns' Self-efficacy, Internet Addiction, Wellbeing, and Online Learning Experiences: A Descriptive-Correlational Study



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Abstract The ramifications of Internet addiction on psychological and social wellbeing have been extensively demonstrated in previous studies involving college students, but examining the mediating role of Internet addiction between self-efficacy and overall wellbeing has not been well-investigated, particularly among interns. This study first assessed the online learning experiences of a sample of interns during the COVID-19 pandemic and then explored the association between three constructs: self-efficacy, Internet addiction, and overall wellbeing. Fresh graduates engaging in an online internship program were recruited to participate in a cross-sectional online survey during the outbreak of COVID-19 in Bahrain. Self-administered scales of General Self-Efficacy (GSE), Internet Addiction Test (IAT), and PERMA Profiler were used to collect data about self-efficacy, Internet addiction, and overall wellbeing. Pearson's correlation coefficient was used to measure the strength of the hypothesized relationships between these three constructs. A structural equation model was used to analyze the mediating role of Internet addiction. Overall, the higher the self-efficacy the participants perceived, the lesser Internet addiction they exhibited ($r = -0.23, p = 0.02$), and the more wellbeing they felt ($r = 0.45, p < 0.01$). Internet addiction has been found as a mediating factor between self-efficacy and overall wellbeing ($b = 0.12, p$

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< 0.001). 61.5% of the participants had mild to moderate levels of Internet addiction. Experiencing less communication with colleagues because of online learning was one of the top-rated online experiences and consistently, enjoying positive relationships was the lowest-rated pillar of PERMA. Therefore, problematic Internet use that negatively affects individuals' health should be managed through self-efficacy-boosting strategies. Further, fostering communications and social connectedness disrupted with excessive reliance on virtual environments demands special attention by counseling psychologists and e-education providers/developers.

Keywords Bahrain · Internship · Self-efficacy · Internet addiction · Wellbeing · Virtual learning

1 Introduction

In recent years, and particularly during the COVID-19 pandemic in 2020, there has been an unprecedented upsurge in the use of and reliance on information and communication technologies (ICTs), for an array of functions, including but not limited to distance work, education, shopping, leisure, and social connectedness (De' et al., 2020). Due to the pandemics' drastic and long-lasting disruptions on many industries and sectors, with a particular focus on education, most colleges and universities worldwide closed their campuses. They significantly changed their courses into fully online or at least a hybrid format (Lockee, 2021). In the twenty-first century, Internet-based activities growth and artificial intelligence (AI) usage in higher education of the modern world has been continuously growing even before the pandemic (Ikedinachi et al., 2019). However, the pandemics' strong catalyzing effect on inducing an abrupt transformation of the global higher education towards greater adoption of online education (e-learning) is evident (De' et al., 2020; Gallagher & Palmer, 2020). This has been associated with several adaptation-related, psychological, and behavioral challenges at the individual and organizational levels (Besser et al., 2020; Maatuk et al., 2021).

Studies investigating university students' psychological wellbeing have been abundant during the COVID-19 pandemic due to the crisis's devastating effects on different life aspects and the recognized vulnerability of students' population (Batra et al., 2021; Browning et al., 2021; Cao et al., 2020; Ebrahim et al., 2021). Many of these studies indicated the pandemic's negative psychological ramifications like increased students' symptomatic manifestations or suffering from anxiety, depression, stress, mood disturbances, emotional distortions, life dissatisfaction, and sleep disorders. Also, substance abuse, abnormal eating patterns, internet addiction, and unhealthy lifestyles were amongst the reported students' behaviors during the pandemic. In meta-analysis studies involving college students from different nations worldwide during 2020 found an overall pooled prevalence rates ranging between 29.1% and 39.4 for anxiety, between 23.2% and 31.2 for depression, 26.0% for stress, 29.8% for post-traumatic stress disorder, and 50.5% for impaired sleep quality (Batra

et al., 2021; Ebrahim et al., 2021). These figures highlight the importance of recognizing and addressing university students' risk factors for mental health and related consequences on their education and quality of life.

