

## **Post graduate students' attitudes towards plagiarism: A comparative perspective**

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### **Abstract**

*This paper attempts to measure post graduate students' attitude towards plagiarism. A quantitative descriptive survey design is used to measure attitude towards plagiarism. Post graduate students of Management Sciences, Social Sciences and Languages currently engaged in thesis writing in public sector universities are taken as population. A Sample of 300 students, 150 male and 150 female with age range between 28-50 years was extracted through purposive sampling technique from two public sector universities of Islamabad. Attitudes towards plagiarism were measured through an adopted questionnaire. The results show that there was statistically significant difference in the attitudes of post graduate students enrolled across three faculties. Post graduate student of management sciences manifested high mean score towards factors that exacerbate plagiarism. Social sciences respondents scored higher on the factor related to justification for plagiarism whereas languages students had a high mean score towards the severity and penalty subscale. Post graduate students across all three faculties strongly agreed that their views about plagiarism have changed after participating in this survey. It is recommended that an operational definition of plagiarism may be constructed and disseminated along faculties. Awareness seminars for students and teachers may also be organized rigorously so that a mutual consensus towards definition of plagiarism is achieved. It is further asserted that academia needs to create ethical classroom practices to enhance academic writing skills and academic integrity among students. Lastly, it is suggested to introduce citation managers such as EndNote, Mendeley and Zotero in addition to a course on intellectual property rights at post graduate level.*

**Keywords:** Academic integrity, academic writing, attitude, citation managers, intellectual property rights, plagiarism

### **Introduction**

Plagiarism is a significant and reminiscent area of concern in higher education level. Plagiarism means to use someone else's work, idea or information without giving proper acknowledgement to that person. This emerging issue has been known by academia for many years and is now a challenge to be catered for. Easy access to internet has made this issue a simplified act as students use two simplified commands "ctrl+C" and "ctrl+V" (copy and paste) to complete the assigned tasks in a learning trajectory ( Razera, 2011).

Authors involved in academia research area have defined plagiarism in a variety of ways, of which few examples can be quoted as below:

- "The presentation of another person's ideas or material as if it were one's own (Culwin& Lancaster, 2000).

- “ The submission of part or all of another person’s work as if it were one’s own, without the knowledge of the author, and with intention to deceive” (Irving, 2004).
- “Unacknowledged copying of documents or programs” (Joy & Luck, 1999).

Plagiarism is one of the major types of academic dishonesty and it can be categorically divided into following four domains:

- i. Complete copying from one or more sources- “ complete plagiarism”
- ii. Using information from digital source- “ copying and pasting”
- iii. Copying a part of text and doing minor changes- “ Word switching”
- iv. Reusing one’s own previous work and submitting as a new assignment- “self-plagiarism” (Vij, Soni & Makhdumi, 2009).

In research literature, almost all studies have narrated plagiarism definition as cheating, academic dishonesty and intellectual theft; to represent or use another person’s writing/idea without referencing or acknowledging the author, , stealing thoughts , forgery and textual misappropriations (Groom,2000; Park,2003; Thomas,2000; Whiteneck, 2002) .In addition to this, Janowski (2002) has operationally defined plagiarism as:

- Downloading or buying a paper from any research service and claiming it as your own.
- Copying another person’s work without due acknowledgment.
- Claiming another author’s work as your own without that person’s knowledge.
- Paraphrasing language/ideas with proper documentation of the source.
- Copying material and supplying its documentation but ignoring to write quotation marks, proper indentation etc.

Reasons for plagiarism can be related to aggravating factors such as insufficient information about plagiarism detection tools, lack of writing skills, inability to understand given assignments, poor assignment design, lack of interest, lack of time, fear of missing deadlines, less knowledge about what is expected from students in honest academic writing due to cultural differences and lastly, lesser contact with teacher (Relph & Randle, 2006).

Plagiarism can be casted as fraudulent action, which eliminates intellectual property of the original writer/author and it is now considered as a plague in our education systems (Petress, 2003). There are evidences of countering the problem of plagiarism through constant innovation and changing/emerging soft wares, students in tertiary education continue to plagiarise in one way or the other (Underwood & Szabo, 2003 ; Roig & Caso, 2005).

