
Relationship between Perfectionism, Attitude towards Research and Plagiarism among University Students

Mina Zahra¹, Shazia Yusuf^{2*}**Abstract**

The present study was conducted to find out the relationship between perfectionism, attitude towards research and plagiarism among university students. 360 research students (of BS/ MSc, MS/ MPhil, and PhD) were taken from the universities of Rawalpindi and Islamabad. It was hypothesized that there would be a positive relationship between perfectionism, attitude towards research and attitude towards plagiarism among research students. It was also hypothesized that the attitude towards research and attitude towards plagiarism varies across study programs (BS/MSc, MS/MPhil and PhD). Attitude towards research was measured with the help of Attitude Towards Research Scale (ATRS) (Rezaei & Zamani-Miandashti, 2013), plagiarism was measured through the Attitude towards plagiarism Questionnaire (ATPQ-R) (Mavrinac et al., 2010) and perfectionism was measured through the Short Almost Perfect Scale (Rice et al., 2014). The results indicate that there is significantly positive relationship between perfectionism, attitude towards research and attitude towards plagiarism among research students. Plagiarism (plagiarism approval) is significantly high among the private sector universities than the public sector universities. Attitude towards research, plagiarism approval, and subjective norms towards plagiarism is high among PhD students as compared to bachelors and MS research students. Perfectionism significantly predicts the plagiarism approval among research students. The present study findings have important implications in the educational sector.

Keywords: Attitude towards Research, Perfectionism, Plagiarism, Research Students

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Introduction

Now-a-days research is considered as a major requirement for the prosperity and growth of any country. The research is regarded as the most significant and the most crucial component for the advancement of any

country/nationwide (Mohammdi et al., 2016). Research is adding the novelty in the body of knowledge and also prepare the students for today's knowledge driven world (Adebisi, 2022).

Some researchers are motivated to conduct research which is of some worth so they want everything to be flawless in their research. In simple words they want everything to be perfect. Perfectionism is about striving for flawless things. It can be explained in two ways as personal standards perfectionism and evaluative concerns perfectionism (Abdollahi et al., 2020; Dunkley et al., 2006). Personal standards perfectionism refers to setting higher level of personal expectations for oneself. Personal perfectionism is about setting realistic personal goals and objects. They also provide positive self-judgment about their own work. Evaluative

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perfectionism is linked with forming excessively critical judgment of one's own behavior, dissatisfaction from a successful performance, and lasting apprehensions about criticism and the anticipations of others (Dunkley et al., 2006). This kind of perfectionists set extraordinary personal standards, values, unrealistic goals and objectives for themselves. They also have a solid inclination to doubt their performance and develop anxiety related to their work (Abdollahi et al., 2020).

The theory of planned behavior also known as a theory of reasoned action differentiate between three types of beliefs that effects one's intentions about behaving in certain manner. 1) behavioral beliefs, which get transferred into the behavior, 2) normative beliefs are associated with the perceived attitude of peers and family figures towards behavior and 3) control beliefs are associated with the ability to perform behavior (Etheridge et al., 2023). If the research students have positive attitude towards research, then they have positive attitude towards plagiarism and the perfectionist person have a tendency to do things in perfect manner. Many researches have been conducted to explore the factors which are creating hindrances in the research process (Dukic, 2015), one of the reasons is perfectionism (Rice & Preusser, 2002). Undoubtedly, apprehension of negative comments from supervisor has been linked with perfectionism (Gregersen & Horwitz, 2002). Some researchers have also indicated that there is a significant positive relationship the perfectionism and academic achievement among students (Atwa et al., 2024).

Attitudes have their significance because a positive attitude aids students to master a specific course of study, like a professional expertise program or scientific education. Attitude determines behavior and the behaviors are aligned with the attitudes. The researchers have indicated that the most of

the students have very negative attitude towards research (Rind, 2020). Furthermore, research evidences indicated that the postgraduate students showed more positive attitude towards research than the undergraduate students (Imran et al., 2019). Nowadays, research is considered as an essential activity of institutes in Pakistan. In Pakistan, the Higher Education Commission (HEC) is playing a significant role in encouraging research culture in higher education institutions (Higher Education Commission, 2005; Kumari, 2015). Universities has made research a compulsory activity to earn a degree in any discipline (Ruchina et al., 2015). The findings of the study undertaken by Sabzwari et al. (2009) on junior faculty in the medical profession in Pakistan revealed that majority of the medical professionals recognize research as a difficult work however have favorable attitude towards the research. Students mostly have an undesirable attitude and perception regarding the research (Papanastasiou, 2014). Sabzwari et al. (2009) discovered that despite the majority of young medical faculty in Pakistan view research as a challenging task but they had a positive attitude toward it. Male students have a more optimistic attitude than female students (Oguan et al., 2014). Shaukat et al. (2014) mentioned that men have a noticeably more favorable attitude toward research than women do. the male students had a greater aptitude of conducting research than female students (Deepa, 2014). The fairness in research is very important and it is directly linked with one of the very important rule which is basically avoiding plagiarism.

