



## OPEN ACCESS

## EDITED BY

Natanael Karjanto,  
Sungkyunkwan University,  
South Korea

## REVIEWED BY

Lai Wai Tan,  
Universiti Tun Hussein Onn Malaysia,  
Malaysia  
Reginamary Matthews,  
University of Nottingham Malaysia Campus,  
Malaysia  
Jenny Ngo,  
Institut Sains dan Teknologi Terpadu  
Surabaya, Indonesia  
Iden Rainal Ihsan,  
Universitas Samudra,  
Indonesia  
Husty Husain,  
Universitas Pendidikan Indonesia,  
Indonesia

## \*CORRESPONDENCE

Maura A. E. Pilotti  
✉ mpilotti@pmu.edu.sa

## SPECIALTY SECTION

This article was submitted to  
Higher Education,  
a section of the journal  
Frontiers in Education

RECEIVED 08 October 2022

ACCEPTED 14 December 2022

PUBLISHED 04 January 2023

## CITATION

Pilotti MAE, Hassan SAM, El Alaoui K and  
Aldossary F (2023) Are law students'  
individual differences in the post-pandemic  
world related to performance?  
*Front. Educ.* 7:1064392.  
doi: 10.3389/feduc.2022.1064392

## COPYRIGHT

© 2023 Pilotti, Hassan, El Alaoui and  
Aldossary. This is an open-access article  
distributed under the terms of the [Creative  
Commons Attribution License \(CC BY\)](https://creativecommons.org/licenses/by/4.0/). The  
use, distribution or reproduction in other  
forums is permitted, provided the original  
author(s) and the copyright owner(s) are  
credited and that the original publication in  
this journal is cited, in accordance with  
accepted academic practice. No use,  
distribution or reproduction is permitted  
which does not comply with these terms.

# Are law students' individual differences in the post-pandemic world related to performance?

Maura A. E. Pilotti<sup>1\*</sup>, Samia A. M. Hassan<sup>2</sup>, Khadija El Alaoui<sup>3</sup>  
and Farah Aldossary<sup>2</sup>

<sup>1</sup>College of Sciences and Human Studies, Prince Mohammad Bin Fahd University, Khobar, Saudi Arabia, <sup>2</sup>College of Law, Prince Mohammad Bin Fahd University, Khobar, Saudi Arabia, <sup>3</sup>Department of Social Sciences, American University of Iraq Sulaimani, Sulaymaniyah, Iraq

The present study examined the dispositions of female undergraduate law students one semester after their return to face-to-face classes. It aimed to determine the contribution of particular dispositions to academic performance. Dispositions selected were those that are known to promote adaptation, such as self-efficacy and emotional intelligence, as well as resistance-to-change attitudes, which are known to do the opposite. Freshmen ( $n=261$ ) and seniors ( $n=236$ ) were included to assess whether dispositions varied with the length of students' academic experience. Participants were students from a society in which females' academic success is seen as key to advancing a sustainable, competitive, and gender-equitable economy. Thus, at the time of the study, these students were expected to quickly readjust to the post-pandemic world of face-to-face instruction. Participants completed questionnaires on the selected dispositions. Academic performance was operationalized as the grade point average obtained in the semester following a return to face-to-face classes. In the study, the length of academic experience mattered. Seniors exhibited greater self-efficacy and emotional intelligence. For both groups, performance increased with emotional reactions to forced change, thereby suggesting that noticing environmental changes that challenge one's sense of agency is beneficial. However, in seniors, performance decreased with their short-term focus, whereas in freshmen, it increased with emotional intelligence, indicating that college experience shapes the utility of particular traits.

## KEYWORDS

emotional intelligence, self-efficacy, resistance to change, academic performance, middle east

## 1. Introduction

College life is defined by change. Schedules, courses, classmates, instructors, and instruction vary from one semester to the next. Furthermore, as one progresses through the curriculum of his/her degree program, academic success rests on different demands through assignments and tests that are diverse in content and often even in format from

one course to another. Thus, the ability to adapt to environmental changes has been seen as essential to the success of undergraduate students before, during, and after the COVID-19 pandemic (Xie et al., 2019). The pandemic has merely highlighted the value of being willing and able to respond to change effectively (Abdel Salam et al., 2021), a value whose recognition has persisted in the post-pandemic world. Biwer et al. (2021), for instance, found that students who had adapted to emergency remote learning (i.e., adapters) were able to find the silver lining in online learning (i.e., autonomy) that made them appreciate the experience. They also were competent self-regulators of their study activities (e.g., enhanced effort regulation and time management). Pilotti et al. (2022b) found that students who had high self-efficacy and an overall positive view of the post-pandemic learning environment reported better management of motivation, effort, and time, better regulation of attention, and greater investment of time and effort. Lo and Ip (2022) reported such well-being states to be positively related to academic performance.