Academic integrity now a day is becoming a challenge for higher education institutions. Student plagiarism is considered as a highly unethical practice and condemned by academia at large. Since the advent of internet and expansion of information and communication technologies, student plagiarism is becoming an expanding issue at higher education level. Students may be able to recognize crudely what plagiarism is, but unable to distinguish the finer aspects of paraphrasing and referencing (Comas-Forgas & Sureda-Negre, 2010; Vehviläinen, Löfström, & Nevgi, 2017). Students at post graduate level are required to complete assignments and develop their writing skills. However, students are sometimes burdened or confused about academic writing and integrity/honesty attached to it, ending up with intentional or unintentional plagiarism. The ultimate responsibility for developing students’ perceptions and positive attitudes become vested in academia. A large number of text matching soft wares are available to detect plagiarism; still

they are unable to replace pedagogical strategies for teaching post graduate students about honest academic writing, appropriate citation strategies and ethical values (Löfström & Kupila 2013).

### **Literature review**

Research studies conducted to find out “students’ views on plagiarism” (Eret & Gokmenoglu, 2010) found that mostly the students had negative perception of plagiarism. Students were not fully knowledgeable about what really plagiarism is. Similarly, study by Kocak and Ozbek (2016) also concluded that more than 90% of the post graduate students agreed to it that if you are unable to write well due to unfamiliarity with the assigned topic, it is justified to copy from already published work in the area in order to represent the underlying idea correctly.

Anney and Mosha (2015) have illuminated various factors that exacerbate plagiarism among post graduate students such as inadequate time to finish assignment, students’ perceptions that the instructor will not read and check students’ assigned work in detail, influence of peer cheating behaviour and lastly, parental pressure demanding students to achieve better grades. Furthermore, they added that if students are ill-integrated with in their academic community, its culture and have lack of orientation towards academia’s ethics then they are more liable to plagiarize.

Several researchers have alluded students do not perceive recycling their own assignments as in the domain of self-plagiarism (Bennett, Behrendt, & Boothby 2011), students consider buying a research paper as serious cheating but do not perceive recycling of assignments as plagiarism (Halupa & Bolliger 2013). Similarly, Obeid & Hill (2017) stated that increase in plagiarism cases by university students is due to easy access to already completed work and increased competitiveness among peers. In their research study, Obeid & Hill (2017) did a two-hour intervention in a research methodology classroom. This intervention successfully reduced plagiarism and self- plagiarism act, implicating that post graduate students require training instead of only threatening them for penalty to reduce plagiarism acts.

Besides these arguments against self-plagiarism, some researches have advocated in favor of this approach (Callahan, 2014). Apart from the point of discussion that students cannot steal from their own previous work, sometimes it becomes unavoidable to reuse some well-formed , standard research done previously by the author himself/herself then it can be justified arguably, but after adding proper reference. In addition to this argument, some researchers claim that reuse of one’s own work is unavoidable sometimes (Horbach & Halffman, 2017), especially in small research fields in which an author builds on his own line of research.

Shirazi, Jafarey and Moazam (2010) have illuminated the need of training in research methodology, report writing and referencing techniques among Pakistani faculty and students so as to curb the causes of plagiarism/ self-plagiarism. They have emphasized that many cases of plagiarism fall in the category of unintentional and major cause is lack of knowledge about citations, inability to communicate research ideas in English, pressure to increase research publications and meet deadlines. Ramzan *et al* (2012) emphasized that post graduate students in Pakistani universities have little awareness about plagiarism detection software, which leads toward major incidents. It had been suggested to make them aware about functioning of such software and improve their language proficiency so that they do not tend to copy paste verbatim from internet.