Plagiarism is called as a systematic dishonesty (Mohammadi et al., 2016). Academic dishonesty is universal phenomenon. investigation conducted in United State on 20,000 high school students indicated that 51 % confessed to cheating on a test, 74 percent had duplicated a class

fellows' homework, and 32 percent had copied websites content (Giluk & Postlethwaite, 2015). Studies done in Portugal show a similar pattern, with 62% of undergraduate economics and business students admitted to cheating at some point throughout their academic careers (Teixeira & Rocha, 2010). Even though not to the same extent, the breadth of academic cheating is a serious problem in many areas of the world (Kayaoglu et al., 2016).

The researchers feel that they are under great pressure to produce large number of research papers that's why many of them get indulge into academic dishonesty to just complete the numbers. Researchers described publication pressure as "too high" and linked it to scientific misconduct, including plagiarism. The inability to write well in English, (which is the primary language used for publishing scientific papers) is another factor that drives researchers to plagiarize. Other causes of plagiarism do exist; however, they differ from individual to individual. For instance, while educationists plagiarize to create more articles, get professional advancement, and obtain research funding, students typically do so to achieve good grades or to complete their degrees (Mohammedi et al., 2015; Qutub et al., 2016).

Inadequate knowledge about plagiarism detection tools, a lack of writing skills, poor assignment design, an inability to comprehend assignments, poor interest, insufficient time, an apprehension of missing deadlines, a lack of familiarity with what is expected of students in honest academic writing due to cultural dissimilarities, and a lack of contact with teachers are aggravating factors that can contribute to plagiarism (Relph & Randle, 2006). In addition, some other reasons for plagiarism include insufficient awareness and education of ethics, and insufficient understanding about scholarly assets rights, have been mentioned in the literature (Qutub et al., 2016).

Most higher learning institutions are quite concerned about the plagiarism problem because it threatens the principles and values upon which they have established in their institute. Most of the higher academic institutions across the world have conducted studies on controlling and eliminating the plagiarized work (Lei & Hu, 2015). Understanding of research obstacles can enrich interaction between researchers and the individuals who use research studies and support the empirical usage of research outcomes. Poor attention to these concerns may lead to delays in research plans and irreversible losses, sinking the progression of research studies. Therefore, the present research study focused on the perfectionism, attitude towards research and plagiarism (Ashrafi-Rizi et al., 2014) and it will help understanding the linkage of research related variables as the attitude towards research need to be further explored (Hussain et al., 2016) however, in terms of plagiarism, most of the participants considered that they cannot worked in a plagiarism free environment and was in favor of that self-plagiarism should not be carry a punishment in the similar way as plagiarism. Point of view in terms of leniency in punishment of younger researcher's/research students who were just learning medical writing was established.

Objectives

1. To find out the relationship between perfectionism (standards and discrepancy), attitude towards research and attitude towards plagiarism (Plagiarism approval, Plagiarism disapproval and Subjective norms toward plagiarism) among research students.
2. To find out the role of demographic variables in relation to perfectionism (standards and discrepancy), attitude towards research and attitude towards plagiarism (Plagiarism approval, Plagiarism disapproval and Subjective norms toward plagiarism) among research students.

Hypotheses

Hypotheses are mentioned below.

1. There will be a positive relationship between perfectionism (standard perfectionism and discrepancy perfectionism), attitude towards research and attitude towards plagiarism (plagiarism approval, plagiarism disapproval and Subjective norms toward plagiarism) among research students.
2. Research students in public universities have positive attitude towards research as

compared to private university research students.

3. Qualitative research students are more perfectionist (standards perfectionism) than quantitative research students.

4. There is a difference in the attitude of BS/MSc, MS/MPhil, PhD research students towards research and plagiarism (plagiarism approval, plagiarism disapproval and subjective norms toward plagiarism) among university students.

