

Role of Teachers' Affective Support for Reducing Students' Emotional Exhaustion in Higher Education in Pakistan



Nasir Ali *

Shah Nawaz Tunio †

Narjis Unar ‡

Corresponding Author: Narjis Unar (Research Fellow, Department of Education, Institute of Business Management (IoBM), Karachi, Sindh, Pakistan. Email: narjisunar62@gmail.com)

Abstract: *The study determined the connection between teachers' affective commitment along with emotional exhaustion among students with the mediation of students' self-efficacy, intrinsic motivation, and extrinsic motivation in Pakistan. 309 responses have been collected from the students of HEIs in Karachi whereas PLS-SEM was employed to analyze data. Teachers' affective support positively impacts students' self-efficacy and intrinsic and extrinsic motivation, whereas students' self-efficacy and extrinsic motivation harm students' emotional exhaustion. Regarding mediation analysis, the study revealed that Teachers' affective support harms students' emotional exhaustion with the mediating effects of students' self-efficacy as well as extrinsic motivation. Practitioners or educational psychologists must realize the likelihood that students' motivation and self-efficacy are possible approaches in which teacher affective support is associated with emotional exhaustion when administering such interventions.*

Key Words: Teachers' Affective Support, Students' Motivation, Self-Efficacy, Emotional Exhaustion, Higher Education Institutes

Introduction

It has been considered for a long time that students had been particularly susceptible to experiencing emotional exhaustion (EE), a condition in which they experience feelings of emotional fatigue while also being unable to complete intellectual tasks, owing to the particular characteristics they possess (Charoensukmongkol & Phungsoonthorn, 2021). Teachers who provide their students with affective support (AS) are those who show the importance of their well-being of demonstrate

caring actions, describing equitable and empathetic attitudes, valuing their thoughts or being there, setting high expectations, showing feelings of optimism, stimulating exertion, showing respect, and being passionate about and receptive to their students' requirements (Blegur et al., 2022).

To understand the student's emotional well-being, it was essential to determine the extent to which they experienced emotional exhaustion. Emotional exhaustion, often known as EE, is a crucial component of burnout. EE occurs when a person's emotional reserves are depleted due to

* Adjunct Faculty and Research Scholar, Institute of Business Management & Healthcare Management (IBHM), DOW University of Health Science, Karachi, Sindh, Pakistan.

† School of Education, Zhengzhou University, Henan, China.

‡ Research Fellow, Department of Education, Institute of Business Management (IoBM), Karachi, Sindh, Pakistan.

Citation: Ali, N., Tunio, S., & Unar, N. (2023). Role of Teachers' Affective Support for Reducing Students' Emotional Exhaustion in Higher Education in Pakistan. *Global Social Sciences Review*, VIII(II), 284-298. [https://doi.org/10.31703/gssr.2023\(VIII-II\).26](https://doi.org/10.31703/gssr.2023(VIII-II).26)

the weight of their scholastic responsibilities (Hsieh et al., 2021). Similarly, mentally and even physically exhausted children may exhibit signs of emotional exhaustion. Time constraints, indifference on the part of supervisors, role conflict, a dearth of social support, and an overwhelming amount of work were all factors that contributed to the development of experiential learning in the classroom (Naidoo-Chetty & du Plessis, 2021).

In addition, the aspect of EE was found in different university students in Pakistan. For instance, dental students were identified to be facing EE as high as 85% in a single day (Bughrara et al., 2023). Similarly, medical students also faced high EE due to poor academic performance, and their stress levels increased significantly. The stress level was 20.8% (Gellisch et al., 2022). In addition, the suicidal stigma of Pakistan's students was not deeply studied, and the actual concept was not discussed effectively (Imran et al., 2021). Like, there had not been any official statistical record of the suicide of students in Pakistan. There were 4 or 5 suicides daily in Karachi, many teenagers. Also, a study conducted in Pakistan's colleges also identified a 31.4% suicidal rate among students, including neglect, EE and psychiatric disorder (Nurikhwan et al., 2022). The persuasion of academic factors enhances the toll of mental and EE on students, and then it eventually becomes high depression. For example, 34% of Pakistani female physicians were depressed (Malik et al., 2022).

It has been shown that the emotional qualities of a supportive teacher help develop good relationships between the instructor and the students, increasing the student's interest in or involvement in classroom activities (M. Liu et al., 2022). In addition, having a sense of safety lessens the impact of unfavourable emotions by fostering a drive for personal development via the pursuit of educational opportunities (Matviichuk et al., 2022). Improved psychological and emotional adjustment is the direct effect of this, particularly for children dealing with academic failure and dropout, as well as social-behavioural issues. This is especially true for children battling both (Haftador et al., 2021). The research aimed to evaluate the connection between instructors' affective devotion and students' emotional exhaustion (EE) in Pakistan through the mediators of students' self-efficacy (SE), intrinsic

motivation (IM), and extrinsic motivation (EM). Specifically, this research was conducted in Pakistan.

Moreover, it was especially the case once we were inside the classroom. The school standards and the students' perspectives were essential (Díaz-Noguera et al., 2022). Furthermore, it was also suggested that a fatal weakness of the EM was that it lacked self-confidence. When the goal is accomplished, the EM will no longer be accessible (Syahrani, 2022). This research is needed to provide insight into the issues that impact the EE of students in Pakistan. Improving the existing literature on teachers' AS in educational settings by investigating associated topics is a priority. In addition, the emphasis on the research on intrinsic and EM motivation among students is a welcome addition to the existing body of knowledge on motivation.

Literature Review

Emotional Exhaustion

According to the social support model suggested by Shuo et al. (2022), interactions with social networks can improve a person's general attitude toward life and happiness. In addition, Shuo et al. (2022) also suggested a stress-buffering model of social support. This model focuses on the significance of social support as a defence mechanism against tiredness. A student's social network has the potential to reduce the amount of exhaustion they feel, develop healthy coping mechanisms, make difficulties seem less significant, and increase the student's motivation (Shuo et al., 2022). Additionally, social support was shown to be a protective element that supports people in dealing with stress, anxiety, and depression. Researchers discovered this. The negative consequences of exhaustion on people may be amplified if they lack social support (Blanco-Donoso et al., 2022). Turnover plans and voluntary turnover were also shown to have a significant association with EE. This is likely because people with high EE levels seek solutions to their problems. As a result, students who had access to a wider variety of resources had a lower likelihood of participating in EE than those who did not have the same level of support (Salmela-Aro et al., 2022). Students struggling with EE may find that having a strong social support system is essential in gaining the requisite fatigue

resistance. Thereby, the following hypothesis has been proposed in support of the discussion above based on the conservation of resources theory by (Chun et al., 2022)

- H1:** Teachers' affective support reduces emotional exhaustion among students in HEIs.