Undoubtedly, the post-pandemic world has offered a new set of challenges defined by the demand to return to face-to-face classes. With this demand, students' lives have required other re-adjustments, not only in a variety of activities (e.g., traveling, studying, engagement in extracurricular pursuits, etc.) but also in their interactions with others (e.g., students, instructors, counselors, etc.). When students are members of a society that since before the pandemic began restructuring its economic and social structure, post-pandemic demands for re-adjustments add to the demands for change already present in the society at large. Consider, for instance, the progressive top-down dismantling of gender segregation based on patriarchy initiated before the pandemic in Saudi Arabia (Bafarasat and Oliveira, 2021). For as long as people could remember, women had been forced into separate spaces in public (restaurants, banks, etc.) and at home. They had been prevented from accessing educational programs and professions that were deemed men-only domains. Decrees suddenly opened spaces and promoted gender equity, and in so doing, redefined gender roles and relations so drastically to demand a considerable readjustment of people's identities and societal expectations (Pilotti et al., 2021). In this environment, female undergraduate students have been the primary beneficiaries of these top-down changes, whose goal is to create a knowledge economy that is sustainable and competitive in the global marketplace (Habibi, 2019). Benefits, however, have come with expectations of academic success so that young females along with males can contribute to developing the economy envisioned at the top. After approximately 2 years of online learning during the pandemic, demands to readjust to face-to-face classes add to the weighty demands of academic success in the underlying social fabric. Thus, in the immediate post-pandemic period, it is reasonable to ask whether particular dispositions, such as emotional intelligence, self-efficacy, and resistance to change, are related to the academic performance of female students a semester after returning to face-to-face classes. Evidence in the extant

literature of the relationship between these dispositions and performance is described below.

## 1.1. Dispositions and academic success

Self-efficacy refers to confidence in one's abilities (Usher et al., 2019). This "can-do attitude" has been described as capable of shaping students' exerted effort, and enabling them to adapt effectively to novel and challenging situations (Judge et al., 1998; Pulakos et al., 2000). It has also been found to be linked to persistence (Pajares, 1996), motivation and engagement (Bandura and Schunk, 1981). Low self-efficacy individuals have been reported to concentrate on their deficiencies and overestimate their difficulties (Bandura, 1986). Thus, it is not surprising that most evidence suggests that it is academically advantageous to possess this "can-do attitude" (Usher et al., 2019; Freire et al., 2020; Hamann et al., 2020), but mixed evidence also exists (Wilhite, 1990; Pintrich et al., 1993; Zeegers, 2004; Choi, 2005).

Emotional intelligence is commonly defined as a set of emotion-related insights (including self-perceived abilities and behavioral predispositions) that become particularly useful in situations with emotional and social implications (Alegre et al., 2019). Individuals with high emotional intelligence are characterized by the belief that they are "in touch" with their feelings and those of others and that they can regulate their emotions to foster well-being (Furnham and Petrides, 2003). Emotional regulation may entail understanding emotional states as well as the ability to use the information gathered from emotional states to function effectively in everyday life. Yet, evidence indicates that emotional intelligence's contribution to academic performance is moderate (Perera and DiGiacomo, 2013) and well below that of traditional intelligence (MacCann et al., 2020) or null (Tok and Morali, 2009; Ahammed et al., 2011; Beauvais et al., 2014).