Conceptual Model



Method

Sample

G*Power software (v. 3.1.9.7) was used to determine the sample size. The non-probability purposive sampling was used to collect the data. Sample size comprised of 360 research students from BS/MSc, and PhD program with age range of (20-40) years from (199) private and (161) government universities of Rawalpindi and Islamabad. Sample encompasses (140) male and (220) female students. The students were from varying disciplines such as Social Sciences, Humanities (Law department) and Management Sciences. Inclusion criteria included those participants have been carrying out independent research lasting at least one semester as their degree requirement. The sample encompasses participants studying at different levels of existing education, counting (277) undergraduate and Master students, (46) MS/MPhil students and (37) PhD students. University students who are studying other

subjects rather than research and were doing group research also excluded.

Instruments

Demographic Data Sheet was consisted of variables such as age, gender, program, university, department, semester, nature of the research, registration duration, birth order, marital status, number of family members, family income, area of residence.

Short Almost Perfect Scale-Revised (APS-R)

Short Almost Perfect Scale-Revised (APS-R) was developed by Rice et al., (2014). Rice et al. (2014) developed a shorter version of Short Almost Perfect Scale – Revised (SAPS-R). The SAPS-R consists of 8 items that have 2 subscales Standards and Discrepancy. Standards subscale shows the inclination of the people to set the idealized standards for themselves. Discrepancy subscale alludes to perceived difference between actual standards and standards that were made by a person. Standard subscale comprises of 1,3,5,7 and Discrepancy subscale comprises

of 2, 4, 6, 8. Scores on both subscales range from 4 to 28 points. Psychometric properties indicate high reliability, it ranges from .70 to .83 (Abdollahi et al., 2020) and internal consistency estimates of the SAPS-R ranged from .85 to .92. High criterion validity through the correlation with various constructs like neuroticism, conscientiousness, academic performance, and depression (Rice et al., 2014)

Attitude Towards Research Scale (ATRS)

Attitude Towards Research Scale (ATRS) scale was developed by Rezaei and Zamani-Miandashti in 2013 and consists of 12 items rated on 5-points likert-scale (Rezaei & Zamani-Miandashti, 2013). Score ranges from 1 (strongly disagree) to 5 (strongly agree). Item numbers 9 and 12 are reverse coded. Higher scores on this scale indicated a positive attitude towards research. Reliability analysis resulted alpha co-efficient of 0.76 in the contemporary study (Rezaei & Zamani-Miandashti, 2013).

Attitude towards Plagiarism Questionnaire (ATPQ-R)

Attitude towards plagiarism Questionnaire (ATPQ-R) was developed by Martina Mavrina in 2010. The short version of this scale was used. The scale has 15 items that are rated on 5-point Likert ranging from 1 (strongly disagree) to 5 (strongly agree) (Mavrinas et al., 2010). There are 3 subscales i.e., Plagiarism approval, Plagiarism disapproval and Subjective norms toward plagiarism. The scale has high reliability range from 0.63 to 0.80 and good face validity assessed by three experts (Mavrinas et al., 2010).

Procedure

After the permission of the university authorities, the students were approached for data collection. Participants were briefed about the research and their consent was taken. They were ensured about confidentiality of the information. After taking consent the data was collected from the research students. It almost took 15-20 minutes for every participant to complete the questionnaires.

Results

Table 1

Socio-demographic Characteristics of Sample (N=360)

Characteristics	Categories	<i>f</i>	%	<i>M</i>	<i>SD</i>
Age	18-48 years	360	100.0	24.11	4.170
Gender	Male	140	38.9		
	Female	220	61.1		
University	Private	199	55.3		
	Public	161	44.7		
Program	BS/MSc	277	76.9		
	MS/MPhil	46	12.8		
	PhD	37	10.3		
Nature of research	Quantitative	192	53.3		
	Qualitative	168	46.7		

f=frequency, %= percentage, *M*= Mean, *SD*= Standard Deviation

Table 1 demonstrates the socio demographic characteristics of the sample.

Table 2
Psychometric Properties for Scales (N=360)

Scale	<i>M</i>	<i>SD</i>	<i>Range</i> <i>Min</i> <i>Max</i>	<i>α</i>
<i>Perfectionism</i>	39.30	8.85	8.00 56.00	.80
<i>Standard Perfectionism</i>	21.66	4.95	4.00 28.00	.77
<i>Discrepancy Perfectionism</i>	17.64	5.50	4.00 28.00	.75
<i>Attitude towards Research</i>	45.91	8.18	15.00 60.00	.86
<i>Attitude towards Plagiarism</i>	50.32	7.64	15.00 75.00	.80
<i>Plagiarism Approval</i>	17.10	3.35	5.00 25.00	.65
<i>Plagiarism Disapproval</i>	17.56	3.24	5.00 25.00	.58
<i>Subjective norms towards plagiarism</i>	15.66	3.31	5.00 25.00	.53

Table 2 explains psychometric properties for the scales and subscales used in the current research study. The Cronbach's *alpha* value for Perfectionism Scale, Attitude towards

Research Scale, Attitude towards Plagiarism Scale was .80, .86, and .80 (>.70) which showed high level of internal consistency.