Teachers' Affective Support, Extrinsic motivation, Emotional Exhaustion

The concept of "affective support," abbreviated as "AS," is a sophisticated piece of psychological thinking that attempts to explain people's time and effort in various activities. AS encourages students to work hard towards a goal by providing extrinsic incentives imposed from the outside, and internal goals, which are prioritized by the students themselves (Guay, 2022). Among the category of environmental influences are disciplinary measures, peer pressure, financial incentives, healthy competition at school, required reading, and growing obligations to one's family (Mdookh & YILDIRIM, 2023). In the case of external motivation, a person's drive is influenced by elements that are not within his or her direct control. For example, a student may be motivated by the awards and incentives they anticipate getting (Zeng & McEaney, 2022). It had been shown that students who were driven by external variables (such as praise from peers or teachers or higher grades) were more involved in their academic work. On the foundation of cognitive psychology theory, the subsequent notion has been made (Steggerda et al., 2023).

- H2:** Teachers' affective support increases extrinsic motivation among students in HEIs.

In addition, extrinsically motivated students do not have a sense of ownership of their subject; rather, they focus on praise and preference from peers, parents, and teachers and avoid negative feedback or punishment. Several studies have stated that external motivation drives IM rather than undermining it. It has beneficial influences, especially when infants have poor levels of IM despite the negative notions of extrinsic motivation. Because of cognitive psychology theory, a new proposition has been created (Steggerda et al., 2023).

- H3:** Extrinsic motivation reduces emotional exhaustion among students in HEIs.

It was thought that AS influenced emotional states and reduced EE. According to one school of thought, AS may be correctly predicted by investigating the influence of factors external to the individual, such as motivation (Henry et al., 2023). The majority of thoughts that primary school teachers put into practice originate from places outside the classroom, specifically the neighbourhood around the institution (Yu et al., 2022). Researchers discovered a link between the degrees of teachers' EM and many educator outcomes, including burnout, work satisfaction, and academic stress (Tobbell et al., 2021). It was predicted that students' external motivation would more than compensate for EE, considering their perceptions of the school atmosphere, the levels of exhaustion they reported, and the amount of effort their instructors put in. Based on the cognitive psychology theory, the following hypothesis has been made (Tobbell et al., 2021).

- H4:** Teachers' affective support reduces emotional exhaustion in students of HEIs with the mediation of extrinsic motivation.

Intrinsic Motivation

The role of teachers and peers was deemed important in understanding a student's learning environment and their perceptions and behaviours, which influenced individual students (Wang et al., 2022). In particular, information regarding their learning environment was exchanged by students and, in this regard, affects each other's beliefs of this context (Yli-Panula et al., 2022). It was a fact that opinions exchanged by students regarding their educational surroundings were forecasting assorted motivational, behavioural, emotional, as well as cognitive, which include learning delight, assignment incentive, homework effort, and academic achievement (Heo et al., 2022). The substantial investigation has concentrated on the influence of apparent independence promoted on intrinsic motivation at a class or individual level. However, there had been a common consensus of teachers' AS towards the IM of students (Barukčić, 2022). However, it had been observed that teachers' average AS had no effect on the predictive validity of student evaluations and IM (ten Hagen et al., 2022).

- H5:** Teachers' affective support increases intrinsic motivation among students in HEIs.

Intrinsic motivation (IM) was attributed to involvement and energy that strongly and positively mitigates burnout and exhaustion (Chen et al., 2022). It has been observed that higher absenteeism, a higher percentage of dropout, academic achievement, and lower motivation were driven by student exhaustion (Ghods et al., 2022). Also, it was previously observed that student EE and IM could exhibit how well students had performed regarding their achievement strategies, work exhaustion, engagement, and future working environment (Granziera et al., 2023). As a result of cognitive psychology theory, the aforementioned concepts have been made (Tobbell et al., 2021).

H6: Intrinsic motivation reduces emotional exhaustion among students in HEIs.

H7: Teachers' affective support reduces emotional exhaustion in students in HEIs by mediating intrinsic motivation.

Self-Efficacy

Students' self-efficacy (SE) was traditionally measured by their f in completing the activities necessary to achieve a specified goal. In contrast to other individual assumptions, it was hypothesized that SE could be accessed via learning circumstances and that these settings may influence its development (Chang et al., 2022). As per the outcomes of one research, the low levels of academic and social engagement among students made them more receptive to the compassionate actions of their teachers. A second research piece showed that improving goal-oriented feedback helped students improve their SE assumptions (Q. Liu et al., 2022). Multiple studies showed that students in primary school who participated in SE had higher academic accomplishments than their peers who did not.

On the other hand, the factors that influence students' perspectives on the value of SE might vary greatly from one academic field to the next (Q. Liu et al., 2022). Previous research found, for instance, that students' SE of surroundings and school belongingness were greater in art classes than in science and mathematics classes (Zdawczyk & Varma, 2022). It is more probable that male students majoring in the social sciences, computers, and mathematics will have higher levels of SE than female students majoring in the language arts (Rani & Jain, 2023). Within the

context of making students, a minor influence size was shown to exist between SE and gender. Regarding finishing assignments in science and technology programs, Male students reported greater self-efficacy ratings than female classmates. This was a case regardless of the subject matter (Okoro et al., 2022).

Moreover, it was also anticipated that by the time children graduated from elementary school, they would have developed a subject-specific SE based on their experiences in school, at home, and with their peers (Chaaban, 2022). Students who had a higher SE were connected with making a larger amount of effort to succeed. In comparison, students with a lower SE were more likely to repeat the same errors and make less effort to manage challenging tasks (Zhou et al., 2022). The students' perspectives about their own SE substantially affected their desire and inspiration to learn new material. Their level of academic and social competence had a substantial impact on the student's motivation to study, level of school happiness, academic achievement, and level of self-assurance about their social abilities (Hayek et al., 2022). To this end, the study formulated the following hypothesis based on the self-determination theory (M. Liu et al., 2022).

H8: Self-efficacy reduces emotional exhaustion among students in HEIs.