A serious issue that needs to be addressed is the heightened prevalence rates of Internet addiction and Internet-based addictive behaviors among adolescents and college students during the COVID-19 pandemic (Lin, 2020; Masaeli & Farhadi, 2021; Sujarwoto et al., 2021). In a study conducted in China on 8,098 college students, it was found that the prevalence of suicide attempts among excessive internet users reached 21.4% (Shen et al., 2020). Further, extant evidence indicates that internet addiction induces anxiety, depression, and disturbed mental health, which potentially could devastate learners' academic performance or induce academic procrastination (Aznar-Díaz et al., 2020; Lebni et al., 2020; Shen et al., 2020). Within this context, some studies pointed out that college students' perceived self-efficacy shows a negative relationship with Internet addictive patterns of use (Berte et al., 2021; Gazo et al., 2020). Self-efficacy is a crucial concept in social–cognitive theory, which refers to "people's beliefs about their capabilities to exercise control over their level of functioning and over events that affect their lives" (Bandura, 1993). Such control is toned by the influence of cognitive, motivational, affective, and selection processes associated with perceived self-efficacy. However, the strength of the self-efficacy-Internet addiction relationship or even its absence is an area of controversy amongst different research (Alrekebat, 2016; Craparo et al., 2014; Tavakoli et al., 2014).

Despite the proliferating research on high school and higher education populations to investigate their levels of self-efficacy, Internet addiction, and wellbeing, unfortunately, fresh graduates (interns), one of the vital community segments, have not been paid adequate attention in research activities. The transition stage from education to employability and its related uncertainties or expectations towards dream fulfillment is in itself a solid reason to steer research on interns. Considering the pandemic devastating and transformational effects, interns' online learning experiences, internet addiction, self-efficacy, and overall wellbeing have become of more importance to be objectively investigated. Hence, the current study was designed to investigate the relationship between specific online learning experiences, levels of perceived self-efficacy, Internet addiction, and overall wellbeing among a sample of interns during the Pandemic of COVID19. This has led to the formulation of the following research hypotheses and the development of a testable conceptual model (see Fig. 1).

Hypotheses

- H1: Self-efficacy has a direct association with overall wellbeing.
- H2: Self-efficacy has a direct association with Internet addiction.
- H3: Internet addiction has a direct association with overall wellbeing.
- H4: Internet addiction mediates the relationship between self-efficacy and overall wellbeing.

The chapter comprises this introduction, followed by the sections of materials and methods, results, discussion, limitations, study implications and recommendations, and the conclusion.

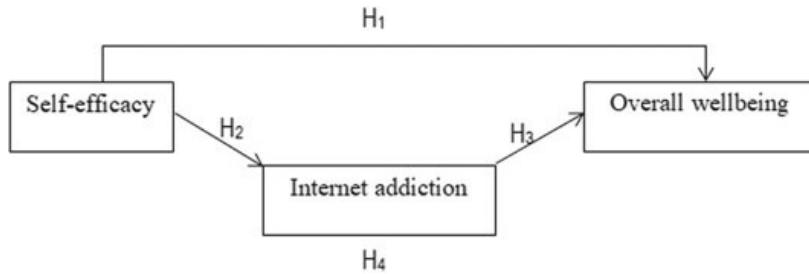


Fig. 1 The conceptual model

2 Materials and Methods

2.1 Ethics, Participants and Sampling

Respondents were eligible to participate in the study if they were above 18 years old, fresh graduates, and participants in the internship program provided by AlQoud Enterprise. AlQoud Enterprise is a professional consultancy firm that has a memorandum of agreement with Bahrain's Ministry of Labor to deliver internship training programs by which the interns are expected to acquire knowledge, skills, and field experience in the working world. This study's sample was selected from the Batch of 125 trainees enrolled in September 2021 and have received eight weeks of virtual training. Participation was entirely voluntary, and there was no monetary or non-monetary compensation for the respondents' participation. Access to the online questionnaire requires reading a set of instructions that the questionnaire is voluntary with maintaining the anonymity and confidentiality of responses and that no personal data such as a name or an identification number will be requested. All participants provided informed consent prior to participating in the research by indicating that (1) accessing and responding to the questionnaire is based on the understanding of the research nature and (2) taking part in the research is on their own accord with complete freedom of withdrawal at any time. Ethical approval for the study was obtained from the Research Advisory Board of Bahrain's Corporate Social Responsibility Society (BCSRC)—Manama, Kingdom of Bahrain. Adherence to the set of ethical principles provided by the Declaration of Helsinki and also the American Psychological Association (APA) has been a priority by the researchers (American Psychological Association, 2016; World Medical Association, 2001).