Resistance to change is a negative personal orientation toward the presence or mere idea of change (Oreg, 2003), which is generally viewed as an obstacle to effective adaptation to shifting circumstances. It comprises four dimensions, each illustrating a different source of one's negative reactions to change: Routine seeking (i.e., comfort with routines and desire to maintain them), emotional reactions to imposed change (i.e., discomfort elicited by forced change), short-term focus (i.e., attention to the short-term inconveniences of change instead of its long-term benefits), and cognitive rigidity (i.e., a form of stubbornness that reflects one's unwillingness to change opinions or attitudes). According to Oreg (2018), resistance to change is linked to poor performance on non-routine tasks (i.e., those that are defined by high variability and low repetitiveness; Hon et al., 2014). Instead, it is linked to good performance on tasks that rely on routines (i.e., those that require a consistent and repetitive execution of patterns of thought and behavior). Academic performance can be assumed to depend on non-routine tasks, as the tests and assignments of different courses require flexibility in cognition and behavior. Yet, the

examination of the relationship between academic performance and resistance to change has been largely neglected in the extant literature.

## 1.2. Our study

College life is the embodiment of change. From one semester to another, students have to adapt to changes in schedules, courses, instructors, and instruction. With them, demands of effort and time also change. Thus, it is reasonable to assume that adaptation to environmental demands may be easier to effectuate as personal experience with change increases. Experience with change may be equivalent to fine-tuning dispositions, such as emotional intelligence and self-efficacy, which are known to facilitate adaptation, as well as to weakening resistance-to-change dispositions, which are known to hinder adaptation. Thus, in the present study, we compare the dispositions of undergraduate students with differing lengths of experience with college life (freshmen versus seniors). Then, we assess the extent to which such dispositions contribute to academic performance.

We hypothesize that if academic experience fosters dispositions that are known to facilitate adaptation, such as self-efficacy and emotional intelligence, seniors will exhibit such dispositions to a greater extent than freshmen. Instead, dimensions that are known to hinder adaptation, such as those linked to resistance to change, will be exhibited to a lesser extent by seniors. Furthermore, if academic performance is an indicator of adaptation, performance in the semester after a full return to face-to-face classes will be positively linked to self-efficacy and emotional intelligence, and inversely linked to resistance-to-change dimensions.

The study focuses on an understudied population of female undergraduate students who are majoring in law. They represent a critical cohort of students whose success is seen as key to improving the gender equity standards of a society slowly emerging from patriarchy. At the time of the study, these young women, who face pressure to succeed academically as a result of broad changes in their society, are expected to quickly readjust to face-to-face instruction to fulfill societal prospects.

## 2. Materials and methods

### 2.1. Participants

Participants were 497 female, full-time students from a university located in the Eastern Region of Saudi Arabia. They were enrolled in an undergraduate law degree program. There were 261 freshmen with one semester of completed classes (first-year students) and 236 seniors with 90 or more completed college credits (fourth-year students). Their mean age was 20.97 (range: 18–30 years old). An online invitation was sent to a pool of 551 students. Participants who provided their informed consent and

completed all parts of the study constituted 90.20% of those initially recruited.

### 2.2. Materials

Three questionnaires were used with items to be rated on a 5-point scale from strongly disagree (−2) to strongly agree (+2) with 0 serving as the neutral point.

Students' overall confidence in their abilities to complete a variety of tasks was assessed through the *General Self-Efficacy* (SE) questionnaire of [Chen et al. \(2000\)](#) and [Chen et al. \(2001\)](#). The questionnaire consisted of 8 generic statements of confidence (e.g., "When facing difficult tasks, I am certain that I will accomplish them"). Cronbach's alpha, a measure of internal consistency, was 0.93.

Emotional intelligence was assessed through the short form of the *Trait Emotional Intelligence* (EI) questionnaire ([Petrides and Furnham, 2006](#); [Cooper and Petrides, 2010](#)). The questionnaire contained 30 statements (e.g., "I usually find it difficult to regulate my emotions"). The original 7-point scale was discarded in favor of a 5-point scale to eliminate the intermediate points, which were reported by pilot participants as unclear. The mean of each student's responses served as her trait EI. Cronbach's alpha was 0.88.

The *Resistance to Change* (RTC) questionnaire of [Oreg \(2003\)](#) measured a student's dispositional inclination to resist changes. The questionnaire consisted of 16 statements organized into four subscales, each measuring a different disposition toward change. *Routine seeking* assessed students' inclination to rely on routines (a behavioral dimension). *Emotional reaction* to imposed change reflected the discomfort students experienced when facing change, whereas *short-term focus* measured the extent to which students were distracted by the short-term inconveniences involved in change (both are affective dimensions). *Cognitive rigidity* illustrated the frequency and difficulty with which students changed their minds (cognitive dimension). Cronbach's alpha was 0.76.

