



Relationship of Procrastination with Self-Efficacy and Job Performance among University Educators

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ABSTRACT

This study investigates the relationship between procrastination, self-efficacy, and job performance among university educators. A total of 110 participants (73 males and 37 females) were recruited using a purposive sampling technique. Data was collected using three standardized instruments: the General Procrastination Scale, the New General Self-Efficacy Scale, and the short version of the Self-Assessment Job Performance Scale. The findings revealed a significant negative correlation between procrastination and job performance, indicating that higher levels of procrastination were associated with decreased job performance among university educators. Moreover, self-efficacy demonstrated a positive association with job performance, suggesting that individuals with greater confidence in their capabilities performed better professionally. Notably, unmarried educators exhibited superior job performance and self-efficacy compared to their married colleagues. Furthermore, age-related differences were observed, with educators aged 47 to 57 demonstrating significantly higher self-efficacy and job performance than those in the 25 to 35 and 36 to 46 age groups. These results underscore the detrimental impact of procrastination on academic job performance and highlight the critical role of self-efficacy in enhancing professional outcomes. The findings also suggest that demographic factors, such as marital status and age, influence job performance and self-efficacy levels among university educators. Addressing procrastination through targeted interventions may contribute to improved job efficiency and overall institutional productivity.



Introduction

Educators contribute to society by helping individuals establish an exemplary community; their guidance and education significantly influence people's lives, preparing them for future leadership roles (Asmatullah, et al., 2024). Successful learning largely hinges on the instructional methods employed by educators (Serdar, et al., 2021). Educators are proficient in executing their responsibilities to achieve superior job performance (Ishak, et al., 2021). Educators are universally acknowledged as having a significant effect on children's academic development both within educational institutions and outside the family (Burgess, 2019). Among university educators, procrastination can impact job performance and self-efficacy, particularly in developing countries like Pakistan, where higher education institutions face structural and resource-related challenges (Rafique, et al., 2022; Afaq et al., 2022).

Procrastination among University Educators

Procrastination among educators in Pakistan is associated with both personal and institutional variables. Khan, et al. (2021) discovered that procrastination is common among faculty members due to workload demands, administrative duties, and insufficient motivation (Steel, 2007). Educators and scholars in higher education have increasingly experienced stress due to the rigorous demands of production and the intricacies of their work (Graça et al., 2021). Increased expectations for teaching and research competitiveness at universities and colleges have resulted in elevated stress levels, depressive symptoms, emotional tiredness, and turnover among university faculty (Yin, et al., 2020; Yu, et al., 2022). Han, et al. (2021) discovered that instructors subjected to significant stress from organizational practices negatively impacted job satisfaction.

Self-Efficacy and Procrastination

Self-efficacy, characterized as an individual's conviction in their ability to successfully perform activities (Bandura, 1997), significantly impacts procrastinating behavior. Self-efficacy is an individual's conviction in their capabilities to perform a task. Self-efficacy is a pivotal factor in students' academic achievement since it affects their decision-making and actions (Carada, et al., 2022). Self-efficacy is a crucial internal self-influence component in social cognitive theory, denoting an individual's assessment of their capability to execute a specific job inside a particular area (Chandrasekaran, et al., 2021; Sibte-Ali et al., 2024). The experiences and cognitive capacities of individuals are primary indicators of their self-efficacy levels. The level of self-efficacy belief varies among people. Certain individuals possess elevated levels of self-efficacy, while others exhibit moderate levels, while some have low levels of self-efficacy. It is a significant determinant for people in their careers (Naoreen, et al., 2020).

Research in Pakistan indicates that educators with elevated self-efficacy exhibit reduced procrastination since they possess greater confidence in managing academic tasks effectively (Malik & Qureshi, 2020). Conversely, diminished self-efficacy correlates with heightened procrastination, as individuals question their skills and are prone to defer responsibilities (Zafar, et al., 2021).