In order to determine the recommended sample size, the following formula was used (www.raosoft.com/samplesize.html):

$$\begin{aligned}
 x &= Z(c/100)^2 r(100 - r) \\
 n &= N x / ((N - 1)E^2 + x) \\
 E &= \text{Sqrt}[(N - n)x / n_{(N-1)}]
 \end{aligned}$$

5% margin of error (M.O.E) was accepted with setting the response distribution to 50% and the confidence level to 95%; hence, the recommended sample size (n) for the total population of 125 interns is 95. A mixed sampling design of total population sampling and self-selection sampling was adopted. The potential participants were approached through direct contacts, and also the e-questionnaire-based invitation was broadcasted in the private online communication platform, which embraces the entire targeted population.

Briefly, within a week, the survey was closed with a total of 96 completed responses (77% response rate), which the researchers accepted as the recommended sample size was attained. The demographic characteristics of the sample are displayed in Table 1.

2.2 Measures

The survey instrument was in English, and that there was confidence towards the respondents' level of English language proficiency as they have been graduated from academic programs taught in English. We administered the English version of the following scales:

The General Self-Efficacy Scale (GSES) (Weinman et al., 1995). This is a valid and reliable self-report scale composed of 10 items measured on a four-point rating scale from 1 (not at all true) to 4 (exactly true)—all items are worded in one direction. The range is from 10 to 40 points upon adding up all responses to a sum score. There is no cut-off score, and that establishing groups could take place based on a median split. The GSES evaluates the individuals' perceptions about their capacity to cope with life's demands, and it represents an optimistic sense of personal competence necessary for motivation and accomplishment (Bandura, 1993; Weinman et al., 1995). The GSES as a unidimensional construct has been applied in multicultural validation studies, which suggest the globality of the construct and endorse its excellent psychometric properties for adults (including adolescents). The scale showed a good internal consistency ($\alpha = 0.85$) for a sample of 19,120 individuals from 25 countries (Scholz et al., 2002).

Internet Addiction Test (IAT) (Young, 1998). This is a valid and reliable self-report scale consisting of 20 items scored on a five-point Likert scale with an additional response of 'Not applicable = 0'—all items are worded in one direction. The range is from 0 to 100 points upon adding up all responses to a sum score. The instrument evaluates the severity of Internet addictive behavior. The interpretation of total scores is as follows: 0–30 points indicate a normal level of Internet usage, 31–49 indicate a mild level of Internet addiction, 50–79 points to moderate Internet addiction, and scores of 80–100 reflect severe dependence on the Internet. Young describes addictive Internet use as an impulse-control disorder that does not implicate an intoxicant but has the potential to erode one's performance at academic, social, and occupational levels (Ibid). However, the IAT was applied among different sub-populations in many countries, provided a comprehensive picture of Internet addiction prevalence, and

Table 1 Demographic data of participants

Domain		Frequency (%)
Gender	Male	28 (29.2)
	Female	68 (70.8)
Nationality	Bahraini	64 (66.7)
	Other	32 (33.3)
Age group	18–20	10 (10.4)
	21–23	36 (37.5)
	24–26	21 (21.9)
	27–30	20 (20.8)
	31–35	6 (6.3)
	36 and over	3 (3.1)
Academic degree	Diploma	10 (10.4)
	Bachelors	81 (84.4)
	Masters	5 (5.2)
University type	Public (local)	53 (55.2)
	Private (local)	31 (32.3)
	Private (international)	12 (12.5)
Academic discipline	Business administration	34 (35.4)
	Information technology	21 (21.9)
	Sciences	2 (2.1)
	Arts	8 (8.3)
	Engineering	14 (14.6)
	Law	2 (2.1)
	Medical sciences	1 (1.0)
	Other	14 (14.6)
Preferred learning mode	Face to face	42 (43.8)
	Online	22 (22.9)
	Blended	32 (33.3)

also exhibited good psychometric properties (Cheng & Li, 2014; Moon et al., 2018; Samaha et al., 2018; Sela et al., 2021). Further, in an Arab sample, the instrument has been validated and yielded a high internal reliability score of 0.914 (Samaha et al., 2018).