Teacher's Affective Commitment

Teacher's affective support is the term used to describe how teachers feel about their students and how it affects the student's behaviours and the way they speak. This includes treating people with respect and fairness, keeping them involved and motivated, expecting great things from them, and proving their relevance in the process (Peercy et al., 2023). Similarly, recent research showed substantial connections between teachers' emotional commitment and students' academic contentment. These findings were independent of gender, cultural background, developmental stage, or prior educational experience (Qureshi et al., 2022). According to another set of research findings, workers who exhibit high levels of emotional involvement in their jobs have a lower likelihood of leaving their current places of employment (Chigeda et al., 2022).

Moreover, In addition to this, when all three aspects of effective commitment were taken into

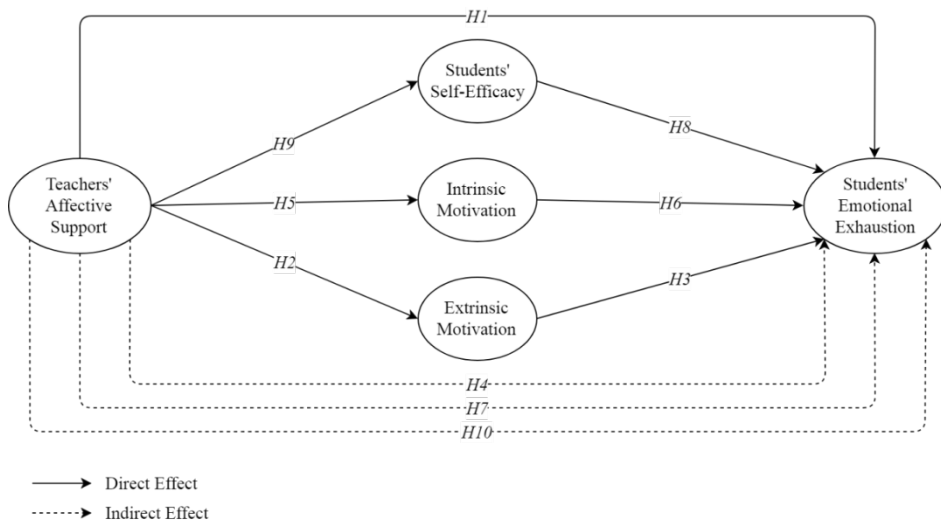
consideration, emotional commitment demonstrated a substantial inverse connection with employee turnover (Mangundjaya, 2023). It was shown that the leadership styles used by principals significantly impacted teachers' satisfaction, morale, and emotional commitment, as well as their decisions on whether or not to leave the teaching profession (Vetter, 2022). In a similar vein, it was shown that supportive administration positively influenced teachers' commitment to their schools (Zhang et al., 2022). Prior research has discovered that when a head of school guides teachers, encourages them and helps them set goals, it increases the likelihood that those teachers will be dedicated to the institution (Zhang et al., 2022). Another advantage of committed teachers is that they usually work harder than those with weaker

commitments (Orunbon & Modupe, 2021). A positive professional climate among teachers has been developed by a principal who encourages and stimulates the progression of teachers into informal leaders, influencing organizational commitment, overall academic capacity, and job satisfaction (Muhammad et al., 2022). According to the following debate, the research has offered the following notion concerning the self-determination theory of Albert Bandura Bandura (1978{Landry, 2022 #61).

H9: Teachers' affective support increases self-efficacy among students in HELs.

H10: Teacher's affective support reduces emotional exhaustion in students in HELs with the mediation of self-efficacy.

Figure 1
Conceptual Framework



Methodology

Sample and Population

The research used a non-probability, purposive sampling technique to obtain a total of 309 answers from members of the study community. The data sample for the survey was comprised of full-time students who had been enrolled at private postsecondary institutions for at least one academic year. A total of 323 valid surveys were submitted by students attending higher education institutions in Karachi, Pakistan, generating a

response rate of 64.6%. The pool of potential respondents consisted of 500 individuals.

Instrument

Section A of the instrument focused on the respondent's demographic profile and features, whereas section B was made up of closed-ended inquiries on a five-point Likert scale. The instrument was conveniently separated into two sections. However, the data allowed for the extraction of eight AS indicators. Sakiz (2007) included "My teacher encourages me at times when I do not do well in class" with Cronbach's

alpha of 0.880; eight determines of students' SE had derived from Sakiz (2007), such as "I believe I will receive an excellent grade in my class" with Cronbach's alpha of 0.940; four determine of IM had derived by Babakus et al. (2008), for instance, "When I do well in my class, it gives me a feeling of accomplishment" through Cronbach's alpha of 0.819; four measures of EM had derived by Guay et al. (2000), for example, "I currently engaged into class activities because I am supposed to do it" through Cronbach's alpha of 0.860 and eight determines of students' EE derived by Babakus et al. (2008) encompassing "I feel emotionally drained from my class activities" with Cronbach's alpha of 0.852.

Data Analysis

PLS-SEM analysis of the data, SmartPLS version 3.2.8 was employed. PLS-SEM, on the other hand, has been used with several reasonable concerns;

Table 1

Respondents' Profile and Characteristics

		Frequency	Per cent
Gender	Male	169	54.7
	Female	140	45.3
Age Group	16-20	39	12.6
	21-24	84	27.2
	25-28	123	39.8
	29-32	63	20.4
	Engineering & Technology	70	22.7
University Type	Computer Sciences & IT	67	21.7
	Medical Sciences	82	26.5
	Business Education	90	29.1
Academic Qualification	Under-Graduate	143	46.3
	Graduate	111	35.9
	Post-Graduate	55	17.8

Measurement Model

The measurement model has essential in structural equation modelling for determining the appropriate evaluation of the outer model, which includes factor loading, Composite Reliability (CR), and Average Variance Extracted (AVE). In addition, measuring (outer) frameworks contain a discriminant validity evaluation utilizing Fornell and Larcker's (1981) Heterotrait-Monotrait

for example, the investigation includes parallel mediation analysis (Hair et al., 2014; Wong, 2013), i.e. the connection among teachers' AS and students' EE had been mediated by students' SE, students' IM and students' EM simultaneously. Furthermore, because of the complicated and exploratory modelling framework with many theorized diffusions, PLS-SEM was applicable (Hair et al., 2011; Sarstedt et al., 2014). Nevertheless, due to a lack of theoretical framework, a lower sample size and the critical role of predictive relevance were further requirements of PLS-SEM deployment (Hair et al., 2011; Hair et al., 2014; Wong, 2013).