Job Performance and Procrastination

Job performance among university educators is critical for ensuring effective teaching, research contributions, and administrative duties. Studies have demonstrated a negative relationship between procrastination and job performance in Pakistani universities. University educators

experiencing elevated job stress encountered increased job burnout (Li, 2018). The job stress of university educators is inversely correlated with job satisfaction (Liu, et al., 2023). Procrastination adversely affects the workplace performance of individuals at all levels, whether they are involved in decision-making or mundane operational tasks. Elevated employment demands deplete energy, resulting in tiredness and detriment to mental and physical health (Ahmad, et al., 2021).

Job engagement results in enhanced performance with both task and contextual job outcomes (Ashraf, et al., 2024). Task behaviors and contextual behaviors can be utilized to characterize job performance, effort, and administrative performance (Asmatullah, et al., 2024). Teacher's work performance is a consistent predictor that psychologically influences teachers' persistence in their professions and institutions.

Relationship Between Procrastination, Self-Efficacy, and Job Performance

Empirical research from Pakistan indicates a robust correlation between procrastination, self-efficacy, and job performance. Tariq, et al. (2023) conducted a study revealing that self-efficacy mediates the connection between procrastination and job performance in university teachers. Educators possessing elevated self-efficacy exhibited superior work management and enhanced job performance, even in the face of academic hurdles. In contrast, faculty members exhibiting diminished self-efficacy were more susceptible to procrastination, adversely affecting their job performance. A recent study by Ahmad and Mahmood (2022) revealed that educators who often delay demonstrate diminished job satisfaction, less efficiency, and lower student engagement. The study indicated that educators who postpone grading, research, and lecture preparations frequently encounter stress and burnout, which subsequently impacts their job performance.

Significance of Study

Procrastination is a widespread problem that undermines workplace efficiency and individual well-being. Procrastination among university instructors can have an impact on classroom quality, research output, and administrative efficiency, all of which affect student results. While procrastination has been extensively studied in Western contexts, its association with self-efficacy and job performance is mostly unknown in Pakistan.

In Pakistan's higher education sector, faculty members frequently have several responsibilities, including teaching, research, and administration. The need to publish research, meet institutional expectations, and manage huge student populations can all contribute to procrastination, especially if educators lack confidence in their abilities (self-efficacy). Given that self-efficacy is an important predictor of motivation and task completion, investigating its involvement in procrastination can reveal psychological impediments to job success. Furthermore, the employment performance of university instructors has a direct impact on the quality of higher education in Pakistan. With increased rivalry in academia and rising expectations from both students and institutions, knowing the impact of procrastination on job performance might assist universities in implementing tailored treatments. Addressing procrastination through faculty training, self-efficacy improvement programs, and systematic task management may result in better academic achievements.

This research is important for Pakistani academics since it will provide empirical information on the relationship between procrastination, self-efficacy, and work performance among university professors. The findings can help educators improve their professional performance, shape institutional practices, and contribute to the body of psychological literature.

Research Methodology

Objectives

- To ascertain the correlation between procrastination, job performance, and self-efficacy in university educators.
- To investigate the difference of scores based on marital status and age groups on study variables among university educators.

Hypotheses

The hypotheses formulated for the current study are as follows:

1. A negative correlation exists between procrastination and job performance among university educators.
2. A positive correlation exists between self-efficacy and job performance among university educators.
3. Unmarried educators exhibit higher job performance, and self-efficacy compared to married ones.
4. University Educators aged 46 to 60 exhibit higher levels of self-efficacy and job performance than those aged 25 to 35 and 36 to 45.

Research Design & Sampling

The present study is based on Cross-sectional Survey Design, and the purposive sampling strategy was employed in this research to pick university teachers $N= 110$ ($M=74$ and $F=36$) aged, 25-80 years from various institutions in Lower Dir, notably the University of Malakand Main Campus, Women Campus Bathkila, and Ripah International University, Chakdara Campus.

Criteria for Inclusion; The inclusion criteria encompassed university teaching staff from the districts of Malakand and Lower Dir, specifically within the age range of 25 to 60 years. Participants of both genders (male and female), whether married or single, were required to provide informed consent willingly before filling up the questionnaires.