Murtaza *et. al.* (2013) reflected upon Pakistani university students’ perceptions and behaviour and concluded that firstly students tend to plagiarize because they have pressure to attain grade point average (GPA) by timely submission of assigned work. Majority of students lack time

management skills and rush to plagiarize work to meet given deadlines. This leads towards intentional plagiarism. Secondly, post graduate students are knowledgeable about Higher Education Commission’s existing policies regarding plagiarism but have less awareness to what extent their contents cover academic aspects. Lastly, it was concluded that students mostly cheat and plagiarize in their course work but these infringements occur with a very lesser percentage once they get engaged with their thesis/dissertations.

Quraishi and Aziz (2017) have concluded that students at higher education level are adults, having their own thoughts and personalities. If they are given proper awareness about the domains of academic dishonesty; of which plagiarism and self- plagiarism constitute a major portion, cases may be decreased. Penalties may diminish or discourage malpractices towards plagiarism but it requires effort and energy of academia to attain valid evidences and decide about minor or major penalties as per the guidelines given by Higher Education Commission, Pakistan.

### Theoretical Framework

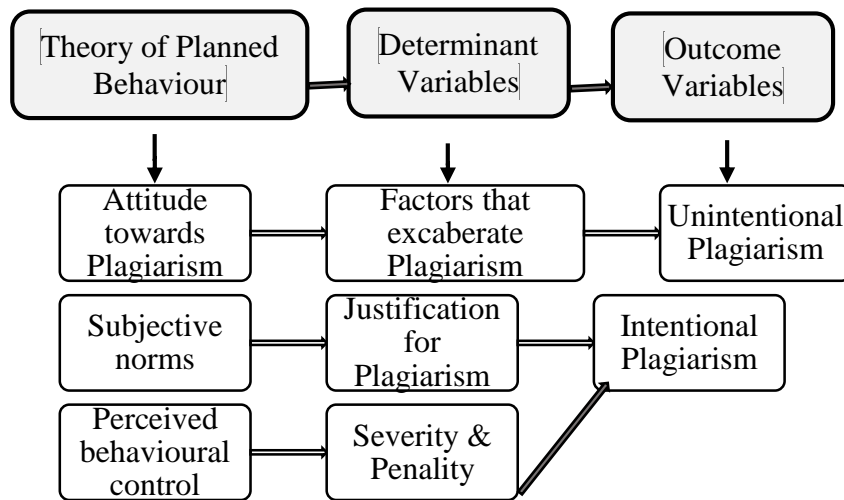


Figure 1. Theoretical framework of the study. Adapted from Ajzen, I. (1988). Attitudes, personality, and behavior. Chicago: Dorsey Press.

Theory of Planned Behaviour (Ajzen, 1985) has been considered as theoretical background of this research study. This theory indicates an individual’s behaviour at a specific place and time positing that his/her behaviour is driven by behaviour intentions. These intentions are function of an individual person’s attitude towards specific behaviour, subjective norms and perceived behavioral control. Behaviour intentions represent a person’s conscious decision or plan of action for performing certain behaviour (Conner & Armitage, 1998). Attitude towards plagiarism is the degree to which students have positive or negative feelings towards plagiarism. This factor leads towards exacerbation or negation towards plagiarism and end result may be unintentional plagiarism (Ajzen, 1991). Subjective norms towards plagiarism refer to students’ perception about the environment surrounding them in social setting. This social environment may influence their thinking about justification for plagiarism thus pushing them towards intentional plagiarism (Hard, Conway, & Moran, 2006). Lastly perceived behavioral control indicates the extent to which

intended behaviour is difficult or easy. This control increases when students perceive that they have more confidence and resources. This confidence drives them towards intentional plagiarism and makes them resistant towards the severity and penalty of plagiarizing intellectual work (Ajzen, 1991, Hartwick & Barki, 1994; Lee & Kozar, 2005).

### **Research questions**

1. What are post graduate students' attitudes towards plagiarism?
2. Is there any difference in attitudes of post graduate students studying in management sciences, social sciences and languages towards plagiarism?

### **Research objectives**

1. To measure attitude of post graduate students enrolled in management sciences, social sciences and languages towards plagiarism.
2. To compare attitudes of post graduate students studying in Management sciences, Social sciences and languages towards plagiarism.

