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Mediating Role of Academic Procrastination between Emotional Intelligence and Academic Performance of Pakistani Youth

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Abstract

The purpose of this research was to measure the mediating role of academic procrastination between emotional intelligence and academic performance in Pakistani youth. In total, 347 youth were selected using multi-stage random sampling from three major cities of Punjab province in Pakistan (Rawalpindi, Lahore, & Faisalabad). The average age remained [M (22.70±3.43)]. Two instruments were used; The Schutte Self Report Emotional Intelligence Test and Yockey Academic Procrastination Scale Short Form, while academic performance was calculated considering semester grade point average (SGPA). The results showed that emotional intelligence was significant positively correlated with academic performance. In mediation, Process Macro Hayes (2018) approach was used. The results showed that academic procrastination endured significant negative mediator in relationship of emotional intelligence and academic performance. The female youth were significantly higher in academic performance and emotional intelligence as compared to male youth, while male youth were significantly higher in academic procrastination. Emotional intelligence increases the academic performance and reduces academic procrastination among university students, while academic procrastination endured negative mediator between emotional intelligence and academic procrastination. Males have more prone towards academic procrastination and reported lower emotional intelligence and academic performance as compared to females. The limitations and future avenues were also discussed.

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

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Introduction

Emotional intelligence (EI) is the capacity of emotional information to be perceived, integrated, communicated and controlled (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 et al. (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 as well as the capacity of using them to improve thinking processes. Deniz et al. (2009) described the negative association of emotional intelligence with academic procrastination.

Mostly university settings require the 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, the negative correlation has been seen between the procrastination and exam grades

as well as marks (Tice & Baumeister, 1997; Doherty, 2006).

Milgram et al. (1998) defined academic procrastination as a trait or behavioral temperament to delay or postpone a task or decision making. Later, Schraw and colleagues (2007) defined as unneeded postponement or avoidance of academic work that is to be completed in time. Further academic procrastination is predictor of academic performance (Howell & Watson, 2007). Kim and Seo (2015) found inverse relationship of academic procrastination with academic performance. Many studies took grade point average (GPA) as a measure to calculate academic performance (Conard, 2006; Khan et al., 2012; Saleem et al., 2016). Further, the academic performance of students is influenced through emotions. It has been suggested by a recent era of modern educational psychology that educational qualifications are sensitive to sentiments (Artino et al., 2010).

The emotions may be linked to university achievement as described by Boyatzis (2006). The emotional intelligence as a predictive factor of success was endorsed by Duran et al. (2006). However, Dhull, (2013) explained that a student must consider their natural passions and emotions. Sánchez-Álvarez, Martos, and Extremera, (2020) reported in meta-analysis that significant positive relationship exists between emotional intelligence and academic performance in secondary school students. There is sufficient evidence to recommend that EI has a positive association with academic performance (MacCann et al., 2020; Richardson et al., 2012).

Further, Deniz et al. (2009) described that the academic procrastination and emotional intelligence are correlated negatively. In a study concluded by Mccloskey (2012), it was found that academic procrastination is a significant mediator between conscientiousness and academic performance. Whereas a recent study reported that academic procrastination found significant mediator in relationship of school attachment and life satisfaction (Çıkrıkçı & Erzen, 2020).

In Pakistani context, Khan et al. (2014) reported that in academic procrastination, the gender plays the role of difference which is significant and males are more procrastinator than females, while in Turkish students, results also showed similar trends and concluded that males were higher than females in terms of academic procrastination (Özer et al., 2009). In many other studies, significant gender disparities have also been identified and males reported more academic procrastination then females (Balkis & Erdinç, 2017).

Chaudhry et al. (2013) taken into account that whether female students of Pakistan were emotionally more intellectual than male students of Pakistan. Moreover, many other studies concluded that females were higher in emotional intelligence than males (Luebbers et al., 2007; Lyusin, 2006; McIntyre, 2010). Evidence suggests that gender differences in academic performance showed that females were higher in academic performance than males (Chew et al., 2013; Fayombo, 2010; Parajuli & Thapa, 2017). Likewise, Cheeseman et al. (2006) also confirmed that female students were more likely than male students to receive honors degrees in the university.