Criteria for Exclusion; The current research study excluded teachers from schools, colleges, and other educational institutions, such as nursing or language academies. Teachers with diagnosed psychological illnesses or physical disabilities were also excluded.

Measures

General Procrastination Scale (GPS) constructed by Lodha and associates in 2016, has 23 items and assesses procrastination across four domains: academic, workplace, medical, and civic duties. All items must be evaluated using a 5-point Likert scale, with values ranging from 1 to 5. The scores indicate a Procrastination Quotient (PQ). Items 5, 8, 12, 16, 18, 21, and 23 are scored in reverse. Scores are derived from the cumulative responses to each item, ranging from 23 to 115. A greater total of scores across all items signifies a higher degree of procrastination for the individual test taker, shown in an elevated Procrastination Quotient (P.Q.). The Cronbach's Alpha correlation value is 0.714.

The New General Self-Efficacy Scale developed by organizational psychologist Gilad Chen and his team in 2001, consists of an 8-item test. Employing a five-point rating scale (1 = strongly

disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = highly agree). *NGSE* has an internal consistency reliability of $\alpha = .90$.

Short Version of Self-Assessment Scale of Job Performance The self-assessment measure for job performance was originally developed with 20 elements rated on a five-point frequency range from 1 (never) to 5 (always). This revised version of the self-assessment comprises 10 items. The scale functionality was evaluated in the original study by Andrade, Queiroga, & Valentini (2020), and the component analyses revealed that the two dimensions accounted for 39.4% of the item variation. Cronbach's alpha coefficients were 0.88 for the context component and 0.82 for the task factor.

Procedure

The data for the current research was gathered from multiple universities in the Malakand and Lower Dir districts. Utilizing a purposive sampling strategy. The goal of the research was elucidated to all participants, and informed consent was obtained before distributing the questionnaires for data collection. The research participants were informed that the data collected would remain anonymous and their identities would not be disclosed under any circumstances, save in legal proceedings. Upon the participants' consent in the study, the demographics form was administered alongside the test scales, and the gathered data was input into SPSS for subsequent statistical analysis.

Ethical Considerations

While conducting a study on the relationship between procrastination, self-efficacy, and job performance among university educators, researchers adhered to ethical guidelines including informed consent (Researchers obtained voluntary participation consent and participants were provided with a clear explanation of the study's purpose, procedures, potential risks, and benefits). Their personal information was kept secured, stored, and accessible only to authorized researchers. Researchers did honest and transparent reporting of data and findings. Before data collection, researchers sought approval from the Departmental Ethics Committee to ensure compliance with ethical standards and guidelines.

Results

Table 1

Frequency and percentage of participants. (N=110)

Demographic Variables	F	%
Age		
25 to 35 years	47	42.7
36 to 46 years	59	53.6
47 to 57 years	4	3.6
Gender		
Male	73	66.4
Female	37	33.6
Socioeconomic status		
Upper	6	5.5

Middle	96	87.3
Lower	8	7.3
Marital Status		80.0
Married	88	20.0
Unmarried	22	
Location		
Rural	20	18.2
Urban	90	81.8

Table 1 presents the frequencies and percentages of university teachers by age range: 25-35 years ($f=47$, 42.7%), 36-45 years ($f=59$, 53.6%), and 46-80 years ($f=4$, 3.6%). The male population comprises 73 individuals (66.4%), while the female population consists of 37 individuals (33.6%). The frequency and percentage based on socioeconomic status are as follows: upper ($f=6$, 5.5%), middle ($f=96$, 87.3%), and lower ($f=109$, 36.3%). Additionally, married teachers account for ($f=88$, .7%), while unmarried teachers represent ($f=22$, 20.0%). The table presents the frequency and percentage of university teachers from rural areas ($f=20$, 18.2%) and urban areas ($f=90$, 81.8%).

Table 2

Psychometric property of study variables. (N=110).