Table 3
Pearson Correlation of Study Variables (N=360)

Variables	1	2	3	4	5	6
1. <i>Standard Perfectionism</i>	-					
2. <i>Discrepancy Perfectionism</i>	.43**	-				
3. <i>Attitude towards Research</i>	.41**	.14**	-			
4. <i>Plagiarism Approval</i>	.36**	.28**	.29**	-		
5. <i>Plagiarism Disapproval</i>	.37**	.23**	.35**	.38**	-	
6. <i>Subjective norms towards plagiarism</i>	.21**	.34**	.12*	.51**	.28**	-

** $p < .01$, * $p < .05$

Table 3 revealed that perfectionism (standard and discrepancy) has significant positive correlation with attitude towards research, attitude towards plagiarism subscales (plagiarism approval, plagiarism

disapproval) and subjective norms towards plagiarism. Attitude towards research has significant correlation with attitude towards plagiarism.

Table 4
Mean Comparison of Private and Public University Research Students on Attitude towards Research and Plagiarism (N=360)

Variables	Private (<i>n</i> =199)		Public (<i>n</i> =161)		<i>t</i> (360)	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
ATR	46.60	8.03	45.07	8.31	1.77	.078	-
PA	17.44	3.13	16.69	3.59	2.11	.035	3.23
PD	17.70	3.08	17.39	3.43	0.91	.362	-
SNTF	15.41	3.08	15.96	3.56	1.56	.121	-

* $p < .05$

Note: ATP= attitude towards research, PA=plagiarism approval, PD= plagiarism disapproval, SNTP= social norms towards plagiarism

Table 4 illustrated mean comparisons of private and public university research students on attitude towards research and attitude towards plagiarism. Results indicate

that plagiarism approval is high among private university students as compared to public sector university students.

Table 5

Mean Standard Deviation and One-way ANOVA in Attitude towards Research and Attitude towards Plagiarism across Study Programs (BS/MSc, MS/MPhil and PhD) (N = 360)

	BS/MSc		MS/MPhil		PhD		F (2, 357)	p	η^2	Post-hoc test
	(n=277)		(n=46)		(n=37)					
	M	SD	M	SD	M	SD				
ATR	45.98	8.20	47.65	6.71	49.86	8.397	6.95	.001	0.38	1<2<3
PA	17.36	3.09	16.48	3.42	15.95	4.68	3.88	.021	0.21	1>2>3
PD	17.46	3.15	18.43	2.66	17.22	4.31	2.03	.132	0.11	-
SNTP	16.04	3.12	14.33	2.96	14.40	4.31	8.61	.001	0.46	1>2<3

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: X=variables, ATP= attitude towards research, PA=plagiarism approval, PD= plagiarism disapproval, SNTP= social norms towards plagiarism

Table 5 showed means, standard deviations and F- values for attitude towards research, plagiarism approval, plagiarism disapproval and subjective norms towards research across study programs (BS/MSc, MS/MPhil and PhD). Results indicated significant mean

differences across study programs on attitude towards research, plagiarism approval, and subjective norms towards plagiarism except Plagiarism disapproval which showed non-significant mean difference.

Discussion

The purpose of the study was to find out the relationship between perfectionism (standards perfectionism and discrepancy perfectionism), attitude towards research and attitude towards plagiarism (Plagiarism approval, Plagiarism disapproval and Subjective norms toward plagiarism) among research students. Moreover, the study goal was to check out demographic differences in study variables. All of the scales' alpha coefficients were more than or equal to .70 ($\geq .70$), indicating that they may be relied upon for the study (Kline, 2005).

Data had a normal distribution, according to the estimated values for skewness and

kurtosis for all scales and subscales estimated through Shapiro Wilk normality test (Shapiro & Wilk, 1965). Skewness and kurtosis values should be less than +1 and -1, respectively (Field, 2005). The results indicate that the values of skewness and kurtosis are less than 1. The issues with univariate normality are not present in the data.

The present study revealed that there is a positive relationship of perfectionism with research and plagiarism among university students. Research evidences also highlights that there is a significant positive relationship the perfectionism and academic achievement among students (Atwa et al., 2024). Perfectionism is a trait in which an individual

strives for perfection in his or her life so those who are perfectionists they strive hard to achieve more and more and in case of research they make sure that everything is done in a perfect manner.