The literature provides direct relationship of emotional intelligence with academic performance but indirect relationship is missing in context of academic procrastination. Thus, the goal of the current research is to measure the mediating role of academic procrastination between emotional intelligence and academic performance of Pakistani youth. Further, this study aimed to find out the gender difference in terms of emotional intelligence, academic procrastination and academic performance.

The above cited scenario provides a sufficient evidence to consider and it needs to be extended, so following hypotheses are devised.

Hypotheses of the Study

1. There would be a positive relationship between emotional intelligence and academic performance.
2. Academic procrastination would be a significant mediator in relationship of emotional intelligence and academic performance.
3. There would be a significant variance of emotional intelligence, academic procrastination, and academic performance between male and female youth.

Method

Sample

In total, 347 youth were selected from three major cities of Punjab province in Pakistan (Rawalpindi, Lahore, & Faisalabad). Both gender was selected in this research (Male = 172 and Female = 175). Age, gender, education, and family system were included in demographic variables. The data were collected physically during the period of October and November 2020, during this period institutes were opened. The sample calculated through online calculator A-priori statistics "multiple regression" (Soper, 2020); power and precision were (0.9%) and the confidence interval was (.95 %). Furthermore, cross-sectional research design was used in this research. The data were collected using multi-stage random sampling. The simple random sampling is not possible with large sample framework, therefore, multistage random sampling was considered in this research to reach the true sample. Sedgwick (2015) preferred multistage sampling to simple random sampling when the population is geographically diverse.

Inclusion and Exclusion Criteria

Both male and female regular university students with the minimum class attendance 60% were included in this research from the selected public sector universities. The age range were considered 18-30 years and only BS (Hons) and MS/MPhil students were included in this research. Whereas, individuals with psychological problems and any physical disease or disability were excluded from research.

Instruments

Schutte Self Report Emotional Intelligence Test (SSEIT-33)

Schutte et al. (1998) developed this scale to measure the self-reporting of trait emotional intelligence. This is 33 items test with five point Likert scale that measure response with strongly agree to strongly disagree. Schutte et al. (1998) tested the reliability rating of 0.90 for SSEIT-33.

Yockey Academic Procrastination Scale Short Form (APS-S-5)

Yockey (2016) developed APS-S-5 that have 5 items Likert scale with response on totally disagree and totally agree. The higher scores representing a high propensity of procrastination. The reliability was good (Cronbach's alpha = .87).

Academic Performance

Academic performance was calculated by semester grade point average (SGPA). The same method is used by past researches e.g. Saleem et al. (2016).

Statistical Analysis

After the data collection, analysis was done using SPSS (23.0). The analysis of bivariate correlation and independent sample t-test were considered to test the hypotheses. While, in analysis of mediation, an approach of Process Macro Hayes (2018) was applied.

Ethical Considerations

Following the ethical considerations in quantitative survey research, the compulsory ethical considerations were addressed (e.g. formal permission from the actual authors of scales, informed consent, anonymity and confidentiality). Whereas, before conducting research, a formal permission was also obtained from the committee of ethical review.

Results

Table 1

Frequency Distribution of Demographic Variables (N=347)

Respondent's Characteristics		***f***	***%***	***M(SD)***
Age				22.70 (3.43)
Gender	Male	172	49.6	
	Female	175	50.4	
Education	B.S (Hons)	299	86.2	
	MS/MPhil	48	13.8	
Family System	Nuclear Family	226	65.1	
	Joint Family	121	34.9	
Institute	Rawalpindi	112	32.3	
	Lahore	107	30.8	
	Faisalabad	128	36.9	

In Table 1, the results reveal the frequency distribution of the demographic variables. The average age of respondents was (M = 22.70, SD = 3.43). In gender, 172(49.6%) were male and 175(50.4%) were female participants. In education levels, 299(86.2%) students were enrolled in BS (Hons) level of education and 48 (13.8%) students were enrolled MS/MPhil level of education. For family system, 226(65.1%) respondents were from nuclear family system and 121(34.9%) respondents were from joint family system. Whereas, 112(32.3%) respondents were from public sector university of Rawalpindi, 107(30.8%) respondents were from public sector university of Lahore and 128(32.3%) respondents were from public sector university of Faisalabad.