Variables	α	K	M	SD	Range		Skew.
					Actual	Potential	
Procrastination	.75	23	58.69	10.72	32-92	23-115	.31
Self-efficacy	.92	8	32.12	5.71	14-40	8-40	-2.13
Job Performance	.63	10	36.23	6.23	14-50	10-50	-1.62

Table 2 presents the psychometric properties of the study variables. The reliability analysis reveals that the reliability coefficient for the general procrastination scale is .75, the new general self-efficacy scale is .92, and the short version of the self-assessment of the job performance scale is .63. The table indicates that all scales have skewness between -2 and +2 that shows that all values are within normal ranges.

Table 3

Pearson correlation among procrastination, self-efficacy, and job performance. (N=110)

Variables	1	2	3
Procrastination	-	-.144	-.369**
Self-efficacy		-	.563**
Job Performance			-

** $p \leq .01$

Table 3 presents the correlation between procrastination, self-efficacy, and job performance in university educators. Results demonstrate a significant negative correlation between procrastination and job performance, as well as a significant positive correlation between procrastination and self-efficacy. However, the association between procrastination and job performance is non-significant and negative.

Table 4

Mean, standard deviation, and t-values of Self-efficacy and Job performance based on the marital status of university educators. (N=110)

Variables	Married (n=88)		unmarried (n=22)		t(108)	p	95% CI		Cohen's d
	M	SD	M	SD			LL	UL	
	Self-efficacy	29.62	6.73	33.23			8.61	-2.12	
Job Performance	34.68	5.63	39.18	11.82	-2.68	.01	-7.93	-1.16	.57

Table 4 presents the mean, standard deviation, and t-values for married and unmarried university educators concerning the study variables. The findings indicate that unmarried university educators exhibit higher self-efficacy ($M=33.23$, $SD= 8.61$) in the workplace compared to their married counterparts, attributed to the differing roles and responsibilities they encounter in both professional and personal spheres. The results indicate that unmarried university teachers exhibit superior job performance ($M=39.18$, $SD= 11.82$) compared to their married counterparts. The results are both significant at the $p \leq .05$ level.

Table 5

Mean, standard deviation, and f-values of Self-efficacy and Job performance based on the three age groups of university educators. (N=110)

Variables	Younger Adult (n=47)		95%CI		Adults (n=59)		95%CI		Older Adults (n=4)		95%CI		f (107)	p	Post-Hoc	η ²
	M	SD	LL	UL	M	SD	LL	UL	M	SD	LL	UL				
	Self-efficacy	31.58	7.88	29.2	33.8	29.27	6.71	27.5	31.0	32.75	5.73	23.6				
Job performance	36.70	8.67	34.1	39.2	34.6	6.44	32.9	36.3	36.50	4.88	28.8	44.1	1.04	.29	1>2<3	--

The data presented in Table 5 includes the mean, standard deviation, and f-values for Self-efficacy and Job performance across the three age groups of university educators. The findings regarding self-efficacy indicate significant mean differences among younger adults, adults, and older adults ($M=31.58$, 29.27 , 32.75) along with their respective standard deviations ($SD=7.88$, 6.71 , 5.73). Minor mean differences were observed in the three age ranges regarding job performance ($M=36.70$, 34.6 , 36.50) and standard deviation ($SD=8.67$, 6.44 , 4.88) respectively. The analysis clearly indicated a significant difference in the self-efficacy of university teachers and highlighted no significant difference in job performance.

Discussion

This study aimed to assess the relationship between procrastination, self-efficacy, and job performance in university teachers. This study also examined the differences of scores based on demographic characteristics, including age, and marital status of university educators. The study hypothesized a negative correlation between university professors' work performance and procrastination. The results of this study corroborate the robust inverse relationship between the two variables. This aligned with prior studies, indicating a negative correlation between

procrastination and work performance. The study indicated a significant likelihood of frequent employee procrastination, leading to diminished work performance (Saman & Wiravan, 2021). Procrastination can hinder job performance for university educators by postponing task completion, leading to subpar work quality, heightened stress, and overlooked deadlines (Schouwenburg, et al., 2019).