Besides the increased supervision, creation of more anti-plagiarism websites and applications in institutions, it still showed a positive attitude of research students towards plagiarism. The reason could be the same as poor writing skills, less awareness to ethical standards and proper citation techniques as well as might be the students are not able to distinct between paraphrasing and citation. There must be other several reasons identified in previous research studies (Comas-Forgas & Negre, 2010) like poor interest, insufficient time and apprehension of missing deadlines (Relph & Randle, 2006) so, it is the need of the time to consider these concerns and take sufficient steps to elevate these factors.

The fact that the private sector is more quality sensitive and competitive in the field of education than the public sector may be used to explain why research is viewed as being much more valuable to life at universities in the private sector in the current study. The needs of the global market are emphasized to students. To improve the way their students, feel about research, their teachers need to work harder at being dedicated, persistent, and committed.

It is essential to evaluate student attitudes about research by estimating their attitudes toward it. The results of the current study showed that teacher educators need to be significantly improved in order to foster in students a good attitude toward research. Because research is important for both academic and professional careers, teacher educators must be prepared with effective strategies and pedagogies for fostering favorable attitudes toward research among their students (Waters et al., 1988). The present study results are consistent with the

literature that there is a significant study programs difference of attitude towards research as PhD research students have more positive attitude towards research as compared to MS/MPhil and BS/MSc research students (Shaukat et al., 2014). Moreover, there is a positive attitude of research students towards plagiarism approval and subjective norms towards plagiarism. There is insignificant gender difference of attitude towards plagiarism. The reason may be the generalization of copying and pasting culture especially in the developing countries like Pakistan. It is important to note that students who were enrolled in private institutions felt that research was substantially more relevant to life than students who were enrolled in public sector universities. The effect size of the difference was low. However, Sabzwari, et al. (2009) discovered that in Pakistan, doctors in the public sector participated in research to a substantially greater extent than those in the private sector. Furthermore, by assessing students' attitudes towards the research, faculty members and supervisors may be able to recognize attitudes and skills are needed to help the learning of research and promote a deeper recognition of this course in students. Shaukat et al. (2014) found that public postgraduate students have positive attitude towards research as compared to private university.

Conclusion

The findings of the study were helpful to conclude that study variables have significant association as when perfectionism increases, the attitude towards research and plagiarism also increases. Results indicates that the student become more conscious about research and plagiarism. This highlights the fact that the students will become more and more conscious about their work and take good care of anything they are quoting.

Implications of the Study

Present study results revealed that there is significant positive relationship between perfectionism, attitude towards research and plagiarism among university students. Results indicates that if in case students are perfectionists, then they strive hard to make their research a perfect research. They try to do everything in perfect manner and they are also very conscious about the plagiarism. Anti-plagiarism policy is available in HEC, which has been provided to the universities as well but there is a need to educate the researchers about these policies. The correlation of the study variables highlights the significant role of supervisors in providing the clarity regarding the plagiarism itself and its types. With the proper clarity the negative attitude of students can be modified into the positive.

Limitations & Recommendations

One of the limitations of the study was that the data was collected from the twin cities (Rawalpindi and Islamabad). Moreover, only research students from BS, MS, and PhD students were taken as a sample within specific departments, namely, social sciences; law; and management sciences. The age group was limited to eighteen (18) years to fifty (50) years old. The outcome and conclusions drawn from the study are limited to the population with these demographic features only. In present study, the attitude towards research was assessed whereas there is a need to assess the resources available to the students to conduct good research. In order to get more insight into this phenomenon, the qualitative studies need to be conducted. The current study shows personality traits of perfectionism has a strong relation with attitude towards research and plagiarism. Future studies can look into the reasons and causes of the phenomenon related to attitude towards research and plagiarism. It can also be seen whether future studies with similar or different

demographics replicate the results of the study or show a variance. The current study was conducted in the Rawalpindi and Islamabad, there is a need to conduct study in other provinces to assess their attitude towards research and plagiarism. Furthermore, longitudinal study is suggested in order to keep track of the changes in attitudes and also the factors that involved in building perfectionism trait.

Contribution of Authors

Minha Zahra: Conceptualization, Investigation, Methodology, Data Curation, Formal Analysis, Writing – Original Draft
Shazia Yusuf: Methodology, Writing - Reviewing & Editing, Supervision

Conflict of Interest

There is no conflict of interest declared by the authors.

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Data Availability Statement

The datasets of the current study are not available publicly due to ethical reasons but are available from the corresponding author [S.Y.] upon the reasonable request.

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