

Emotional Intelligence and Academic Performance: The Mediating Role of Procrastination Among Students in Different Educational Levels.

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Abstract

The current study sets out to quantify the mediating role of academic procrastination between emotional intelligence and academic performance among two levels of education (collage and Univearty).The sample was justified using online A-priori statistics multiple regression and student t-test (Soper, 2016); power and precision remained 0.9% at the confidence interval .95 %. In total, 347 youth were enlisted by use of a multi-stage random sampling from three major cities of Pakistan (Lahore, Rawalpindi, & Faisalabad). The mean of age remained; [M (22.70±3.43)]. Two questionnaires were used; The Schutte Self Report Emotional Intelligence Test (SSEIT-33) and Yockey Academic Procrastination Scale Short Form (APS-S-5), while academic performance was measured by semester grade point average (SGPA). The collected data were analyzed through SPSS (23.0). The results revealed that emotional intelligence was significant positively correlated with academic performance. In mediation, a process macro Hayes (2016) approach was used. The results showed that academic procrastination endured significant negative mediator between emotional intelligence and academic performance. The Collage students were significantly higher in academic performance and emotional intelligence as compared to university Students, while University students were significantly higher in academic procrastination. The limitations and future avenues were also discussed.

Keywords: Academic Procrastination; Emotional Intelligence; Academic Performance; Mediation; Pakistan.

Introduction

Emotional intelligence (EI) has garnered significant attention in educational psychology for its potential to influence academic outcomes, as it encompasses skills essential for managing emotions, social interactions, and stress (Mayer & Salovey, 1997). Research indicates that students with higher EI are better equipped to handle academic challenges, demonstrating improved problem-solving skills, resilience, and self-regulation, which collectively contribute to academic success (Goleman, 1995). Furthermore, EI has been associated with reduced procrastination, a behavior known to hinder academic performance by creating a cycle of delayed task initiation and lowered productivity (Ferrari, Johnson, & McCown, 1995). Procrastination can act as a mediating factor between EI and academic performance, where students with lower EI may struggle to manage stress and, consequently, defer essential tasks, leading to poorer academic results (Tice & Baumeister, 1997). The significance of this relationship may vary across different educational levels as students in earlier stages, such as school or college, might exhibit different patterns of emotional regulation and procrastination compared to university students, who are often more self-directed (Steel, 2007; Jan et al.2025).

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The significance of this relationship may vary across different educational levels as students in earlier stages, such as school or college, might exhibit different patterns of emotional regulation and procrastination compared to university students, who are often more self-directed (Steel, 2007; Jan et al.2025). By examining these relationships across varying academic levels, this study aims to uncover nuanced developmental patterns in the influence of EI on procrastination and academic performance, contributing to a deeper understanding of how educational interventions can be tailored to support students effectively.

Mostly university settings require efficient performance and successful completion of challenging assignments within specified time. Approximately 10-20% of students complete work well in time, while others procrastinate, they wait for the last minute (Steel, 2007). In many researches procrastination has been found to be negatively correlated with examination scores and grades (Tice & Baumeister, 1997; Doherty, 2006; Ullah et al.2021).Further, the academic performance of students is influence through emotions. Though in the past research has observed at the human mind merely as a processor of information, and learning as the acquisition, storing and manipulation of that information, a new wave of contemporary educational psychology has proposed that academic performance is subject to emotions (Artino, La Rochelle, & Durning, 2010).

Emotional Intelligence is the ability to process emotional information as it has perception, integration, expression, and management of emotion (Brackett et al. 2006). Further, EI defines capacity, skill or ability to evaluate, find out, and manage the emotions of people (Mayer & Salovey, 1995). Further Mayer, Salovey, and Caruso, (2012) detailed five components of emotional intelligence a) Self-awareness b) Motivating self c) Managing emotions d) Interpersonal skills and e) Empathy. According to Lopes et al. (2005) Emotional intelligence is a skill to reason about emotions and the ability to use that knowledge to enhance thought process.Deniz, Tras, and Adygan (2009) described that there is negative correlation between EI and academic procrastination. Academic Procrastination is defined as a trait or behavioral disposition to delay or postpone a task or decision making (Milgram et al. 1998; Khan et al. 2023; Ali et al.2024).Again defined as unneeded postponement or avoidance of academic work that is to be completed in time (Schraw et al. 2007). Further academic procrastination is an impediment to academic performance (Howell & Watson, 2007). Many studies took grade point average GPA as a measure of academic performance (Conard, 2006; Khan et al., 2012; Saleem et al., 2016,Ur-Rahman(2017), Ishaq et al. 2024).