Studies have repeatedly shown a negative correlation between self-efficacy and procrastination. Individuals possessing high self-efficacy—confidence in their capacity to perform tasks—are less prone to procrastinating habits. In contrast, individuals with poor self-efficacy frequently procrastinate owing to self-doubt and apprehension around failure. A study by Cerino (2014) indicated that elevated academic self-efficacy correlated with diminished academic procrastination in college students. Research by Singh, & Srivastava, (2024) similarly demonstrated that academic self-efficacy has a negative correlation with academic procrastination, mediated by self-control. The findings indicate that improving self-efficacy may serve as an effective approach to diminish procrastinating tendencies.

The study highlighted that the scores of job performance and self-efficacy are significantly higher among unmarried university educators compared to their married counterparts. The outcomes of the current study confirm that single individuals are better job performers. These inequalities indicate that unmarried educators may possess fewer familial responsibilities, enabling them to concentrate more on their professional duties, thereby improving self-efficacy and job performance (Batool, et al., 2020; Bhalla & Tanwar, 2024). In contrast, married educators frequently manage numerous responsibilities, which may result in heightened stress and diminished effectiveness in their professional roles. Comprehending these relationships is essential for creating tailored support systems that meet the specific obstacles encountered by educators according to their marital status (Mbongo, 2024). Both groups demand an equivalent level of diligence in maintaining work responsibilities. The research on the influence of marital status on employee performance revealed a favorable correlation between marital status and job performance (Aslam, et al., 2020).

Lastly, this study anticipated that university teachers aged 47 to 57 exhibit better levels of self-efficacy and job performance than those aged 25 to 35 and 36 to 46. The results of this study align with those of prior research. Qualitative investigation indicated that instructors' self-efficacy is contingent upon age. The present study concludes that age affects instructors' self-efficacy in a curvilinear fashion. Teachers' self-efficacy and its domains rise from the onset of employment until middle age, after which it stabilizes. Subsequently, teachers' self-efficacy diminishes as they advance past middle age and near retirement due to external life responsibilities (Odanga et al., 2024). Recent studies have explored the relationship between age, self-efficacy, and job performance among university educators. Ismayilova (2019) found that university teachers' self-efficacy varied according to their career stage and qualification level, with more experienced educators demonstrating higher self-efficacy. Similarly, research indicates that self-efficacy and job satisfaction are positively correlated, with more experienced teachers reporting higher levels of both.

Shortcomings of Study

A few limitations may affect this study.

- With its correlational research design, the study could not prove a causal link between work performance and procrastination self-efficacy.
- The results may not apply to other occupational groups or career stages since university professors are a specific professional group.
- The study focuses primarily on procrastination self-efficacy and job performance, ignoring other characteristics that may affect university professors' work performance. Consider organizational support, work satisfaction, and motivation for a more complete analysis.

Implications and Conclusion

The findings of these studies highlight the need for interventions to reduce procrastination among university educators in Pakistan. Universities should focus on professional development programs aimed at enhancing self-efficacy through workshops, mentorship, and time management training. Addressing procrastination at an institutional level can lead to improved job performance and overall academic productivity.

Future research should explore the role of psychological interventions and organizational support systems in mitigating procrastination among faculty members. Understanding these dynamics can contribute to the development of strategies that enhance both educator efficiency and student learning outcomes in Pakistan's higher education sector.

References

1. Afaq, A., Khan, Q., Arshad, A., Sibte-e-Ali, M., & Malik, A. A. (2022). The job satisfaction of academic staff in higher educational institutes. *Journal of South Asian Studies*, 10(1), 95-101.
2. Ahmad, M., & Mahmood, K. (2022). The impact of procrastination on job performance among university faculty members in Pakistan. *Pakistan Journal of Educational Research*, 5(2), 45-61.
3. Ahmad, Z., Munir, N., & Hussain, M. (2021). Procrastination and job performance of employees working in public and private sector organizations. *Pakistan Social Sciences Review*, 5(2),
4. Andrade, É. G. S. de A., Queiroga, F., & Valentini, F. (2020). Short Version of Self-Assessment Scale of Job Performance. *Anales de Psicología / Annals of Psychology*, 36(3), 543-552.
5. Ashraf, R., Hussain, M., ul haq, A., Ullah, A., & Fatima, I. (2024). Investigating the Mediating Role of Work Engagement in the Relationship between Personality and Work Performance among Freelancers. *Migration Letters*, 21(S7), 1732-1745.
6. Aslam, W., Hafeez, M., Shahzad, A. K., Ahmad, A., Maenuddin, ..., & Khan, M. (2020). Evaluating the impact of marital status on employees' job performance: Moderating role of hired hand's gender. *International Journal of Advanced Science and Technology*, 29(11s), 1699–1706.
7. Asmatullah, Hussain, M., Afzal, H., Naseer, S., Mobeen, R., & Rehmatullah. (2024). Examining the relationship of occupational self-efficacy, job stress, and job performance among university teachers of Quetta. *Migration Letters*, 21(2), 144-158