### **Null hypotheses**

**H<sub>01</sub>** = There is no statistically significant difference in attitude of post graduate students enrolled in post graduate programs in management sciences, social sciences and languages towards plagiarism.

**H<sub>01(a)</sub>** = There is no statistically significant difference in attitude of post graduate students in management sciences, social sciences and languages towards factors that exacerbate plagiarism.

**H<sub>01 (b)</sub>** = There is no statistically significant difference in attitude of post graduate students enrolled management sciences, social sciences and languages towards factors related to justification for plagiarism.

**H<sub>01 (c)</sub>** = There is no statistically significant difference in attitude of post graduate students enrolled in management sciences, social sciences and languages towards factors related to severity and penalty for plagiarism.

### **Methodology**

Quantitative descriptive research study design was used to measure and compare the attitudes of post graduate students towards plagiarism. Population included all the post graduate students engaged in thesis writing in public sector universities of Islamabad region. Due to time constraint, homogenous purposive sampling technique was used for sample selection. Sample included 300 post graduate students (MS, MPhil & PhD), 150 males and 150 females with age range between 28-50 years enrolled in the faculties of management sciences, social sciences and languages in two public sector universities of Islamabad.

Data for the research purpose was collected through a standardized questionnaire "Revised attitudes towards plagiarism questionnaire (RATPQ)" by Howard *et. al.* (2014). They had developed psychometric properties of a questionnaire on attitudes towards plagiarism by Mavrinac *et. al.* (2010). Through exploratory factor analysis and Rasch validation of the questionnaire, Howard *et. al.* (2014) extracted three factors of the questionnaire namely; factors that exacerbate plagiarism (7 items), justification for plagiarism (6 items) and severity and penalty (9 items) whereas last two items explored the notions "my initial definition of plagiarism prior to completing this survey matched university's definition of plagiarism" and "my views of plagiarism have changed since completing this survey". All 22 items for above mentioned three factors were scored on a 5 point likert scale (ranging from strongly agree to strongly disagree). Whereas last two items were scored on a yes/no scale. The questionnaire was adopted as it is for this study after taking

written permission from Mavrinac et al (2010) and Howard et al (2014). However reliability analysis was conducted which yielded over all  $r = .89$ , whereas for factor 1  $\alpha = .83$ , for factor 2  $\alpha = .86$  and for factor 3  $\alpha = .87$ . This questionnaire (attached as annexure I) was converted into google form and sent to respondents through email link as <https://goo.gl/forms/WNTdW7R67g1eiH4J2>.

### Results & Findings

Table 1

Mean scores of MS/MPhil students on Revised Attitudes towards Plagiarism scale (n=300)

Sub scales	<u>Management sciences</u>		<u>Social sciences</u>		<u>Languages</u>	
	Mean	SD	Mean	SD	Mean	SD
Exacerbation of Plagiarism	16.80	5.91	24.47	4.04	23.84	3.98
Justification for plagiarism	18.89	3.01	20.30	3.27	18.79	3.08
Severity & Penalty	21.17	4.61	24.60	6.95	27.28	5.54

Table 1 displays the mean values of three subscales scored on the Revised Attitudes towards Plagiarism questionnaire by MS/MPhil students enrolled in management sciences, social sciences and languages. It reveals that highest mean score on subscale related to exacerbation of plagiarism was by students of social sciences (m=24.47). It shows that students of this program have highest awareness about such items, which aggravate plagiarism. Justification for plagiarism was again scored highest by M.Phil. students of social sciences (m= 20.30), showing that these students agreed mostly with the causes for justification of plagiarism. However, highest scores on subscale related to severity and penalty were exhibited by MPhil students of Languages (m=27.28).