Results and Findings

Respondents' Profile and Characteristics

Table 1 shows the demographics as well as traits of 309 participants.

(HTMT) ratio along with criteria (Henseler et al., 2015). Table 2 gives statistical conclusions for evaluating this present investigation's measurement (outer) models. For assessment, Hair et al. (2017); Hair et al. (2016); Hair et al. (2011); Hair et al. (2014) put forward that factor loading be at least 0.70 or higher, whereas it was suggested that CR and AVE be at least 0.70 and 0.50, correspondingly.

Table 2

Measurement Model

Latent Constructs	Items	Loadings	CR	AVE
Extrinsic Motivation	EM2	0.919	0.873	0.775
	EM3	0.839		
Intrinsic Motivation	IM1	0.848	0.778	0.637
	IM2	0.745		
	SEE2	0.799		
Students' Emotional Exhaustion	SEE3	0.914	0.881	0.652
	SEE4	0.780		
	SEE8	0.724		
	SSE1	0.814		
Students Self-Efficacy	SSE5	0.800	0.841	0.638
	SSE8	0.784		
	TSA3	0.787		
Teachers' Affective Support	TSA5	0.802	0.824	0.609
	TSA6	0.751		

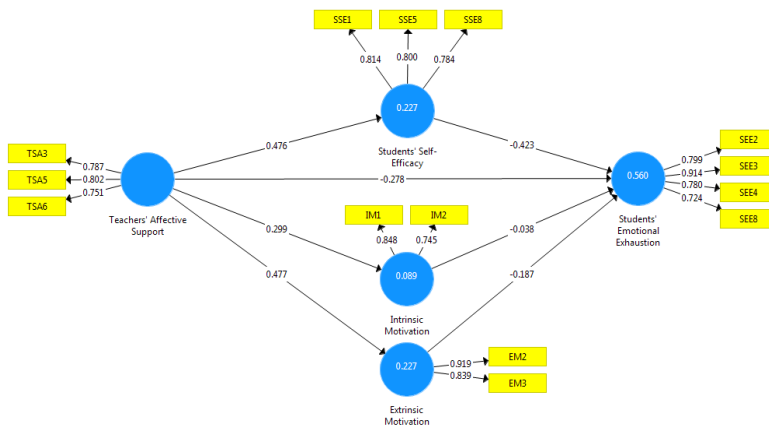
The above table demonstrates that all latent construct measurements have factor loadings larger than 0.70. Similarly, the composite reliability in the measurement (outer) model was 0.778 (intrinsic motivation) or 0.873 (extrinsic motivation). In terms of extracted average variance, the measurement model revealed that AVE for implicit elements varied around 0.609 (teachers' AS) and 0.775 (extrinsic motivation). Therefore, it was determined that the measurement (outer) model had been sufficiently evaluated in terms of factor loadings, CR, or AVE.

Moreover, table 3 and Table 4 provide an assessment of discriminant validity using Fornell

and Larcker's (1981) criterion and Heterotrait-Monotrait (HTMT) ratio, respectively. It has been demonstrated that all square roots of AVE have greater coefficients than their corresponding latent variables, implying that discriminant validity exists using Fornell and Larcker (1981) the requirement has been met. Additionally, Henseler et al. (2016); Henseler et al. (2015) suggested that for appropriate discriminant validity, the HTMT ratio for latent constructs should be smaller than 0.90. Table 4 shows that the HTMT ratio criterion has been met, implying that discriminant validity using the HTMT ratio has been met.

Figure 2

PLS Algorithm using SmartPLS version 3.2.8



Structural Model

Path Analysis

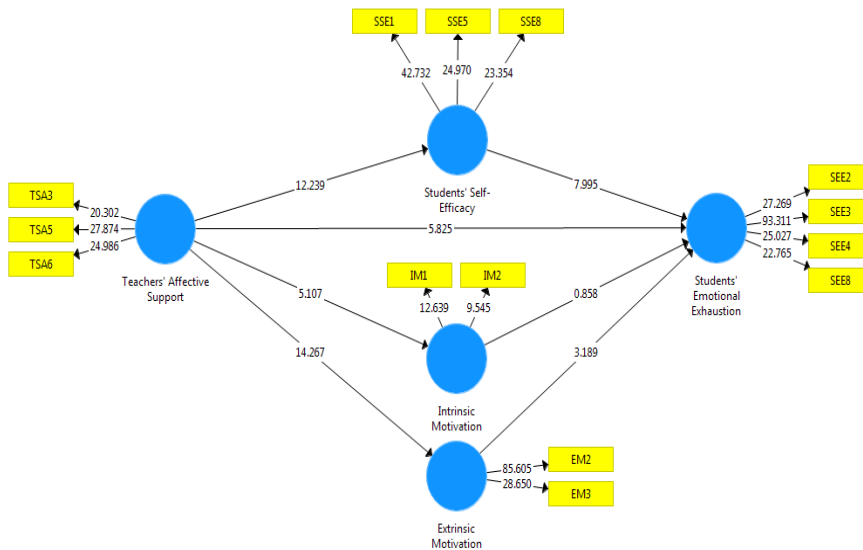
Table 5 provides the outcomes of the structural model using path analysis for hypothesis testing. Thus, it had been ascertained that teachers' AS, perceived by higher education students, have a big direct and favourable impact on students' SE (0.476, $p < 0.001$), IM (0.299, $p < 0.001$) and EM (0.477, $p < 0.001$). In contrast, it significantly negatively affected students' EE (-0.278, $p < 0.001$). Additionally, students' SE (-0.423, $p < 0.001$) and students' EM (-0.187, $p < 0.05$) had a significantly negative effect on students' EE, while students' IM (-0.038, $p > 0.05$) had a negative but statistically insignificant effect on students' EE. Thereby, the results confirmed all direct hypotheses except 6th hypothesis.

Mediation Analysis

The research was consistent with Baron and Kenny (1986) according to methods, PLS-SEM was used for indirect impact estimate and mediation analysis. Therefore, this outcome concluded that teachers' AS has been a negatively significant impact on students' EE with the mediating effect of students' SE (-0.201, $p < 0.001$), and a similar result was found to a mediating effect of EM (-0.089, $p < 0.05$) between teachers' AS and students' EE. However, the result revealed that IM (-0.011, $p > 0.05$) did not mediate the link between teachers' AS or students' EE. According to Zhao et al. (2010), teachers' AS and students' EE had a direct effect but no indirect effect; thereby, it was consistent with direct-only non-mediation. However, the mediating effect of students' SE and EM was consistent with competitive mediation.