Boyatzis (2006) described emotions are related with academic performance. In another study, Duran et al. (2006) found emotional intelligence as a predictor of academic performance. More, a study stated that emotions of students do affect their academic performance. So it is necessary for a student to understand his own emotions (Dhull, 2013, Khattak et al. 2021, Khan et al. 2023). Furthurmore, Deniz et al.(2009) described that there is negative correlation between emotional intelligence and academic procrastination. In a study concluded byMcCloskey (2012) stated that academic procrastination is a significant mediator between conscientiousness and academic performance. In Pakistani context, Saleem and Rafique (2012) reported that gender played non-significant role of difference in academic procrastination, while in Turkish students, results showed male were higher than female in term of academic procrastination (Özer, Demir, & Ferrari, 2009, wali & Ur Rahman, 2019). In many other studies also reported significant gender differences (Milgram, Marshevsky, & Sadeh, 1995; Pychyl, Coplan, & Reid, 2002), while other studies reported no such gender difference in academic procrastination (Ferrari, 1991; Ferrari, 2001; Schouwenburg, 1992).

In EI, Chaudhry, Jan, Sajjad, and Ali (2013) quantified that emotional intelligence was higher among Pakistani female students as compared to Pakistani male students. Moreover, in many other studies concluded that female were higher in emotional intelligence than male (Luebbbers, Downey, & Stough, 2007; Lyusin, 2006; McIntyre, 2010). Evidence suggests that gender differences in academic performance showed female were higher than male (Cumberbatch 1993; Fayombo 2010; Iqbal et al.2011). Similarly, it was also reported female students were more likely than male students to receive honors degrees in the university (Cheeseman, Simpson & Wint 2006). Thus, the aim of this study is to investigate the mediating role of academic procrastination between emotional intelligence and academic performance among Pakistani youth. Additionally, this study seeks to identify differences in emotional intelligence, academic procrastination, and academic performance between students pursuing BS degrees at the college level and those enrolled at the university level. The literature reviewed provides substantial evidence of the interconnectedness of these constructs; however, further exploration is warranted to deepen our understanding within the context of these two educational settings in Pakistan. Based on this background, the following objectives and hypotheses have been developed.

Objectives Of The Study

- To measure the relationship between emotional intelligence and academic performance.
- To investigate the mediating role of academic procrastination between emotional intelligence and academic performance.
- To examine the differences in emotional intelligence, academic procrastination, and academic performance between students pursuing BS degrees at the college level and those enrolled at the university level.

Hypotheses Of The Study

- H₁. It was assumed that there would be a significant positive correlation between emotional intelligence and academic performance.
- H₂. It was hypothesized that there would be a significant mediator of academic procrastination between emotional intelligence and academic performance.
- H₃. there was a significant difference in emotional intelligence, academic procrastination, and academic performance between students pursuing BS degrees at the college level and those enrolled at the university level.

Sample

In total, 347 youth were enlisted by use of a multi-stage random sampling from three major cities of Pakistan (Lahore, Rawalpindi, & Faisalabad). The mean of age remained; [M (22.70±3.43)]. The sample was justified using online A-priori statistics multiple regression and student t-test (Soper, 2016); power and precision remained 0.9% at the confidence interval .95 %. Furthermore, cross-sectional research design was used in this research.

Instruments

Schutte Self Report Emotional Intelligence Test (SSEIT-33): This scale is self-report measure of trait emotional intelligence (Schutte et al., (1998). Five point Likert scale, scored ranging from 1 strongly disagree to 5 strongly disagree.

Yockey Academic Procrastination Scale Short Form (APS-S-5): The APS-S (Yockey, 2016) is a 5 item Likert-type scale with anchors 1: Agree to 5: Disagree, while higher scores indicating a greater tendency to procrastinate. The internal consistency for reliability was .87 (Cronbach's alpha).

Academic Performance: Academic performance was measured by semester grade point average (SGPA). The same idea is sanctioned by Ali et al. (2016), and Saleem et al. (2016).

Analyses Plan

The collected data were analyzed through SPSS (23.0). The bivariate correlation, regression and independent sample t-test were employed to test the hypotheses. While, in mediation, a process macro Hayes (2016) approach were utilized.

Ethical Considerations

Considering the quantitative survey research design, the mandatory ethical considerations were addressed (such as, prior permission from the actual author to use the questionnaire, informed consent, confidentiality, and anonymity). Further, formal permission was taken from ethical review committee

Results

Table 1 Bivariate Correlation among all variables (N=347)

Variables	M	SD	1	2	3
1. Emotional Intelligence	104.71	17.91		-.38***	.41***
2. Academic Procrastination	16.39	4.03			-.53***
3. Academic Performance	3.18	0.38			

*** $p < .001$

Bivariate Pearson correlation showed significant negative association between emotional intelligence and academic procrastination ($r = -.38, p < .001$). Further results revealed that emotional intelligence was significantly positively correlated ($r = .41, p < .001$) with academic performance, while academic procrastination was highly significantly negatively associated ($r = -.53, p < .0001$) with academic performance.