PERMA Profiler scale (Butler & Kern, 2016). This is a valid and reliable self-administered scale composed of a 15-item scale to measure Seligman's five pillars of wellbeing, including Positive emotions, Engagement, Relationships, Meaning, and Accomplishment (three items per subscale). The PERMA Profiler encompasses eight supplementary items that assess negative emotions (three items), health (three

items), loneliness (one item), and overall happiness (one item). All items have a rating scale of 11-point anchored by 'never' at the beginning and 'always' at the end. All items are worded in one direction. Scores are calculated by averaging the items comprising each pillar, and the overall wellbeing score is calculated by averaging the entire items representing the PERMA. There is evidence implying that the PERMA scale has acceptable reliability, cross-time stability, and convergent and divergent validity, (α range = 0.80–0.93) (Butler & Kern, 2016; Ryan et al., 2019; Umucu et al., 2020).

Online learning experiences. The researchers developed 13 items based on a review of relevant studies conducted recently during the COVID-19 pandemic and attempted to address college students' online experiences of college students (Adedoyin & Soykan, 2020; Lei & So, 2021; Mukhtar et al., 2020; Rahali et al., 2020; Selvanathan et al., 2020). Alongside, the researchers' area of expertise has been useful to formulate these items in a meaningful and valid manner. A matrix question was used, and that the extent of respondents' agreement or disagreement towards the developed 13 statements were objectively collected through anchoring a five-point Likert scale ranging from strongly agree (1) to strongly disagree (5). Briefly, these items focus on how online learning has been supportive for a participant to (1) attain academic success, (2) gain sufficient knowledge from courses material, (3) improve learning ability, (4) control on what to be extracted from textbooks, (5) work hard, (6) speed-up building-up knowledge, (7) communicate ideas and opinions, (8) understand the course material with less difficulty, (9) communicate more with colleagues, (10) motivate to study, (11) experience less boredom, (12) experience less anxiety about keeping up to date with course work, and (13) keep-up interest in most of the life activities. Items 8, 9, 11, 12, and 13 were formulated in a negative direction, while the remaining ones were positively stated.

2.3 Statistical Analysis

In this study, the analyses were performed using the Statistical Package for the Social Sciences version (SPSS) version 23. All collected responses were exported as CSV file format from the survey website. These responses represented completed surveys as all questions were inaugurated with the option of 'required answer' to proceed. The data were managed in SPSS to administer descriptive analysis to calculate mean, standard deviation, and frequencies. Pearson's correlation analysis was applied to assess the relationships between different variables. A t-test and analysis of variance (ANOVA) test were used to compare the means of two groups and three groups, respectively, and regression analysis to test the mediation effect using Andrew F. Hayes's PROCESS macro for SPSS (Hayes, 2017). A p-value of less than 0.05 (typically ≤ 0.05) was considered statistically significant.

3 Results

The descriptive statistics related to the findings of self-efficacy, Internet addiction, and PERMA constructs are displayed in Table 2 and Fig. 2. Regarding self-efficacy ($M: 31.72$, $SD: 4.69$), 54% of the participants' scores were above the median value, which was 31. Results of Internet addiction ($M: 37.82$, $SD: 15.21$) showed that 61.5% of the participants had mild to moderate levels of internet addiction, while the presence of severe Internet addiction was rare. The analysis of PERMA ($M: 6.98$, $SD: 1.34$) had given a median value of 6.97, and that 54.2% of the participants' scores were above the median value. Within this construct, the 'accomplishment' pillar had the highest mean value ($M: 7.06$, $SD: 1.63$), followed by the 'meaning' pillar ($M: 7.04$, $SD: 1.85$); however, the pillar of relationships received the lowest rating ($M: 6.83$, $SD: 1.99$).

Through examining the descriptive findings of online learning experiences, the highest rating was associated with the experience of perceiving that online learning was helpful to improve the learning ability ($M: 3.53$, $SD: 1.12$). Also, the experience of "having less communication with colleagues because of online learning" ($M: 3.53$, $SD: 1.31$) shared the first rank of the highest rating. The lowest rated experience was "confronting difficulties to understand the material of courses with online learning" ($M: 3.10$, $SD: 1.25$).