8. Bandura, A. (1997). *Self-efficacy: The exercise of control*. W.H. Freeman.
9. Batool, S., Atta, M., & Riaz, N. (2020). Impact of self-efficacy on job stress in teachers: The role of marital status. *Journal of Research in Social Sciences*, 8(2), 46-61.
10. Bhalla, V., & Tanwar, K. (2024). Correlational study of work life balance, religiosity and psychological well-being in married and unmarried working women. *Department of Clinical Psychology, Max Hospital and SGT University, Gurugram*.
11. Burgess, S. (2019). Understanding teacher effectiveness to raise pupil attainment. *IZA World of Labor*: 465.
12. Carada, I., Aliazas, J. V., Palacio, L., & Palacio, C. M. A. (2022). Perceived Skills and Employability of Senior High School Graduates: Basis for Youth *Employment Policy. International Journal of Social Sciences and Humanities Invention*, 9(01), 6759-6766.
13. Cerino, E. S. (2014). Relationships Between Academic Motivation, Self-Efficacy, and Academic Procrastination. *Psi Chi Journal of Psychological Research*, 19(4), 156–163. <https://doi.org/10.24839/2164-8204.jn19.4.156>
14. Chandrasekaran K, Halim F, Sulaiman W, et al. (2021). Conceptual Review on the Role of Self Efficacy in influencing Work Life Balance of Telecommuters[J]. *International Journal of Academic Research in Accounting, Finance and Management Sciences*.
15. Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational research methods*, 4(1), 62-83.
16. Graça, M., Pais, L., Mónico, L., Dos Santos, N. R., Ferraro, T., & Berger, R. (2021). Decent work and work engagement: a profile study with academic personnel. *Applied. Res. Qual. Life*. 16, 917–939.
17. Han, J., Perron, B. E., Yin, H., & Liu, Y. (2021). Faculty stressors and their relations to teacher self-efficacy, engagement and teaching satisfaction. *High. Educ. Res. Develop.* 40, 247–262.
18. Han, Y., & Wang, Y. (2021). Investigating the correlation among Chinese EFL teachers' self-efficacy, work engagement, and reflection. *Front. Psychol.* 12:763234.
19. Ishak, N., & Jamian, L. S. (2021). Emotional intelligence, self-efficacy, and job performance of university lecturers. *Social and Management Research Journal*, 18(1), 31-51
20. Ismayilova, K. (2019). *University teachers' self-efficacy for research and teaching and its relationship with job satisfaction: A mixed methods study*. University of Leeds. <https://etheses.whiterose.ac.uk/23011/>
21. Khan, S., Iqbal, M., & Yousaf, R. (2021). Procrastination and its implications for faculty performance in higher education institutions of Pakistan. *Journal of Educational Psychology and Research*, 4(1), 78-92.
22. Li, J. J. (2018). A study on university teachers' job stress-from the aspect of job involvement. *J. Interdisciplinary Math.* 21, 341–349.
23. Li, X. Y., Zhang, Q., & Gamble, J. H. (2022). Teacher burnout and turnover intention in higher education: the mediating role of job satisfaction and the moderating role of proactive personality. *Front. Psychol.* 13:6277.
24. Liu, Y., Yi, S. & Siwatu, K. O. (2023) Mediating roles of college teaching self-efficacy in job stress and job satisfaction among Chinese university teachers. *Front. Educ.* 7:1073454.
25. Lodha, P., Sharma, A., Dsouza, G., Marathe, I., Dsouza, S., Rawal, S., Pandya, V., & Sousa, A. D. (2019). General Procrastination Scale: Development of validity and reliability. *International Journal of Medicine and Public Health*, 9(3), 74-80. DOI : 10.5530/ijmedph.2019.3.19
26. Malik, A., & Qureshi, N. (2020). Self-efficacy and academic procrastination: A study of university educators. *Asian Journal of Social Sciences and Humanities*, 9(3), 112-126.