### 2.3. Procedure

The study relied on a cross-sectional design of law freshmen and seniors representing the endpoints of the continuum of undergraduate academic experience. To ensure the inclusion of both freshmen and seniors, students who were enrolled in general education or law courses were asked to participate. At the selected university, all general education courses and major-specific courses are taught through a student-centered pedagogy and are expected to conform to international standards (as attested by international accreditation bodies, such as HCERES or TIEC). Content delivery is monitored by course coordinators (i.e., senior faculty) for quality assurance and consistency across sections. The law program entails 138

credit hours of which 39 are general education requirements and 99 cover the field of law.

The study was described as concerning individual differences. The questionnaires were administered after a semester of fully online classes. Students were given a window of 2 weeks to participate. Participation complied with the guidelines of the Office for Human Research Protections of the U.S. Department of Health and Human Services for the treatment of human subjects in educational research. Students were informed that the study required them to (a) complete the EI, SE, and RTC questionnaires, and (b) report their age, educational level, and major. The grade point average (GPA) obtained in the semester following a full return to face-to-face classes was provided by the Office of the Registrar. Following informed consent and the collection of self-reported and performance data, all responses were anonymized in data files so that participants' confidentiality could be preserved. Questionnaire completion was followed by debriefing performed by instructors who were informed of group results after the completion of the study.

### 3. Results

The analyses described below are organized into two steps: (a) A one-way analysis of variance (ANOVA) was conducted to determine whether freshmen and seniors differed in their dispositions, as well as academic performance (as indexed by prior semester GPA). (b) Then a regression analysis was carried out separately for freshmen and seniors to determine the extent to which dispositions could account for academic performance. The skewness of all variables (Cohen, 2008) was below 2 (Curran et al., 1996), thereby justifying the use of parametric statistics. The results of inferential statistics are considered significant at the 0.05 level.

#### 3.1. Do the dispositions and performance of freshmen and seniors differ?

To assess whether the values of each dimension were indeed significantly different from 0 (i.e., absence), a one-sample *t*-test was conducted in each group. The Bonferroni correction was applied to reduce the inflation of alpha ( $p=0.004$ ). All values were significantly different from 0 (freshmen:  $t_s \geq 3.88$ ; seniors:  $t_s \geq 4.31$ ). Thus, in Table 1, a positive value indicated the expression of a given dimension, whereas a negative value indicated a deficiency expressing its counterpart.

One-way ANOVA was conducted on each dimension with college experience (freshman versus senior) as the independent variable. Seniors had greater SE [ $F(1, 495) = 34.54, MSE = 0.758, p < 0.001, \eta_p^2 = 0.065$ ], and EI [ $F(1, 495) = 6.45, MSE = 0.238, p = 0.011, \eta_p^2 = 0.013$ ]. There were no significant group differences in the RTC dimensions ( $F_s \leq 2.92, ns$ ). In both

groups, routine seeking and short-term focus were deficient, whereas emotional reactions to forced change and cognitive rigidity were present.

Freshmen exhibited higher performance [ $F(1, 495) = 8.16, MSE = 0.222, p = 0.004, \eta_p^2 = 0.016$ ]. The latter simply reflected a common phenomenon among students at the selected university whereby performance declines as more challenging courses are taken at the end of a degree program. Overall, partial eta square values for significant differences, which illustrated the proportion of variance uniquely explained by students' academic experience, were rather modest.

#### 3.2. Do dispositions account for academic performance?

A regression analysis was conducted with academic performance (GPA from the prior semester) as the outcome variable, and SE, EI, and RTC dimensions as the predictors (see Table 2). Regression analyses did not produce evidence of multicollinearity (tolerance values greater than 0.51; mean VIF for freshmen = 1.31; mean VIF for seniors = 1.51). In freshmen, GPA increased with EI and emotional reactions to forced change. In seniors, GPA increased with emotional reactions to forced change and decreased with a short-term focus.