The matrix correlation results in Table 2 indicated that self-efficacy has a significant and negative association with Internet addiction ($r = -0.23$, $p = 0.02$), but it has a significant and positive association with overall wellbeing (PERMA) ($r = 0.45$, $p < 0.01$). Hence, H_1 and H_2 are accepted. In addition, findings showed that Internet addiction has a negative and significant relationship with overall wellbeing ($r = -0.23$, $p < 0.05$). Therefore, H_3 is supported. Based on examining the regression models generated by using Andrew F. Hayes's process, it was found that while self-efficacy was a significant predictor for both wellbeing and Internet addiction variables, it is no longer significant in the presence of the Internet addiction variable, confirming the mediation effect. I.e., the mediation process showed that the mediator (Internet addiction), controlling for self-efficacy, was significant, $b = 0.12$, $t(93) = 4.49$, $p < 0.01$. And that, controlling for the mediator (Internet addiction), self-efficacy was not a significant predictor of wellbeing, $b = -0.01$, $t(93) = -1.41$, $p = 0.16$. Hence, the results support the acceptance of H_4 .

Worth mentioning, mainly self-efficacy was significantly correlated with two online experiences "confronting a difficulty to understand the courses material" ($r = 0.31$, $p < 0.01$), and "suffering anxiety about keeping up to date with course work" ($r = 0.266$, $p < 0.01$). In contrast, there were no statistically significant correlations between Internet addiction and any of scored online experiences. As expected, ANOVA analysis showed that participants who preferred face-to-face learning mode—compared to those who preferred either hybrid or solely online learning modes—recognized online learning as (1) more difficult to understand the courses material ($F [2, 93] = 7.63$, $p < 0.01$), (2) less motivating to study ($F [2, 93] = 3.26$, $p < 0.05$), (3) more boredom inducing ($F [2, 93] = 20.66$, $p < 0.01$), (4)

Table 2 Correlations matrix

Factor	Mean ± SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Internet addiction	37.82 ± 15.21	1	-0.231*	-0.231*	-0.109	-0.084	-0.287**	-0.285**	-0.158	-0.299**	0.033	0.163	0.084
2. Self-efficacy	31.72 ± 4.69	-0.231*	1	0.453**	0.241*	0.291**	0.294**	0.448**	0.530**	0.381**	0.143	-0.108	-0.051
3. PERMA	6.98 ± 1.34	-0.231*	0.453**	1	0.806**	0.582**	0.791**	0.890**	0.747**	0.544**	0.591**	-0.106	-0.182
4. Positive emotion	6.99 ± 1.72	-0.109	0.241*	0.806**	1	0.320**	0.545**	0.691**	0.428**	0.478**	0.671**	-0.399**	-0.376**
5. Engagement	6.95 ± 1.50	-0.084	0.291**	0.582**	0.320**	1	0.258*	0.365**	0.494**	0.276**	0.148	0.178	0.197
6. Relationships	6.83 ± 1.99	-0.287**	0.294**	0.791**	0.545**	0.258*	1	0.704**	0.430**	0.463**	0.448**	-0.072	-0.273**
7. Meaning	7.04 ± 1.85	-0.285**	0.448**	0.890**	0.691**	0.365**	0.704**	1	0.641**	0.534**	0.435**	-0.136	-0.200
8. Accomplishment	7.06 ± 1.63	-0.158	0.530**	0.747**	0.428**	0.494**	0.430**	0.641**	1	0.297**	0.248*	0.112	0.059
9. Health	7.03 ± 2.26	-0.299**	0.381**	0.544**	0.478**	0.276**	0.463**	0.534**	0.297**	1	0.337**	-0.219*	-0.291**
10. Happiness	7.10 ± 2.22	0.033	0.143	0.591**	0.671**	0.148	0.448**	0.435**	0.248*	0.337**	1	-0.170	-0.175
11. Negative emotion	5.63 ± 1.92	0.163	-0.108	-0.106	-0.399**	0.178	-0.072	-0.136	0.112	-0.219*	-0.170	1	0.456**
12. Loneliness	5.02 ± 3.20	0.084	-0.051	-0.182	-0.376**	0.197	-0.273**	-0.200	0.059	-0.291**	-0.175	0.456*	1

* Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

Note PERMA (Positive emotions, Engagement, Relationships, Meaning, and Accomplishment)