Figure 3

PLS Bootstrapping using SmartPLS version 3.2.8



Predictive Relevance

Predictive relevance determined by predictive power (R-Square and Adjusted R-Square), as well as the cross-validation technique that suggested Geisser (1975); Stone (1974) manifested teachers' AS are able to forecast latent construct

of students' SE up to 22.7 per cent IM up to 8.9 per cent or EM up to 22.7 per cent. Furthermore, all endogenous latent constructs exhibited cross-validation (Q-Square) values greater than zero; hence, by Hair et al. (2016) guidelines, all endogenous latent constructs were found to be predictively relevant.

Table 3

Discriminant Validity using Fornell and Larcker (1981) Criterion

Latent Constructs	Extrinsic Motivation	Intrinsic Motivation	Students' Emotional Exhaustion	Students Self-Efficacy	Teachers' Affective Support
Extrinsic Motivation	0.880				
Intrinsic Motivation	0.326	0.798			
Students' Emotional Exhaustion	-0.558	-0.319	0.807		
Students Self-Efficacy	0.534	0.325	-0.667	0.799	
Teachers' Affective Support	0.477	0.299	-0.580	0.476	0.781

Table 4

Discriminant Validity using Heterotrait-Monotrait (HTMT) ratio

Latent Constructs	Extrinsic Motivation	Intrinsic Motivation	Students' Emotional Exhaustion	Students Self-Efficacy	Teachers' Affective Support
Extrinsic Motivation					
Intrinsic Motivation	0.602				
Students' Emotional Exhaustion	0.717	0.535			
Students Self-Efficacy	0.728	0.622	0.855		
Teachers' Affective Support	0.619	0.514	0.768	0.627	

Table 5

Hypothesis Testing using Path Analysis

	A	B	C	C'
Teachers' Affective Support → Students' Self-Efficacy	0.476*	-0.423*	-0.278*	-0.201*
→ Students' Emotional Exhaustion				
Teachers' Affective Support → Intrinsic Motivation →	0.299*	-0.038	-0.278*	-0.011
Students' Emotional Exhaustion				
Teachers' Affective Support → Extrinsic Motivation →	0.477*	-0.187**	-0.278*	-0.089**
Students' Emotional Exhaustion				

* $p < 0.001$; ** $p < 0.05$

Discussions

The existing research has investigated the role of teachers' AS in reducing EE in students in HEIs. The study used structural equation modelling, and the data supported the final model. The findings exhibited that EE is a difficult concept in which different factors can influence different approaches. Teachers' AS and EM reduce students' EE, and EM exerts a significant positive influence on exhaustion. Furthermore, teacher AS was also accepted as a positive and significant predictor of EM and SE, respectively. Lastly, teachers' AS reduces students' EE with the indirect effects of SE and extrinsic motivation.

It was recommended that students at HEIs bear in mind the elements impacting this assumption, notably those outlined above, to avoid EE. This was done in order to prevent students from engaging in EE. The findings showed that there were both direct and indirect mediating effects on EE; hence, efforts should be made to enhance IM and lessen its harmful impacts on EE (Hofferber et al., 2016). According to the present research results, using AS and EM by teachers at higher education institutions may benefit the mental and motivational health of the students enrolled in such institutions. As a result, it was essential to educate teachers on the benefits of AS and how the discourse in their classrooms and their language may foster mutual respect,

trust, and compassion (Jansen et al., [2015](#)). It was determined that the verbal and nonverbal urgency behaviours shown by instructors helped provide AS and build safe school settings, ultimately reducing students' emotional distress (Lau et al., [2018](#)). In addition, instructors' AS helps students understand that creating errors has a natural component of the educational experience process, which is an important realization (Demirören et al., [2016](#)). Moreover, teachers were ignored to implement non-obtrusive error correction methods, activities, and tasks to involve students, specifically those high in exhaustion, in-class activities and discussions (Lee & Turner, [2017](#)).

The outcomes have significant ramifications for the results of the mediation analysis. Initially, SE, extrinsic motivation, as well as IM have been assigned mediators of the relationship between teachers' AS and EE in students in HEIs. Clinicians' competence to endow in-depth information regarding interventions has been accepted to improve treatment adherence of subjects. In addition, practitioners and educational psychologists must realize the possibility that motivation or SE of students had been potential strategies in which teacher AS was associated with EE when administering such interventions. Lastly, the results of this study endow novice ideas as well as therapeutic goals for psycho-educational interventions. For instance, educational psychology experts and practitioners adhere regarding modifications in students' IM and SE concentration throughout therapy and the manner in which they are affected by these modifications has been associated with alterations within their EE capacities.

Conclusion

The purpose of this study was to better understand the connection involving teacher emotional commitment and EE among Pakistani students. The research project investigates the direct and indirect impacts of the specified factors for achieving this objective. The outcomes of this research proposed that all the developed hypotheses are significant, except the hypothesis (H6: Intrinsic motivation reduces EE among students). Therefore, teachers in the educational sector of Pakistan can improve the SE, extrinsic and IM among the students. Moreover, enhancing the teacher's AS helps reduce the students' EE.

Similarly, inheriting the EM and SE among students can reduce the emotional exhaustion of the students. At the same time, it was observed that IM mediation was insignificant. As in Pakistan, teachers' AS can only reduce EE among the students once the students are intrinsically motivated. In addition, EM and SE among the students enhance to reduce the EE among the students through the teacher's effective support.

Along with the beneficial characteristics of this study's findings, there were some limitations of the study that may help future researchers overcome. Firstly, the context of this study only revolves around Pakistan due to the need for more evidence in this specific context. Therefore, researchers can replicate this research to discover the characteristics of EE among students in other regions. Secondly, the study's sample size could have been bigger due to the need for more time and resources. Hence, in future, researchers may extend the study's sample size to extrapolate the research's findings. Thirdly, the present research focuses on students' viewpoints. Therefore, the future researcher can also include the instructors' perspective to provide a widespread view of the research.