### 4. Discussion

Consider that college life means that every semester students are expected to adapt to a variety of changes, including schedules, courses, instructors, etc. In the immediate post-pandemic world, it also means re-adapting to face-to-face instruction. Theoretically, greater experience with college life may mean greater opportunities to fine-tune SE and EI, which would foster adaptation. Our results support this assumption by uncovering greater SE and EI in seniors. However, our results tell a different story when academic performance the semester after a full return to face-to-face instruction is conceptualized as a measure of successful adaptation. One would expect EI to contribute heavily to performance. In fact, emotional regulation, a critical aspect of EI, entails not only understanding emotional states but also the ability to use information about emotional states to function effectively in college (Furnham and Petrides, 2003). Instead, only freshmen's performance benefited from EI, and its contribution was minor. These findings, coupled with the lack of a contribution by SE, which indexes motivation, indicate that at the start of students' academic journey other factors, such as college preparation (Stevens et al., 2019) and metacognitive awareness (Ward and Butler, 2019), are likely to be more impactful. The lack of a contribution of EI or SE to seniors' performance suggests that a similar explanation may apply at the end of students' academic journey.

The results of the present study add to those that have reported a moderate contribution of EI to academic performance

TABLE 1 Descriptive statistics including mean (M) and standard error of the mean (SEM).

Variable	M freshmen	SEM	M seniors	SEM
Self-efficacy (range: -2 - +2)*	0.60	0.054	1.06	0.057
Emotional intelligence (range: -2 - +2)*	0.54	0.030	0.65	0.032
Resistance to change (range: -2 - +2)				
Routine seeking	-0.55	0.044	-0.50	0.046
Emotional reaction to forced change	0.28	0.049	0.22	0.051
Short-term focus	-0.18	0.045	-0.23	0.048
Cognitive rigidity	0.23	0.046	0.35	0.049
GPA (range: 0-4)*	3.39	0.029	3.27	0.031
Number of students	261		236	

\*Significant differences between freshmen and seniors.

TABLE 2 Regression analyses.

Variables	B	SE	Beta	t	p
<b>Freshmen</b>					
Constant	3.285	0.051			
Self-efficacy	-0.002	0.032	-0.005	-0.070	ns
Emotional intelligence*	0.181	0.071	0.186	2.570	0.011
Routine seeking	0.056	0.043	0.088	1.310	ns
Emotional reaction to forced change*	0.117	0.042	0.207	2.773	0.006
Short-term focus	-0.050	0.047	-0.081	-1.067	ns
Cognitive rigidity	-0.024	0.038	-0.042	-0.650	ns
<b>Seniors</b>					
Constant	3.138	0.058			
Self-efficacy	0.070	0.049	0.115	1.436	ns
Emotional intelligence	-0.019	0.084	-0.019	-0.222	ns
Routine seeking	0.038	0.049	0.055	0.769	ns
Emotional reaction to forced change*	0.113	0.047	0.179	2.416	0.016
Short-term focus*	-0.217	0.054	-0.323	-4.012	0.000
Cognitive rigidity	0.032	0.046	0.047	0.689	ns

\*Significant values. Freshmen:  $R = 0.229$ . Seniors:  $R = 0.309$ .

(MacCann et al., 2020). In agreement with the meta-analysis of Perera and DiGiacomo (2013), we found that the length of a student's college experience is a moderating factor in the relationship between the two variables. Perera and DiGiacomo argued that EI has a positive influence on academic performance because it promotes socially adaptive responses. That is, the positive contribution of EI to academic performance may be attributed to EI's ability to regulate emotions experienced in academic settings and build social relationships in such settings (MacCann et al., 2020). However, its benefits tend to decrease as learning becomes more self-directed with increasing educational experience (as indexed by students' educational levels; Perera and DiGiacomo, 2013).

The lack of a contribution of self-efficacy to academic performance is consistent with the findings of Choi (2005) but

inconsistent with those of Naderi et al. (2018) and Lane and Lane (2001) who reported a moderate contribution. An earlier study by Pilotti et al. (2022a), which included a sample of Saudi college students, also failed to find a significant relationship between the two variables. One possible account for our finding comes from Fenning and May (2013) who found that students' general self-efficacy was positively related to their academic performance in high school but not in college. They argued that, at the undergraduate level, students' specific beliefs in their abilities matter much more than general beliefs.