Table 2

Mean scores of PhD students on Revised Attitudes towards Plagiarism scale (n=300)

Sub scales	<u>Management sciences</u>		<u>Social sciences</u>		<u>Languages</u>	
	Mean	SD	Mean	SD	Mean	SD
Exacerbation of Plagiarism	23.80	6.92	20.43	4.00	20.34	3.99
Justification for plagiarism	20.29	3.74	24.30	3.27	20.21	3.48
Severity & Penalty	21.17	4.61	24.60	6.95	26.23	5.74

Above mentioned table reveals the mean scores of three subscales of the questionnaire obtained from data of PhD students of management sciences, social sciences and languages. Management sciences students scored highest on the subscale of exacerbation of plagiarism (m= 23.80) thus revealing that mostly students agreed towards the causes of aggravating plagiarism. Justification for plagiarism was having high mean score (m= 24.30) by social sciences students, whereas languages students attained highest mean score on the subscale of severity and penalty (m= 26.23).

Table 3

One way ANOVA for faculty wise difference in factors that exacerbate plagiarism (n=300)

Source	df	SS	MS	F	p
Between Groups	2	3265.580	1632.790	78.287	.000
Within Groups	297	6194.350	20.856		
Total	299	9459.930			

One-way between subjects ANOVA was conducted to compare the effect of factors that exacerbate plagiarism among post graduate students of management sciences, social sciences and languages. There was a statistically significant difference in the attitudes of post graduate students enrolled management sciences, social sciences and languages towards factors that exacerbate plagiarism at  $p < .05$  level for the three conditions mentioned in table 3 [  $F ( 2,297)=78.28, p=.00$ ]  
Table 4

Post hoc comparisons using Tukey HSD test for dependant variable “Factors that exacerbate plagiarism”.

(I) Faculty	(J) Faculty	Mean Difference (I-J)	Std. Error	p	95% Confidence Interval	
					Lower	Upper
M.Sciences	Social sciences	7.670*	.646	.090	9.19	6.15
	Languages	6.040*	.646	.060	7.56	4.52
Social sciences	M.Sciences	7.670*	.646	.090	6.15	9.19
	Languages	2.710*	.646	.052	2.11	3.15
Languages	M.Sciences	6.040*	.646	.060	4.52	7.56
	Social sciences	2.710*	.646	.052	3.15	2.11

Tukey HSD test indicates that the attitudes of post graduate students of management sciences toward the factors that exacerbate plagiarism were significantly different from students of social sciences and languages ( $p=.090$ ), whereas students of social sciences did differ less significantly in their attitudes from students of languages (  $p=.052$ ), thus  $H_{01(a)}$  is not accepted, where  $p < 0.05$  levels.

Table 5

One way ANOVA for faculty wise difference in justification for plagiarism (n=300)

Source	df	SS	MS	F	p
Between Groups	2	101.940	50.970	55.56	.004
Within Groups	297	2719.380	9.156		
Total	299	2821.320			

One-way between subjects ANOVA conducted to compare the factors related to justification for plagiarism among post graduate students of management sciences, social sciences and languages revealed that there was a statistically significant difference in the attitudes of post graduate students enrolled management sciences, social sciences and languages towards justification for plagiarism at  $p < .05$  level for the three conditions mentioned in table 5 [ $F (2,297) =55.56, p=.004$ ]

Table 6

Post hoc comparisons using Tukey HSD test for dependant variable “Justification for plagiarism”.

(I) Faculty	(J) Faculty	Mean Difference (I- J)	Std. Error	p	95% Confidence Interval	
					Lower	Upper
M.Sciences	Social sciences	1.410*	.428	.063	2.42	.40
	Languages	.900	.428	.021	1.91	.11
Social sciences	M.Sciences	1.410*	.428	.063	.40	2.42
	Languages	.510	.428	.061	.50	1.52
Languages	M.Sciences	.900	.428	.021	.11	1.91
	Social sciences	.510	.428	.061	1.52	.50

Post hoc Tukey HSD test indicates that the attitudes of post graduate students of management sciences towards the factors about justification for plagiarism were significantly different from students of social sciences (p=.063) but did not differ significantly from attitude of languages students (p=.021), whereas students of languages did differ significantly in their attitudes from students of social sciences ( p=.061), thus  $H_{01(b)}$  is rejected at  $p < 0.05$  levels

Table 7

One way ANOVA for faculty wise difference in severity and penalty towards plagiarism (n=300)