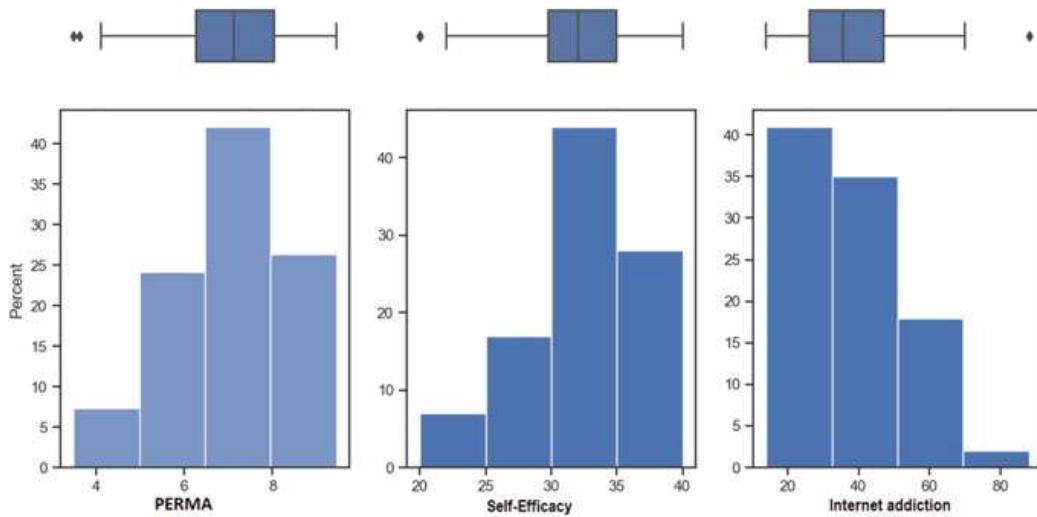


Fig. 2 Percentage of scores and medians for the main variables of the study

more anxiety-inducing to keep up to date with course work ($F [2, 93] = 10.80, p < 0.01$), and (5) more interest-destroying in most of the life activities ($F [2, 93] = 5.29, p < 0.01$). However, participants preferring online learning mode, compared to their counterparts, indicated that their online experiences as (1) more supportive to sped-up knowledge building ($F [2, 93] = 3.18, p < 0.05$), and (2) more convenient to communicate ideas and opinions with teachers ($F [2, 93] = 3.69, p < 0.05$).

Through comparing the means values, there was no significant difference between the male and female groups with regards to levels of self-efficacy, Internet addiction, and overall wellbeing ($p > 0.05$). Also, there was no significant difference between Bahraini and non-Bahraini groups with regards to levels of Internet addiction and overall wellbeing ($p > 0.05$); however, non-Bahraini interns indicated higher levels of perceived self-efficacy (33.56 ± 3.80), compared to Bahraini interns (30.80 ± 4.84), ($t [94] = -2.83, p < 0.01$). At the aspect of online learning experiences, there was no significant difference between the male and female groups with regards to rating levels towards all stated online learning experiences ($p > 0.05$), except for two experiences. Explicitly it was found that perceived difficulty in understanding the course material via online learning was greater in men (3.64 ± 1.31) than women (2.88 ± 1.17), ($t [94] = 2.80, p < 0.01$); despite that finding, men considered online learning helpful to speed-up building-up knowledge (3.89 ± 1.07) in a greater extent than women (3.19 ± 1.16), ($t [94] = 2.75, p < 0.01$). From a different angle, there was no significant difference between Bahraini and non-Bahraini groups with regards to rating levels towards all stated online learning experiences ($p > 0.05$), except for one experience. Non-Bahraini interns indicated that they felt more bored with online learning (3.84 ± 0.99) than Bahraini interns (2.98 ± 1.11), ($t [94] = -3.72, p < 0.001$).

4 Discussions

During the abrupt switch to remote learning induced by the COVID-19 pandemic, this study attempted to evaluate interns' perceived e-learning experiences and hypothesized a conceptual model of relationships between perceived general self-efficacy, Internet addiction, and overall wellbeing PERMA (Positive emotion, Engagement, positive relationships, meaning, and accomplishment). This research is the first of its kind in the Arab region to target the interns' population to investigate the variables mentioned earlier, to provide education and market decision-makers with evidence helpful for informed decision-making. The main findings showed that surveyed interns' e-learning experiences of anxiety and difficulties in understanding materials were associated with their perceived self-efficacy. Also, the interrelationships between the three variables of perceived general self-efficacy, Internet addiction, and overall wellbeing were statistically significant.