Table 2: For the effect of Emotional Intelligence and Academic Procrastination on Academic Performance of Youth (N=347)

Predictors	Model 1 <i>B</i>	Academic Performance	
		<i>B</i>	Model 2 95% <i>CI</i>
Constant	18.72**	21.19**	[15.54, 22.93]
Emotional Intelligence	.39**	.42**	[.33, .58]
Academic Procrastination		-.52**	[-.16, .03]
R ²	.19	.23	
F	45.22**	49.56**	
ΔR ²		.26	
ΔF		52.88**	

** $p < .01$, *B* for Unstandardized regression coefficient, *CI* for Confidence interval

Results showed that academic procrastination endured significant negative mediator between emotional intelligence and academic performance.

Table 3: T-test was used to assess differences in emotional intelligence, academic procrastination, and academic performance between students pursuing BS degrees at the college level G₁ and those enrolled at the university level G₂ (N=347).

Variable	G ₁ (n = 172)		G ₂ (n = 175)		t	95%CI		Cohen's d
	M	SD	M	SD		LL	UL	
Emotional Intelligence	99.20	13.43	113.26	9.28	-8.07***	-17.07	-5.40	-1.23
Academic Procrastination	19.13	3.71	13.69	4.92	5.78***	1.33	7.35	1.21
Academic Performance	3.04	.33	3.33	0.29	-.29*	-.79	.12	-1.03

* $p < .05$, *** $p < .001$, CI for confidence interval, LL for lower limit and UL for upper limit

Results indicated that students in the university group (G₂) had significantly higher emotional intelligence ($t = -8.07$, $p < .001$) compared to those in the college group (G₁), while the college group exhibited significantly higher levels of academic procrastination ($t = 5.78$, $p < .001$) than their university counterparts. Additionally, the university students had better academic performance ($t = -0.29$, $p < .05$) compared to those in college

Discussion

The overarching aim of present research is to measure the mediating role of academic procrastination between emotional intelligence and academic performance of Pakistani youth. A plethora of studies available in Western context, but very few are available in Pakistan. For this purpose, contemporary study is planned to bridge the very gap. In the current study, the testing of H₁, showed that emotional intelligence was significantly positively correlated ($r = .41$, $p < .001$) with academic performance. Many studies in past concluded that high emotional intelligence youth performed better in academics as compared to low emotional intelligence youth (Dulewicz & Higgs, 2000; Gardner & Hatch, 1989; Goleman, 1996). In a past study Sergio (2001) found emotional intelligence is a vital indicator of academic performance among students. Where in Pakistani perspective, Farooq (2003) found significant negative correlation between emotional intelligence and academic performance. Hence, the results of present study (H₁) are in-line with the existing literature.

Further, results for H₂ revealed that academic procrastination endured significant negative mediator between emotional intelligence and academic performance. In past study found that emotional intelligence was significant negative predict with academic procrastination while emotional intelligence was significant positive predict academic performance (Hen & Goroshit, 2014). Another study, Deniz et al. (2009) found emotional intelligence negative predictor in academic procrastination. Furthermore, studies concluded that the ability to utilize and regulate emotions has been revealed positively associated with academic performance (Boyatzis, 2006; Daus & Ashkanasy, 2005).

Every phenomenon does not impact both groups equally. To assess the differences in emotional intelligence, academic procrastination, and academic performance between students pursuing BS degrees at the college level and those enrolled at the university level, the hypothesis was formulated that university students would demonstrate significantly higher emotional intelligence ($t = -8.07$, $p < .001$) compared to college students, while college students would exhibit significantly higher levels of academic procrastination ($t = 5.78$, $p < .001$). Additionally, it was hypothesized that university students would achieve better academic performance ($t = -0.29$, $p < .05$) than their college counterparts. Literature supports the notion that university students tend to demonstrate greater emotional intelligence, which may be attributed to their academic environment and experiences (Özer, Demir, & Ferrari, 2009). Furthermore, various studies have indicated that academic procrastination is more prevalent among college students than university students (Milgram, Marshevsky, & Sadeh, 1994; Pychyl, Coplan, & Reid, 2002). In terms

of emotional intelligence, research has shown that female youth generally possess higher emotional intelligence than male youth, and similar patterns can be observed among college and university students (Luebbers, Downey, & Stough, 2007; Lyusin, 2006; McIntyre, 2010). In terms of academic performance, past studies indicate that university students often outperform college students (Fayombo, 2010; Kutnick, 2000). This lower average performance among college students may be linked to their tendency to procrastinate.

Conclusion

In conclusion, emotional intelligence was positively associated with academic performance and negatively linked with academic procrastination, while academic procrastination served as a negative mediator between emotional intelligence and academic performance. Additionally, students enrolled in university programs demonstrated higher emotional intelligence and academic performance compared to those in college programs. Conversely, college students exhibited higher levels of academic procrastination than their university counterparts.

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