Our study's results involving RTC offer some support for the findings of Oreg (2018) that RTC is negatively related to non-routine tasks. Assignments and tests, which contribute to a student's academic performance, are diverse in nature, thereby qualifying for the label "non-routine tasks." Yet, we found that

only short-term focus, a dimension of RTC, negatively contributed to the academic performance of seniors. According to Oreg, a focus on the short-term aspects of change may make it difficult to maintain attention and motivation. During a student's senior year, a long-term focus is likely to be fostered by a deeper understanding of the overarching goal for which diverse assignments and tests are performed (i.e., professional competence in a future job). As such, a short-term focus may become particularly detrimental to academic performance as it makes it difficult to maintain attention and motivation. For a freshman, the novelty of the academic experience, including tasks and environment, may help maintain attention and motivation, thereby weakening the impact of a short-term focus on performance.

Surprisingly, in both freshmen and seniors, emotional reactions to forced change, one of the RTC dimensions, was beneficial to performance. Freshmen and seniors not only did not differ in their expression of RTC dimensions but also agreed during debriefings on the benefits of emotional reactions to forced change. Spontaneous comments suggested that such reactions were viewed as indices of students' ability to detect environmental changes, as well as instances of agency (e.g., "I may feel uncomfortable, but I will voice my objection to a change in a deadline of an assignment"). As such, reactions to forced change were perceived as desirable features.

Our results imply that students' college experience is a relevant variable in remedial actions related to poor performance. Freshmen may benefit from training in emotion regulation to enhance EI, whereas seniors may benefit from training in cognitive restructuring to reduce their short-term focus. Yet, the present study has limitations that need to be addressed in future research. First, participants were female law students from a society that is attempting to move away from patriarchy by placing females at the center of its re-engineering of the economy. Thus, their dispositions and related contributions to performance may differ from those of males who have been until recently the recipients of privilege. They may also differ from those of female students of other societies who are facing less pressure to succeed in the name of national welfare. Second, the study relied on a cross-sectional design of freshmen and seniors as the endpoints of the undergraduate continuum of academic experience. Such naturally occurring groups may differ in other ways besides experience that may then impact their performance.

## References

- Abdel Salam, H. M., Pilotti, M. A., and El-Moussa, O. J. (2021). Sustainable math education of female students during a pandemic: online versus face-to-face instruction. *Sustainability* 13:12248. doi: 10.3390/su132112248
- Ahmed, S., Abdullah, A. S., and Hassane, S. H. (2011). The role of emotional intelligence in the academic success of United Arab Emirates University students. *Int. Educ.* 41, 7–25. Available at: <https://www.proquest.com/docview/911991601?pq-origsite=360link>
- Alegre, A., Pérez-Escoda, N., and López-Cassá, E. (2019). The relationship between trait emotional intelligence and personality. Is trait EI really anchored within the big five, big two and big one frameworks? *Front. Psychol.* 10:866. doi: 10.3389/fpsyg.2019.00866

## Data availability statement

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

## Ethics statement

The studies involving human participants were reviewed and approved by Prince Mohammad Bin Fahd Deanship of Research. The participants provided their written informed consent to participate in this study.

## Author contributions

MP, SH, KA, and FA equally contributed to the design of the study, to the collection, analysis, and interpretation of the data, as well as to the drafting of the article. All authors contributed to the article and approved the submitted version.

## Acknowledgments

We are grateful to the students of the Undergraduate Research Society for their help in data collection and feedback.

## Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

## Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

- Bafarasat, A. Z., and Oliveira, E. (2021). Prospects of a transition to the knowledge economy in Saudi Arabia and Qatar: a critical reflection through the lens of spatial embeddedness and evolutionary governance theory. *Futures* 129:102731. doi: 10.1016/j.futures.2021.102731

- Bandura, A. (1986). Fearful expectations and avoidant actions as Coeffects of perceived self-efficacy. *Am. Psychol.* 41, 1389–1391. doi: 10.1037/0003-066X.41.12.1389

- Bandura, A., and Schunk, D. H. (1981). Cultivating competence, self-efficacy, and intrinsic interest through proximal self-motivation. *J. Pers. Soc. Psychol.* 41, 586–598. doi: 10.1037/0022-3514.41.3.586