Source	df	SS	MS	F	p
Between Groups	2	1875.980	937.990	27.992	.000
Within Groups	297	9952.270	33.509		
Total	299	11828.250			

A One-way ANOVA calculated to compare the factors related to severity and penalty towards plagiarism among post graduate students of management sciences, social sciences and languages revealed that there was significant difference statistically in the attitudes of post graduate students enrolled in management sciences, social sciences and humanities towards factors related to severity and penalty for plagiarism at  $p < .05$  level for the three conditions mentioned in table 7 [ $F(2,297) = 27.99, p = .000$ ]

Table 8

Post hoc comparisons using Tukey HSD test for dependant variable “Severity & penalty for plagiarism”.

(I) Faculty	(J) Faculty	Mean Difference (I- J)	Std. Error	p	95% Confidence Interval	
					Lower	Upper
M.Sciences	Social sciences	3.430*	.819	.060	5.36	1.50
	Languages	6.110*	.819	.050	8.04	4.18
Social sciences	M.Sciences	3.430*	.819	.060	1.50	5.36
	Languages	2.680*	.819	.034	4.61	1.75
Languages	M.Sciences	6.110*	.819	.050	4.18	8.04



Social sciences      2.680\*      .819      .034      .75      4.61

Tukey HSD test for multiple comparisons indicates that the attitudes of post graduate students of management sciences, social sciences and languages towards the factors related to severity and penalty in the research questionnaire were statistically significantly different from each other, thus  $H_{01(c)}$  has been rejected, where  $p < 0.05$  levels.

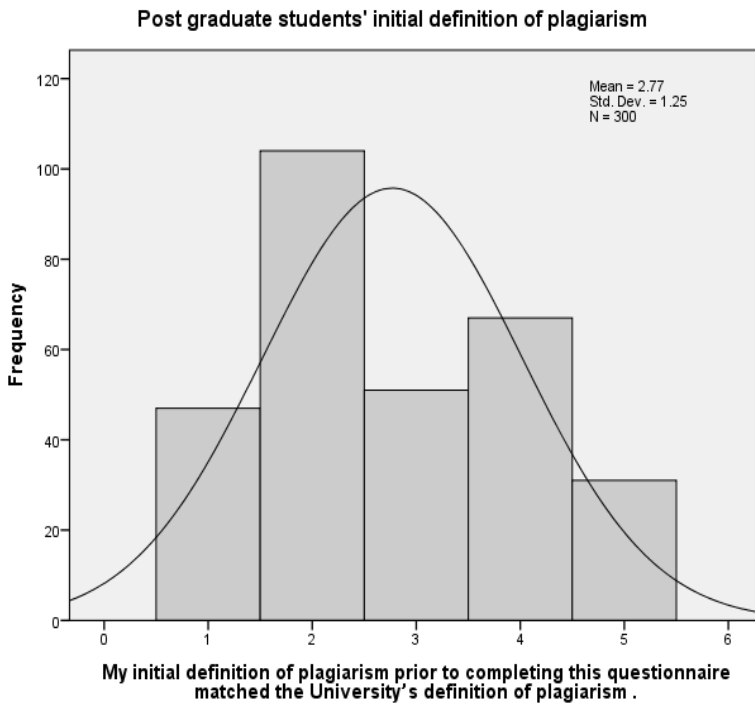


Figure 2. Histogram showing post graduate students' initial definition of plagiarism.

This histogram reflects that post graduate students disagreed that their initial definition of plagiarism matched the university's definition of plagiarism (which had been outlined in the research questionnaire) prior to completing the survey questionnaire ( $m = 2.77$ ,  $sd = 1.25$ , where  $n = 300$ )