27. Mbongo, D. N. (2024). Relationship between teachers' self-efficacy and age, gender, and marital status among teachers at rural high schools. *International Journal of Studies in Inclusive Education*, 1(1), 93-98. <https://doi.org/10.38140/ijisie.v1i1.1288>
28. Naoreen, B., Mohsin, M. N., & Farooqi, S. M. A. (2020). University Teachers' Perceptions of Self-Efficacy and Its Relationship with Workplace Stress. *Global Social Sciences Review*, V(II), 182-189.
29. Naoreen, B., Tahira, S. S., Shahzad, D. S., & Jalal, H. (2020). Impact of Self-Efficacy of University Teachers on Their Performance. *Ilkogretim Online - Elementary Education Online*, 19(3).
30. Odanga, S. J., & Aloka, P. J. (2024). Effects of Age on Teachers' Self-Efficacy: Evidence from Secondary Schools. *Athens Journal of Education*, 11(4), 301-314
31. Rafique, H., Sarwar, M., & Naeem, Z. (2022). Structural barriers and psychological predictors of procrastination among Pakistani university educators. *International Journal of Educational Development*, 38(4), 201-220.
32. Saman, A., & Wirawan, H. (2021). Examining the impact of psychological capital on academic achievement and work performance: The roles of procrastination and conscientiousness. *Educational Psychology*, 41(3), 821-838
33. Schouwenburg, H. C., Lay, C. H., Pychyl, T. A., & Ferrari, J. R. (2019). Counseling the procrastinator in academic settings. In *The Oxford Handbook of Counseling Psychology* (pp. 497- 510).
34. Serdar, E., Harmandar Demirel, D., & Demirel, M. (2021). The relationship between academic procrastination, academic motivation, and perfectionism: A study on teacher candidates. *TOJET: The Turkish Online Journal of Educational Technology*, 20(4), 140-157
35. Sibt-e-Ali, M. S., & Bashir, F. (2024). The Role of Individual Resource Capital, University Support Environment and Government Policy in Academic Entrepreneurship: Evidence from China. *Pakistan Journal of Humanities and Social Sciences*, 12(1), 645-664.
36. Singh, K. & Srivastava, A. (2024). Self-Efficacy and Procrastination: A Correlation Study. *International Journal of Indian Psychology*, 12(2), 2373-2379. DIP:18.01.204.20241202, DOI:10.25215/1202.204
37. Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin*, 133(1), 65-94.
38. Tariq, S., Rehman, H., & Shah, Z. (2023). The mediating role of self-efficacy in the relationship between procrastination and job performance among university faculty. *Pakistan Journal of Psychological Studies*, 6(1), 30-47.
39. Yin, H., Han, J., & Perron, B. E. (2020). Why are Chinese university teachers (not) confident in their competence to teach? The relationships between facultyperceived stress and self-efficacy. *Int. J. Educ. Res.* 100, 101529-101511.
40. Yu, T., Li, J., He, L., & Pan, X. (2022). How work stress impacts emotional outcomes of Chinese college teachers: the moderated mediating effect of stress mindset and resilience. *Int. J. Environ. Res. Public Health* 19, 1-12.
41. Zafar, A., Imran, M., & Javed, N. (2021). Academic self-efficacy and procrastination: Examining their relationship among university educators in Pakistan. *South Asian Journal of Psychology*, 10(2), 55-71.