References

- Babakus, E., Yavas, U., & Karatepe, O. M. (2008). The Effects of Job Demands, Job Resources and Intrinsic Motivation on Emotional Exhaustion and Turnover Intentions: A Study in the Turkish Hotel Industry. *International Journal of Hospitality & Tourism Administration*, 9(4), 384–404. <https://doi.org/10.1080/15256480802427339>
- Baron, R. M., & Kenny, D. A. (1986). The Moderator–Mediator Variable Distinction in Social Psychological research: Conceptual, strategic, and Statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182. <https://doi.org/10.1037/0022-3514.51.6.1173>
- Barukčić, I. (2022). Causal inference and study design. *Causation*, 17(2), 5–72. <https://doi.org/10.5281/zenodo.6299686>
- Blanco-Donoso, L. M., Moreno-Jiménez, J., Gallego-Alberto, L., Amutio, A., Moreno-Jiménez, B., & Garrosa, E. (2021). Satisfied as professionals, but also exhausted and worried!: The role of job demands, resources and emotional experiences of Spanish nursing home workers during the COVID-19 pandemic. *Health & Social Care in the Community*, 30(1), e148–e160. <https://doi.org/10.1111/hsc.13422>
- Blegur, J., Rajagukguk, C. P. M., & Rosari, R. (2022). EMPOWERING A SUPPORTIVE PHYSICAL EDUCATION LEARNING CULTURE FOR THE DEVELOPMENT OF STUDENTS' SOCIAL SELF-ESTEEM. *Facta Universitatis, Series: Physical Education and Sport*, 025–034. <https://doi.org/10.22190/fupes201111003b>
- Bughrara, M. S., Swanberg, S. M., Lucia, V. C., Schmitz, K., Jung, D., & Wunderlich-Barillas, T. (2022). Beyond COVID-19: the impact of recent pandemics on medical students and their education: a scoping review. *Medical Education Online*, 28(1). <https://doi.org/10.1080/10872981.2022.2139657>
- Chaaban, Y. (2022). ICT in ELT: a mixed methods study of Lebanese national policies, university courses and English teachers [Macquarie University].
- Chang, C. Y., Hwang, G. J., & Gau, M. L. (2022). Promoting students' learning achievement and self-efficacy: A mobile chatbot approach for nursing training. *British Journal of Educational Technology*, 53(1), 171–188. <https://doi.org/10.1111/bjet.13158>
- Charoensukmongkol, P., & Phungsoonthorn, T. (2020). The effectiveness of supervisor support in lessening perceived uncertainties and emotional exhaustion of university employees during the COVID-19 crisis: the constraining role of organizational intransigence. *The Journal of General Psychology*, 148(4), 1–20. <https://doi.org/10.1080/00221309.2020.1795613>
- Chen, J., Ghardallou, W., Comite, U., Ahmad, N., Ryu, H. B., Ariza-Montes, A., & Han, H. (2022). Managing Hospital Employees' Burnout through Transformational Leadership: The Role of Resilience, Role Clarity, and Intrinsic Motivation. *International Journal of Environmental Research and Public Health*, 19(17), 10941. <https://doi.org/10.3390/ijerph191710941>
- Chigeda, F., Ndofirepi, T. M., & Steyn, R. (2022). Continuance in organizational commitment: The role of emotional intelligence, work-life balance support, and work-related stress. *Global Business and Organizational Excellence*, 42(1), 22–38. <https://doi.org/10.1002/joe.22172>
- Chun, Y., Sagas, M., & Wendling, E. (2022). The Intervening Effects of Perceived Organizational Support on COVID-19 Pandemic Stress, Job Burnout and Occupational Turnover Intentions of Collegiate Sport Athlete-Facing Professionals. *Sustainability*, 14(11), 6807. <https://doi.org/10.3390/su14116807>
- Demirören, M., Turan, S., & Öztuna, D. (2016). Medical students' self-efficacy in problem-based learning and its relationship with self-regulated learning. *Medical Education Online*, 21(1), 30049. <https://doi.org/10.3402/meo.v21.30049>
- Díaz-Noguera, M. D., Hervás-Gómez, C., De la Calle-Cabrera, A. M., & López-Meneses, E. (2022). Autonomy, Motivation, and Digital Pedagogy Are Key Factors in the Perceptions of Spanish Higher-Education Students toward Online Learning during the COVID-

- 19 Pandemic. *International Journal of Environmental Research and Public Health*, 19(2), 654. <https://doi.org/10.3390/ijerph19020654>
- Fornell, C., & Larcker, D. F. (1981). Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. *Journal of Marketing Research*, 18(3), 382-388. <https://doi.org/10.2307/3150980>
- Geisser, S. (1975). The Predictive Sample Reuse Method with Applications. *Journal of the American Statistical Association*, 70(350), 320-328. <https://doi.org/10.1080/01621459.1975.10479865>
- Gellisch, M., Wolf, O. T., Minkley, N., Kirchner, W. H., Brüne, M., & Brand-Saberi, B. (2022). Decreased sympathetic cardiovascular influences and hormone-physiological changes in response to Covid-19-related adaptations under different learning environments. *Anatomical Sciences Education*, 15(5), 811-826. <https://doi.org/10.1002/ase.2213>
- Ghods, A. A., Ebadi, A., Sharif Nia, H., Allen, K. A., & Ali-Abadi, T. (2022). *Academic burnout in nursing students: An explanatory sequential design*. *Nursing Open*.
- Granziera, H., Martin, A. J., & Collie, R. J. (2023). Teacher well-being and student achievement: A multilevel analysis. *Social Psychology of Education*. <https://doi.org/10.1007/s11218-022-09751-1>
- Guay, F. (2022). Applying self-determination theory to education: Regulations types, psychological needs, and autonomy supporting behaviors. *Canadian Journal of School Psychology*, 37(1), 75-92. <https://doi.org/10.1177/08295735211055355>
- Guay, F., Vallerand, R. J., & Blanchard, C. (2000). On the Assessment of Situational Intrinsic and Extrinsic Motivation: The Situational Motivation Scale (SIMS). *Motivation and Emotion*, 24(3), 175-213. <https://doi.org/10.1023/a:1005614228250>
- Haftador, A. M., Shirazi, F., & Mohebbi, Z. (2021). Online class or flipped-jigsaw learning? Which one promotes academic motivation during the COVID-19 pandemic? *BMC Medical Education*, 21(1), 1-8. <https://doi.org/10.1186/s12909-021-02929-9>
- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modelling (PLS-SEM)*. SAGE Publications.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152. <https://doi.org/10.2753/MTP1069-6679190202>
- Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European Business Review*, 26(2), 106-121. <https://doi.org/10.1108/eb-10-2013-0128>
- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management & Data Systems*, 117(3), 442-458. <https://doi.org/10.1108/imds-04-2016-0130>
- Hayek, J., Schneider, F., Lahoud, N., Tueni, M., & de Vries, H. (2022). Authoritative parenting stimulates academic achievement, also partly via self-efficacy and intention towards getting good grades. *PLOS ONE*, 17(3), e0265595. <https://doi.org/10.1371/journal.pone.0265595>
- Henry, J. D., Grainger, S. A., & von Hippel, W. (2022). Determinants of Social Cognitive Aging: Predicting Resilience and Risk. *Annual Review of Psychology*, 74(1), 167-192. <https://doi.org/10.1146/annurev-psych-033020-121832>
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: updated guidelines. *Industrial Management & Data Systems*, 116(1), 2-20. <https://doi.org/10.1108/imds-09-2015-0382>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.