- Beauvais, A. M., Stewart, J. G., DeNisco, S., and Beauvais, J. E. (2014). Factors related to academic success among nursing students: a descriptive correlational research study. *Nurse Educ. Today* 34, 918–923. doi: 10.1016/j.nedt.2013.12.005
- Biber, F., Wiradhany, W., Oude Egbrink, M., Hospers, H., Wasenitz, S., Jansen, W., et al. (2021). Changes and adaptations: how university students self-regulate their online learning during the COVID-19 pandemic. *Front. Psychol.* 12:642593. doi: 10.3389/fpsyg.2021.642593
- Chen, G., Gully, S. M., and Eden, D. (2001). Validation of a new general self-efficacy scale. *Organ. Res. Methods* 4, 62–83. doi: 10.1177/109442810141004
- Chen, G., Gully, S. M., Whiteman, J. A., and Kilcullen, R. N. (2000). Examination of relationships among trait-like individual differences, state-like individual differences, and learning performance. *J. Appl. Psychol.* 85, 835–847. doi: 10.1037/0021-9010.85.6.835
- Choi, N. (2005). Self-efficacy and self-concept as predictors of college Students' academic performance. *Psychol. Sch.* 42, 197–205. doi: 10.1002/pits.20048
- Cohen, B. H. (2008). *Explaining Psychological Statistics*. New York, NY: John Wiley & Sons.
- Cooper, A., and Petrides, K. V. (2010). A psychometric analysis of the trait emotional intelligence questionnaire–short form (TEIQue–SF) using item response theory. *J. Pers. Assess.* 92, 449–457. doi: 10.1080/00223891.2010.497426
- Curran, P. J., West, S. G., and Finch, J. F. (1996). The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychol. Methods* 1, 16–29. doi: 10.1037/1082-989X.1.1.16
- Feenling, B. E., and May, L. N. (2013). 'Where there is a will, there is a way': examining the roles of self-efficacy and self-concept in college students' current educational attainment and career planning. *Soc. Psychol. Educ.* 16, 635–650. doi: 10.1007/s11218-013-9228-4
- Freire, C., Ferradás, M. D. M., Regueiro, B., Rodríguez, S., Valle, A., and Núñez, J. C. (2020). Coping strategies and self-efficacy in university students: a person-centered approach. *Front. Psychol.* 11:841. doi: 10.3389/fpsyg.2020.00841
- Furnham, A., and Petrides, K. V. (2003). Trait emotional intelligence and happiness. *Soc. Behav. Personal. Int. J.* 31, 815–823. doi: 10.2224/sbp.2003.31.8.815
- Habibi, N. (2019). Implementing Saudi Arabia's vision 2030: an interim balance sheet. *Middle East Brief* 127, 1–9.
- Hamann, K., Pilotti, M. A., and Wilson, B. M. (2020). Students' self-efficacy, causal attribution habits and test grades. *Educ. Sci.* 10:231. doi: 10.3390/educsci10090231
- Hon, A. H., Bloom, M., and Crant, J. M. (2014). Overcoming resistance to change and enhancing creative performance. *J. Manag.* 40, 919–941. doi: 10.1177/0149206311415
- Judge, T. A., Erez, A., and Bono, J. E. (1998). The power of being positive: the relation between positive self-concept and job performance. *Hum. Perform.* 11, 167–187. doi: 10.1207/s15327043hup1102&3\_4
- Lane, J., and Lane, A. (2001). Self-efficacy and academic performance. *Soc. Behav. Personal. Int. J.* 29, 687–693. doi: 10.2224/sbp.2001.29.7.687
- Lo, O. T., and Ip, T. (2022). How does the psychological well-being (PWB) in the first year of college studies predict community college students' academic performance in Hong Kong? *Commun. Coll. J. Res. Pract.* 46, 161–178. doi: 10.1080/10668926.2021.1882357
- MacCann, C., Jiang, Y., Brown, L. E., Double, K. S., Bucich, M., and Minbashian, A. (2020). Emotional intelligence predicts academic performance: a meta-analysis. *Psychol. Bull.* 146, 150–186. doi: 10.1037/bul0000219