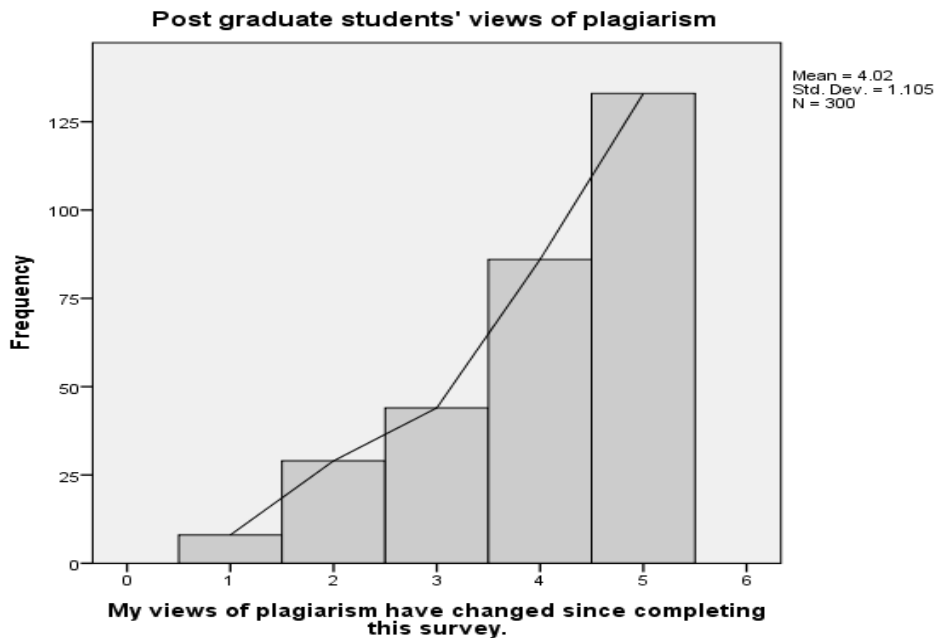


Figure 3. Histogram showing post graduate students' change in views about plagiarism.

This histogram is skewed towards right side depicting that the interpolation line moves towards strongly agree scale where mean = 4.02, sd = 1.105 at n=300. It means that mostly the students agreed that their attitude and views towards plagiarism have changed since completing the questionnaire.

### Discussion

Plagiarism is a subject which has become a major concerns for higher education institutions globally. This study succinctly measured post graduate students' attitudes towards plagiarism. Three major domains for attitude towards plagiarism were explored namely; factors exacerbating plagiarism, justification to plagiarize and penalty for this act. The findings of this study also reveal some major aspects in this regard. For example, post graduate students of management sciences, social sciences and humanities had varying conceptualizations about the concept of plagiarism and self-plagiarism, that's why their responses manifested different attitudes towards plagiarism.

Students of management sciences scored lesser on the variables related to exacerbation in plagiarism. It means that their inclination was more towards unintentional plagiarism. This finding is in line with the work done by Gomez *et. al.* (2013). The paper described that 12.6% of the documents analyzed obtained a plagiarism percentage of above 45% and another 45% documents indicated significant copying. In Pakistani context Murtaza *et. al.* (2013) have also conducted a cross sectional study across 6 departments of 35 universities and concluded that an extensive lack in understanding of post graduate students about plagiarism is the major cause of unintentional plagiarism.

Judging the results of this study, it is inappropriate to justify the reuse of others work without proper citation. Post graduate students of management sciences, social sciences and languages differed in their opinion about justification for plagiarism and self-plagiarism, which indicates underlying subjective norms in the environment surrounding their social settings. As social settings of these faculties differ, so does subjective norms (Giluk & Postlethwaite, 2015).

Social model of plagiarism also states that identification, occurrence and regulation of plagiarism becomes related to different socio-cultural settings across various disciplines at higher education institutions (Reddy & Jones, 2004). So the scores on statement such as “It is justified to use previous descriptions of a concept or theory, because they remain the same” were different (Management sciences  $m= 18.89$ , social sciences  $m= 20.30$  and languages  $m=18.79$ ). These findings are in consonance with the work of Khalid (2015) stating that social context influences the perceptions and attitudes of students toward plagiarism, furthermore it was highlighted that academia plays an important role to decrease the differences in students’ attitudes across disciplines by making a mutual consensus on institutional definition of plagiarism and self-plagiarism. It may go a long way in curbing incidents of intentional plagiarism.