With the deployment of Web 2.0, the models of e-learning in the 21st Century have become diverse and advanced. These include virtual meetings, discussion boards, and recorded videos, which aim to ensure content accessibility and encourage active engagement of learners (Cairns & Alshahrani, 2013). Within the increasing involvement with such models, our finding related to the participants' experience of learning ability improvement confirms the role of distance technologies in developing users' skills of self-regulated learning and enabling a personal learning environment (Yen et al., 2016). Despite this advantage, sustaining adequate levels of social connectedness emerges as the highest challenge that online learners could encounter. The results are consistent with prior evidence that off-campus students are more likely to have a sense of social isolation than their counterparts in face-to-face learning environments (Ali & Smith, 2015; Irani et al., 2014). Furthermore, the relationships dimension of the overall wellbeing factor received the lowest rating in this study's investigation, and hence, despite the unprecedented increased reliance on technology-based interactions during the COVID-19 pandemic, there has been an obvious issue concerning the fulfillment of social needs and aggravated vulnerability to experiencing loneliness or isolation (Dimmock et al., 2021; Shah et al., 2020).

Self-efficacy has been noted in several different disciplines, and it could be utilized differently in multiple domains, depending entirely on whether it is relevant to a particular context or covers a broad range. It was revealed, in particular, that self-efficacy was related to online learning self-efficacy, such as e-learning as well as using electronic technology. Prior research has shown that students with strong academic self-efficacy report less academic anxiety and stress and function effectively in academic activities (Elias & MacDonald, 2007; Gore, 2006; Hejazi et al., 2009; Nie et al., 2011). However, this study's findings highlighted that higher levels of perceived self-efficacy were associated with greater experiences of difficulty comprehending the course content and suffering anxiety with sustaining the coursework. Such results could be interpreted within the assertions provided by Strack et al. (2017), that working best and achieving goals by individuals can be attained when they are clear about their feelings and deploy anxiety as a motivating

element. However, few studies reported that students might experience stress and anxiety as a result of diminished self-efficacy with Learning Management Systems (LMS) and subsequent inability to fulfill their e-learning activities (Aldhahi et al., 2021; Alqurashi, 2016; Martin et al., 2010). Therefore differentiating between the perceived general self-efficacy and task-specific self-efficacy in predicting the ability to manage situations or perform a course of actions is necessary to avoid misinterpretation. Another possible factor to consider when analyzing such results is the participants' likelihood of overestimating their confidence (Moores & Chang, 2009).

This study found that difficulties in learning, demotivation, and anxiety were linked with face-to-face learning-preferring individuals than others who preferred online mode. This calls for viewing self-efficacy in the context of online learning as it could play a key factor for academic achievement and successful virtual learning experience (Alahmari, 2017; Alqurashi, 2016; Bolliger & Halupa, 2018; Bubou & Job, 2020; Gavrilis et al., 2020; Hodges, 2008; Jan, 2015; Lee et al., 2020; Olivier et al., 2019; Puzziferro, 2008; Schunk, 1991; Shea & Bidjerano, 2010; Stephen & Rockinson-Szapkiw, 2021; Weidlich & Bastiaens, 2018; Yokoyama, 2019; Yýldýz Durak, 2018; Zilka et al., 2019; Zimmerman, 2000; Zimmerman & Kulikowich, 2016). Students' online learning self-efficacy (OLSE) is associated with improved learning, mental health, and motivation (Nie et al., 2011). It has been found as a potent predictor of academic satisfaction by Gunawardena et al. (2010) and many other scholars (Gunawardena et al., 2010; Lee & Hwang, 2007; Lee & Mendlinger, 2011; Lim, 2001; Yokoyama, 2019). Such evidence provides a rationale for our study's finding of why those who preferred online learning mode had experienced online learning as more supportive to (1) speed-up knowledge building and (2) vigorously communicate ideas and views with educators.