Table 2

Bivariate Correlation among Emotional Intelligence, Academic Procrastination., and Academic Performance (N=347)

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

***p <.001

Bivariate Pearson correlation showed in Table 2 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 3

Procrastination as Mediator in relationship between Emotional Intelligence and Academic Performance of Youth (N=347)

		Academic Performance	
		Model 2	
Predictors	**Model 1 *B***	***B***	**95% *CI***
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

Note. B=Unstandardized regression coefficient, CI=Confidence interval

The results showed in Table 3 that academic procrastination endured significant negative mediator between emotional intelligence and academic performance. While, emotional intelligence is significant direct and indirect predictor of academic performance.

Table 4

t-test use for differences between Male and Female Youth for Emotional Intelligence, Academic Procrastination, and Academic Performance (N=347)

Variables	**Male(n = 172)**		**Female(n = 175)**		**t**	**95%CI**		
	M	**SD**	**M**	**SD**		**LL**	**UL**	**Cohen's d**
Emotional Intelligence	99.10	13.33	113.26	9.28	-8.07***	-17.07	-5.40	-1.23
Academic Procrastination	19.03	3.81	13.69	4.92	5.78***	1.33	7.35	1.21
Academic Performance	3.02	.31	3.33	0.29	-.29*	-.79	.12	-1.03

*p <.05, ***p <.001

Note. CI=confidence interval, LL=lower limit, UL=upper limit

In gender differences, the results showed in Table 4 that males youth were significantly higher in academic procrastination (t= 5.78, p <.001) than female youth, while the females were significantly higher in emotional intelligence (t = -8.07, p <.001) and academic performance (t = -29, p <.05) as compared to males.

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 H_1, showed that emotional intelligence was significantly positively correlated ($r = .41$, $p < .001$) with academic performance. Many studies in past concluded that high emotional intelligence make youth perform better in academics as compared to low emotional intelligence in youth (Chew et al., 2013; Dulewicz & Higgs, 2000; MacCann et al., 2020). In a past study Sergio (2001) found emotional intelligence is a vital indicator of academic performance among students. Hence, the results of present study (H_1) are in-line with the existing literature.

Further, results for H_2 revealed that academic procrastination endured significant negative mediator between emotional intelligence and academic performance. A past study found that emotional intelligence was significant negative predictor of academic procrastination, while emotional intelligence was significant positive predictor of academic performance (Hen & Goroshit, 2014). Another study, Deniz et al. (2009) found emotional intelligence negatively predicted 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).

The H_3 results revealed that male youth were significantly higher in academic procrastination ($t= 5.78$, $p <.001$) than female youth, while the females were significantly higher in emotional intelligence ($t = -8.07$, $p <.001$) and academic performance ($t = -29$, $p <.05$) as compared to males. Literature support that male youth have higher tendency to procrastinate than females' youth (Özer et al., 2009). While many other studies concluded that gender played a significant role of difference in academic procrastination, moreover, males were higher in academic procrastination as compared to females (Pychyl et al., 2002). Additionally, a study concluded that emotional intelligence was higher in Pakistani female youth as compared to Pakistani male youth. Many others studies showed that females were higher in emotional intelligence than males (Luebbers et al., 2007; Lyusin, 2006; McIntyre, 2010). In academic performance, past studies showed that females were performed bitterly in academic performance than males (Fayombo, 2010, Kutnick, 2000). The reason behind the males being low average outcomes in academic is delaying behavior.

Conclusion

Emotional intelligence increases the academic performance and reduces academic procrastination among university students, while academic procrastination endured negative mediator between emotional intelligence and academic procrastination. Further in gender, males are more prone towards academic procrastination and report lower level of emotional intelligence and academic performance as compared to females.

Limitations of the Study

The data were collected only form public sector universities that have limited generalizability. So, it is suggested to future researches, comparative study should be conducted with university students from public sector and private sectors. In this research, only BS (Hons) and MS/MPhil students were selected, so in the future, PhD

students should also be included. Quantitative research type was used in this research, so in future, qualitative researchers should be conducted to explore the more findings and factors related with academic performance and academic procrastination.

Implications of the Study

This research will be helpful for scholars, psychologists, educational psychologists, educationists, students, parents and government agencies for policy making. Psychologist should conduct seminars among university students to enhance their emotional intelligence and reduce academic procrastination.

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