- Heo, H., Bonk, C. J., & Doo, M. Y. (2022). Influences of depression, self-efficacy, and resource management on learning engagement in blended learning during COVID-19. *The Internet and Higher Education*, 54, 100856. <https://doi.org/10.1016/j.iheduc.2022.100856>
- Hofferber, N., Basten, M., Großmann, N., & Wilde, M. (2016). The effects of autonomy-supportive and controlling teaching behaviour in biology lessons with primary and secondary experiences on students' intrinsic motivation and flow-experience. *International Journal of Science Education*, 38(13), 2114–2132. <https://doi.org/10.1080/09500693.2016.1229074>
- Hsieh, C.-C., Ho, S. S.-H., Li, H.-C., & Liang, J.-K. (2021). Mindfulness as Moderator Against Emotional Exhaustion Due to Online Teaching During COVID-19 Pandemic: An Investigation Using Job Demands-Resources Model and Conservation of Resource Theory. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.781804>
- Imran, N., Haider, I. I., Mustafa, A. B., Aamer, I., Kamal, Z., Rasool, G., Azeem, M. W., & Javed, A. (2021). The hidden crisis: COVID-19 and impact on mental health of medical students in Pakistan. *Middle East Current Psychiatry*, 28(1), 1–9. <https://doi.org/10.1186/s43045-021-00123-7>
- Jansen, M., Scherer, R., & Schroeders, U. (2015). Students' self-concept and self-efficacy in the sciences: Differential relations to antecedents and educational outcomes. *Contemporary Educational Psychology*, 41, 13–24. <https://doi.org/10.1016/j.cedpsych.2014.11.002>
- Lau, C., Kitsantas, A., Miller, A. D., & Drogin Rodgers, E. B. (2018). Perceived responsibility for learning, self-efficacy, and sources of self-efficacy in mathematics: a study of international baccalaureate primary years programme students. *Social Psychology of Education*, 21(3), 603–620. <https://doi.org/10.1007/s11218-018-9431-4>
- Lee, J., & Turner, J. (2016). The role of pre-service teachers' perceived instrumentality, goal commitment, and motivation in their self-regulation strategies for learning in teacher education courses. *Asia-Pacific Journal of Teacher Education*, 45(3), 213–228. <https://doi.org/10.1080/1359866x.2016.1210082>
- Liu, M., Gorgievski, M. J., Qi, J., & Paas, F. (2022). Increasing teaching effectiveness in entrepreneurship education: Course characteristics and student needs differences. *Learning and Individual Differences*, 96, 102147. <https://doi.org/10.1016/j.lindif.2022.102147>
- Liu, Q., Du, X., & Lu, H. (2022). Teacher support and learning engagement of EFL learners: The mediating role of self-efficacy and achievement goal orientation. *Current Psychology*, 42, 1–17. <https://doi.org/10.1007/s12144-022-04043-5>
- Malik, S., Rehman, N., Naz, F., Rehman, S., Syed, Z., Mushtaq, H., & Haseeb, A. (2022). COVID-19 PANDEMIC-KNOWLEDGE, PERCEPTION, ANXIETY AND DEPRESSION AMONG FRONTLINE HEALTHCARE WORKERS OF AYUB TEACHING HOSPITAL ABBOTTABAD, PAKISTAN. *Journal of Ayub Medical College Abbottabad*, 34(3 (SUPPL 1)). <https://doi.org/10.55519/jamc-03-s1-10650>
- Mangundjaya, W. (2022). Age and Educational Level on Psychological Empowerment and Affective Commitment to Change. *International Journal of Advanced Multidisciplinary*, 1(2), 263–275. <https://doi.org/10.38035/ijam.v1i2>
- Matviichuk, L., Ferilli, S., & Hnedko, N. (2022). Study of the Organization and Implementation of E-Learning in Wartime Inside Ukraine. *Future Internet*, 14(10), 295. <https://doi.org/10.3390/fi14100295>
- Mdookh, W., & YILDIRIM, İ. (2023). Factors that Increase and Decrease Teachers' Motivation: The example of Gaza. *Bartın University Journal of Faculty of Education*, 12(1), 167–179.
- Muhammad, N., Iqbal, J., & Parveen, A. (2022). The Relationship between Teachers' Professional Growth and Organizational