Considering the results of this study's hypothetical proposition that self-efficacy directly correlates with overall wellbeing, an explanation could be given based on adopted coping strategies (Freire et al., 2020). Individuals who consistently have high self-efficacy are more likely to utilize positive problem-solving coping mechanisms and are better at controlling their behavior and emotions. Accordingly, as a result, stressful situations seemed to have less of an impact on them. On the other hand, people with poor self-efficacy are more likely to use negative coping methods and engage in negative self-talk, resulting in an increased reactivity to stressful circumstances (Bandura, 2002; Schwarzer & Warner, 2013). Social anxiety, loneliness, and social dissatisfaction have been linked to low social self-efficacy (Betz & Smith, 2002). On the other side, high self-efficacy has been linked to positive life satisfaction, along with high self-esteem, interpersonal and professional achievement (Betz & Hermann, 2004; Betz & Schifano, 2000; Betz & Smith, 2002). It is acceptable to assume that students who believe in their abilities to complete their assignments effectively will appreciate the educational process greater; additionally, these individuals should experience more feelings of optimism and accomplishment than students with lower self-efficacy (Dai, 2016; Mega et al., 2014; Pekrun et al., 2011). This is consistent with prior research conclusions (Hayat et al., 2020; Putwain et al., 2013).

Another finding of this study was a significant relationship between internet addiction and self-efficacy, studied in some research. For example, Lee et al. (2001), Kim and Davis (2009), Esen and Gundogdu (2010), Yao and Zhong (2014), and Sari and Aydin (2015) have concluded that there is a strong connection between self-efficacy levels and problematic internet usage. Furthermore, the internet addicts have higher vulnerability to suffering anxiety and depressive symptoms than the non-addicts, and subsequent potential of low academic performance (Akin & Iskender, 2010; Bozoglan et al., 2013; Chen et al., 2020; Cheung et al., 2018; Chiu et al., 2013; Craparo et al., 2014; Lee et al., 2001). Individuals' personal interactions deteriorate, and they become socially disconnected as they spend more time on the internet. Consequently, as the level of internet addiction increases, social self-efficacy decreases (Bakioğlu, 2020; Berte et al., 2019; Iskender, 2018).

5 Limitations

This study has some limitations. The nature of the small size sample drawn from a population of interns at a single private training foundation induces that findings may not be generalizable to interns at other institutions or with other demographics. Besides that, the interpretation of the results should be undertaken with precautions and consideration to the temporal dimension, as during the COVID-19 pandemic, problematic internet use and coping behaviors appear to be elevated during that pandemic (Jahan et al., 2021). Further, social desirability biases are of potential in this study due to the nature of subject self-reports. Another major limitation is the readability of the questionnaire, which was presented in English, and that variation in those respondents' level of English language proficiency is possible. However, we emphasized the importance of Arabic validation of the used tests within the socio-cultural context of this study through future research.

6 Study Implications and Recommendations

This study introduces challenges that interns have experienced with online learning, particularly during the era of the Covid-19 pandemic and the drastic learning evolution. Developing innovative strategies to boost social connectedness in online learning environments is an important priority to support online programs' success and learners' sense of accomplishment. Alongside, higher education providers should seriously consider measuring learners' perception of social connectedness and their satisfaction with technology-mediated communication channels. This study found that individuals with low self-efficacy exhibited more Internet addiction and subsequently enjoyed lesser overall wellbeing. Hence, further research is needed to explore and analyze adults' Internet behavior by considering interactions with different social networks and information platforms that become a significant element of

daily lifestyle for many young adults. Health promotion advocates need to ensure education, awareness, and encouraging healthy lifestyle and habits, including how effectively one can monitor Internet use duration and patterns.

The current study findings concluded that perceived self-efficacy directly correlates with overall wellbeing and is a key factor in academic achievement in virtual learning. Therefore, it is highly beneficial to work on modalities to improve perceived self-efficacy in general and perceived self-efficacy in performing virtual learning. Some recommendations are teaching students how to set specific learning objectives that are attainable, providing education for stress-reducing techniques to help lessen the anxiety associated with learning, and giving special attention to students who have learning difficulties or have high anxiety baseline levels. In general, the study findings enrich learning theories and provide valuable insight into the association of self-efficacy and Internet addiction on young adults' mental, emotional, and social wellness.

7 Conclusion

While many studies have addressed the online experiences, internet-related behaviors, and psychological aspects of college students, especially amid the COVID-19 pandemic, the community of interns has been neglected to a great extent with that regard. Our research, the first of its kind in the region, indicates that interns have an alarming prevalence of internet addiction which mediates the relationship between self-efficacy and overall wellbeing. Hence, institutions providing internship programs need to deploy practical assessment tools to evaluate interns' behavioral health and also to determine effective strategies promoting healthy technology use and resilience to cope with the tectonic shift towards virtual learning.

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