An examination of the subscale related to severity and penalty for plagiarism revealed that mean scores of all faculties were high (Management sciences  $m= 21.17$ , social sciences  $m= 24.60$  and languages  $m=26.23$ ). Languages students secured highest, meaning that they viewed plagiarism undermines independent thought, whereas social sciences students’ views indicated that if the textual material is of high quality, then plagiarized parts from students’ papers must be ignored. Furthermore, management sciences students’ responses depicted that if you are unable to write because of unfamiliarity with the assigned topic, you can copy from already published work without being penalized. This finding opens up an opportunity for further research as it indicates that plagiarizing your work is not an isolated behaviour (Gomez, Salazar, & Vargas, 2013). It is deduced that post graduate students do not have clear idea of the severity and penalties as the consequences of plagiarism and self-plagiarism (Ayub, Hamid, & Nawawi, 2014).

The analysis of two notions “*my initial definition of plagiarism prior to completing this survey matched university’s definition of plagiarism*” and “*my views of plagiarism have changed since completing this survey*” shows that 50% post graduate students agreed, 33% disagreed and 17% remained neutral with the first notion; whereas 74% students strongly agreed, 12% disagreed and 14% gave neutral response to second notion. It means that the survey helped the students think critically and match their self-perception about plagiarism to that of their institutions. This survey provided a direction to streamline their views about plagiarism as well. As the study done by Teeter (2015) also illuminated the need for reconstruction of students’ attitudes towards plagiarism through involving academia and students in developing and critiquing policies and standard operating procedures on academic honesty and integrity.

### **Conclusion**

There are codes of conduct and Standard Operating Procedures (SOPs) in every university that regulates the cases of plagiarism as per guidelines given by Higher Education Commission, Pakistan. Understanding these courses of action is essential not only for students but for academia as well. As academia, we need to critically reflect on our own practices and moral obligations towards maintaining academic integrity among students. We need to go beyond simple accusation phase when a case of student plagiarism occurs, and try to rummage in to the question of why that phenomena occurred. This study revealed that attitudes of students towards plagiarism differ across faculties, so it becomes utmost responsibility of academia to conjoin their own perceptions and attitudes towards plagiarism in order to provide uniform guidance to respective students. This study implicates that academia lays a strong prominence on educating students about consequences of plagiarism, available soft wares for its detection and strategies to avoid it.

This study has shed some light that plagiarism is a dichotomous issue, dividing unintentional and intentional aspects. Consequently, reliance on preventive measures may not resolve the issue but a comprehensive approach clearly focused in teaching learning situation at

post graduate level is required. Moreover, students must be taught the rules of citation and referencing and it may be made mandatory for students at post graduate level to pass a course in academic writing with emphasis on academic citation and referencing style. In order to accomplish this feat, academia across all disciplines may begin by evaluating current practices and concerns about students' academic writing and equip them with academic writing skills. Last but not the least, academia need to lament the current state of post graduate students' attitudes towards plagiarism and create ethical climate in their classrooms. A climate of ethical behaviour asserts the connection between students' ethical behaviour and their learning / development. Climate of ethical behaviour in post graduate classrooms is going to make a deep impact towards academic integrity among students as Kassem (2011) rightly said: "A true poet writes from the language and experiences of their own heart, not those of others".

### **Recommendations**

1. Universities may devise operational definition of plagiarism within the framework given by Higher Education Commission, Pakistan and disseminate it to academia and students to enhance ethical scholarship and academic integrity.
2. University management may hold workshops/ awareness seminars/ symposiums to help students understand the concept of plagiarism in a better way.
3. Trainings on research ethics, proper citation, paraphrasing and referencing may improve students attitudes towards plagiarism, so such training may be conducted frequently.
4. Academia may devise appropriate assignments for students according to their level of critical thinking and give explicit directions so that students do not indulge in dishonest means of completing these, thus decreasing the chances of plagiarism occurrences.
5. Academia may introduce Citation Managers such as EndNote, Mendeley and Zotero to facilitate post graduate students in developing authentic bibliography and reference management.
6. Lastly, a course on intellectual property rights may be introduced at post graduate level to help students build creativity, originality and novelty in their academic / research writings.

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