- Commitment at Secondary Schools Level in the Punjab. *Human Nature Journal of Social Sciences*, 3(4), 365–372. <http://hnpublisher.com/ojs/index.php/HN/JSS/article/view/252>
- Naidoo-Chetty, M., & Plessis, M. D. (2021). Systematic Review of the Job Demands and Resources of Academic Staff within Higher Education Institutions. *International Journal of Higher Education*, 10(3), 268–284. <https://doi.org/10.5430/ijhe.v10n3p268>
- Nurikhwan, P. W., Felaza, E., & Soemantri, D. (2022). Burnout and quality of life of medical residents: a mixed-method study. *Korean Journal of Medical Education*, 34(1), 27–39. <https://doi.org/10.3946/kjme.2022.217>
- Okoro, A. U., Nwagbo, C. R., Ugwuanyi, C. S., & Ugwu, B. E. (2022). Evaluating the Impact Of Teachers' Self-Efficacy On Students' Academic Achievement In Biology In Enugu State, Nigeria. *Webology*, 19(3), 161-176. <https://www.webology.org/abstract.php?id=2676>
- Orunbon, N. O., & Modupe, I.-P. M. (2021). School Organisational Silence, Teachers' Job Commitment and Productivity in Senior Secondary Schools Education District I of Lagos State, Nigeria. *Journal of Educational Sciences*, 5(3), 569-583. <https://jes.ejournal.unri.ac.id/index.php/JES/article/view/8198>
- Percy, M. M., Tigert, J. M., & Fredricks, D. E. (2023). *Core practices for teaching multilingual students: Humanizing pedagogies for equity*. Teachers College Press.
- Qureshi, M. A., Raza, S. A., Kolachi, I. A., Sarwar, A., & Khan, K. A. (2022). Influence of Front-Desk Staff Service Quality on Students' Affective Commitment, Trust, and Word-of-Mouth in Higher Education. *Asian Academy of Management Journal*, 27, 29–60. <https://doi.org/10.21315/aamj2022.27.1.2>
- Rani, S., & Jain, R. (2023). Understanding The Relationship Between Gender And Experience In The Self-Efficacy Of Indian Teacher Educators. *Journal of Positive School Psychology*, 953-964.
- Sakiz, G. (2007). *Does teacher affective support matter? An investigation of the relationship among perceived teacher affective support, sense of belonging, academic emotions, academic self-efficacy beliefs, and academic effort in middle school mathematics classrooms*. The Ohio State University]. Columbus, OH.
- Salmela-Aro, K., Upadyaya, K., Ronkainen, I., & Hietajärvi, L. (2022). Study Burnout and Engagement During COVID-19 Among University Students: The Role of Demands, Resources, and Psychological Needs. *Journal of Happiness Studies*, 23(6), 2685–2702. <https://doi.org/10.1007/s10902-022-00518-1>
- Sarstedt, M., Ringle, C. M., Smith, D., Reams, R., & Hair, J. F. (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. *Journal of Family Business Strategy*, 5(1), 105–115. <https://doi.org/10.1016/j.jfbs.2014.01.002>
- Shuo, Z., Xuyang, D., Xin, Z., Xuebin, C., & Jie, H. (2022). The Relationship Between Postgraduates' Emotional Intelligence and Well-Being: The Chain Mediating Effect of Social Support and Psychological Resilience. *Frontiers in Psychology*, 13, 1–9. <https://doi.org/10.3389/fpsyg.2022.865025>
- Steggerda, J. C., Pastrana, F. A., Craig, J. R., & Cavell, T. A. (2023). Lunchroom-Specific Peer Acceptance and Children's Internalizing Symptoms. *Child Psychiatry & Human Development*, 1–10. <https://doi.org/10.1007/s10578-023-01497-x>
- Stone, M. (1974). Cross-Validatory Choice and Assessment of Statistical Predictions. *Journal of the Royal Statistical Society: Series B (Methodological)*, 36(2), 111–133. <https://doi.org/10.1111/j.2517-6161.1974.tb00994.x>
- Syahrani, N. A. (2022). *The Analysis of the Impact of Rewards on Students' motivation In Learning English: A Study at English Department Hasanuddin University Batch 2021 = The Analysis of the Impact of Rewards on Students' motivation In Learning English. A Study at English Department Hasanuddin University Batch 2021 Hasanuddin University*]. Indonesia.
- Teasdale, J. D. (1978). Self-efficacy: Toward a unifying theory of behavioural change? *Advances in Behaviour Research and*

- Therapy*, 1(4), 211–215.
[https://doi.org/10.1016/0146-6402\(78\)90009-7](https://doi.org/10.1016/0146-6402(78)90009-7)
- Ten Hagen, I., Lauermaun, F., Wigfield, A., & Eccles, J. S. (2022). Can I teach this student?: A multilevel analysis of the links between teachers' perceived effectiveness, interest-supportive teaching, and student interest in math and reading. *Contemporary Educational Psychology*, 69, 102059.
- Tobbell, J., Burton, R., Gaynor, A., Golding, B., Greenhough, K., Rhodes, C., & White, S. (2020). Inclusion in higher education: an exploration of the subjective experiences of students. *Journal of Further and Higher Education*, 45(2), 1–12.
<https://doi.org/10.1080/0309877x.2020.1753180>
- Vetter, F. J. (2022). *Principals Cultivating Collective Teacher Efficacy Walden University*.
- Wang, J., Tigelaar, D. E. H., Luo, J., & Admiraal, W. (2022). Teacher beliefs, classroom process quality, and student engagement in the smart classroom learning environment: A multilevel analysis. *Computers & Education*, 183, 104501.
<https://doi.org/10.1016/j.compedu.2022.104501>
- Wong, K.-T. (2013). Partial Least Squares Structural Equation Modeling (PLS-SEM) Techniques Using SmartPLS. *Marketing Bulletin*, 24(1), 1–32.
- Yli-Panula, E., Jeronen, E., Koskinen, S., & Mäki, S. (2022). Finnish University Students' Views on Climate Change Education and Their Own Ability to Act as Climate Educators. *Education Sciences*, 12(3), 169.
<https://doi.org/10.3390/educsci12030169>
- Yu, J., Kreijkes, P., & Salmela-Aro, K. (2022). Students' growth mindset: Relation to teacher beliefs, teaching practices, and school climate. *Learning and Instruction*, 80, 101616.
<https://doi.org/10.1016/j.learninstruc.2022.101616>
- Zdawczyk, C., & Varma, K. (2022). Engaging girls in computer science: gender differences in attitudes and beliefs about learning scratch and python. *Computer Science Education*, 1–21.
<https://doi.org/10.1080/08993408.2022.2095593>
- Zeng, Y., & McEneaney, J. E. (2022). *Not All Competitions Are the Same: Digital Game-based Learning Environments That Incorporate Competition Facilitates Students' Learning Motivation*. DigitalCommons@Fayetteville State University.
<https://digitalcommons.uncfsu.edu/jri/vol7/iss1/2>
- Zhang, J., Huang, Q., & Xu, J. (2022). The Relationships among Transformational Leadership, Professional Learning Communities and Teachers' Job Satisfaction in China: What Do the Principals Think? *Sustainability*, 14(4), 2362.
<https://doi.org/10.3390/su14042362>
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis. *Journal of Consumer Research*, 37(2), 197–206.
<https://doi.org/10.1086/651257>
- Zhou, Y., Wu, Y., Deng, X., Wang, S., & Shi, L. (2022). Analysis Model of the Influence of Self-Efficacy on Professional Toughness of Preschool Teachers under the Condition of Ensuring Children's Mental Health and Healthy Family Environment. *Journal of Environmental and Public Health*, 2022, 1–11.
<https://doi.org/10.1155/2022/3737690>