- Naderi, Z., Bakhtiari, S., Momennasab, M., Abootelebi, M., and Mirzaei, T. (2018). Prediction of academic burnout and academic performance based on the need for cognition and general self-efficacy: a cross-sectional analytical study. *Rev. Latinoam. Hipertension* 13, 584–591.
- Oreg, S. (2003). Resistance to change: developing an individual differences measure. *J. Appl. Psychol.* 88, 680–693. doi: 10.1037/0021-9010.88.4.680
- Oreg, S. (2018). Resistance to change and performance: toward a more even-handed view of dispositional resistance. *J. Appl. Behav. Sci.* 54, 88–107. doi: 10.1177/0021886317741867
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Rev. Educ. Res.* 66, 543–578. doi: 10.3102/00346543066004543
- Perera, H. N., and DiGiacomo, M. (2013). The relationship of trait emotional intelligence with academic performance: a meta-analytic review. *Learn. Individ. Differ.* 28, 20–33. doi: 10.1016/j.lindif.2013.08.002
- Petrides, K. V., and Furnham, A. (2006). The role of trait emotional intelligence in a gender-specific model of organizational variables. *J. Appl. Soc. Psychol.* 36, 552–569. doi: 10.1111/j.0021-9029.2006.00019.x
- Pilotti, M. A., Abdulhadi, E. J., Algouhi, T. A., and Salameh, M. H. (2021). The new and the old: responses to change in the Kingdom of Saudi Arabia. *J. Int. Women's Stud.* 22, 341–358.
- Pilotti, M., Alkuhayli, H., and Al Ghazo, R. (2022a). Memorization practice and academic success in Saudi undergraduate students. *Learn. Teach. High. Educ. Gulf Perspect.* 18, 19–31. doi: 10.1108/LTHE-08-2020-0030
- Pilotti, M., Faisal, N. Y., Hassan, S. A., Cavazos, S. E., and Elmoussa, O. (2022b). Female students' responses to change. *Front. Educ.* 7:929998. doi: 10.3389/feduc.2022.929998
- Pintrich, P. R., Smith, D. A., Garcia, T., and McKeachie, W. J. (1993). Reliability and predictive validity of the motivated strategies for learning questionnaire (MSLQ). *Educ. Psychol. Meas.* 53, 801–813. doi: 10.1177/0013164493053003024
- Pulakos, E. D., Arad, S., Donovan, M. A., and Plamondon, K. E. (2000). Adaptability in the workplace: development of a taxonomy of adaptive performance. *J. Appl. Psychol.* 85, 612–624. doi: 10.1037/0021-9010.85.4.612
- Stevens, A. E., Hartung, C. M., Shelton, C. R., LaCount, P. A., and Heaney, A. (2019). The effects of a brief organization, time management, and planning intervention for at-risk college freshmen. *Evid. Based Pract. Child Adolesc. Ment. Health* 4, 202–218. doi: 10.1080/23794925.2018.1551093
- Tok, S., and Morali, S. (2009). Trait emotional intelligence, the big five personality dimensions and academic success in physical education teacher candidates. *Soc. Behav. Personal. Int. J.* 37, 921–931. doi: 10.2224/sbp.2009.37.7.921
- Usher, E. L., Li, C. R., Butz, A. R., and Rojas, J. P. (2019). Perseverant grit and self-efficacy: are both essential for Children's academic success? *J. Educ. Psychol.* 111, 877–902. doi: 10.1037/edu0000324
- Ward, R. T., and Butler, D. L. (2019). An investigation of metacognitive awareness and academic performance in college freshmen. *Education* 139, 120–126.
- Wilhite, S. C. (1990). Self-efficacy, locus of control, self-assessment of memory ability, and study activities as predictors of college course achievement. *J. Educ. Psychol.* 82, 696–700. doi: 10.1037/0022-0663.82.4.696
- Xie, Y. J., Cao, D. P., Sun, T., and Yang, L. B. (2019). The effects of academic adaptability on academic burnout, immersion in learning, and academic performance among Chinese medical students: a cross-sectional study. *BMC Med. Educ.* 19, 1–8. doi: 10.1186/s12909-019-1640-9
- Zeeegers, P. (2004). Student learning in higher education: a path analysis of academic achievement in science. *High. Educ. Res. Dev.* 23, 35–56. doi: 10.1080/0729436032000168487