

## ABSTRACT

### 1. Background and Rationale of the Study

In the recent years necessity of developing CT skills and positive personality traits among students is considered as one of the main goals of higher education around the globe. In order to acquire this goal, many researchers and authors in the field of educational administration in different universities and colleges have been striving to develop plans and designing courses in CT skills and personality traits among the students. Regardless of formal plans and educational methods that have been designed so far to improve CT skills among students, there are little researches and studies about the traits and characteristics that help students acquire their objectives and goals. That is why acquiring some information on students' personality traits and characteristics is necessary to develop effective plans in order to evaluate these skills.

As a purposeful activity, CT influences all aspects of human life. Education is one of them and there is a great tendency to train people to become good critical thinkers. Hence, one of the most important goals of educational systems is developing learners' CT skills in order to figure out, analyzing and presupposition in arriving at scientific hypothesis for reasonable solution toward complex problem. By applying and conducting the CT skills, writing ability among students can substantially improve. Critical thinkers' feedback can be very fruitful to other learners in order to understand better and to make reasonable connection between different ideas, arrive at conclusions and finally successful international communication (Malmir & Shoorchech, 2012).

There are several studies which investigate relationship between personality traits, CT and learning. Hashemi & Ghanizade (2012) in critical discourse analysis and thinking research, study the effects of critical discourse analysis and thinking on students.

Shortly afterwards, Chan (2013) in CT and creativity in nursing, explores nursing student's perception towards CT and creativity. On the other hand, Wltink and Nelson (2014) in relationship between personality traits and psychotic suggest that this relationship may partly account for higher level of depression in individual with certain personality traits. Mendolia and Walker (2014) also study the effect of personality traits on subject choice and performance in high school research.

In another study, Fahim and Azarnioushi (2011) tried to find whether there is any relationship between the CT ability of language learners and their performances by using rule-driven or discovery learning approaches to teach grammar. The results of their study showed that there was a positive correlation between the CT ability of the learners and their grammar test scores if the inductive teaching method is used. However, for the deductive teaching method, no specific relationship could be discovered between the CT ability of the learners and their grammar test scores.

Furthermore, Kamali and Fahim (2011) investigated the relationship between resilience, CT ability and reading comprehension of texts including unfamiliar vocabulary items. The conclusion showed that there is a significant relationship between CT ability, resilience, and L2 reading comprehension. Behdani (2009) also has done a research investigating the relationship between CT ability, autonomy, and reading comprehension of the Iranian EFL learners. The results displayed that a significant relationship between learners' autonomy and their performance on reading comprehension exists. In another study, the relationship between CT and lexical inference of EFL learners was examined by Mirzaie (2008). Here, the researcher found out a relationship between CT levels and lexical inference of learners.

In addition, Malmir and Shoorcheh (2012), Sanavi and Tarighat (2014) also conducted some researches in this area and they recognized the impact or any possible relationships between personality traits, CT and the other concepts and skills in TEFL.

Hence, it is obvious that the process of problem solving and using logical inquiry requires CT. based on this perspective, CT is a move from viewing learning as memorizing and repeating words to a constantly evolving process of discovering, questioning and formulating hypotheses (Pennycook, 1996). According to this significance, personality traits and CT training courses have been advertised as a boosting device to enhance language learning.

Therefore, this idea that improving CT and different aspects of personality traits may facilitate or frustrate the process of learning, motivated by individual difference in the language learning in EFL/ESL classes on the one hand and the ideological conflict between psychologists and applied linguists on the other hand, the present study aims at investigating any relation between personality traits and CT on writing.

As there has not been any pertinent study to magnify the significance of relationships between personality traits and CT on writing, studies such as the present one are so essential. This study can theoretically enrich the findings in the applied linguistic as well as psycholinguistics. Furthermore, it can clarify the relation between psychology and language learning and teaching. The findings of the present study can also provide teachers and language centers with enough evidence to change or modify their outlook toward the role of personality factors and CT skill in language learning. In addition, the current study will be helpful for policy makers and syllables designers and based on the obtained result, they will encourage aspects of personality trait and CT that may have more effects on writing.

Finally, the standard plans to develop and to expand CT skills focus on teaching the skills of rationalization and reasoning. Some theorists in the field of education suggested that individual differences and personality traits lead to differences in the CT and writing skill. While considerable studies have investigated the correlation between different aspects of CT and personality traits on different skills, few studies investigated the correlation between personality traits and CT in writing. So, the present study is an attempt to fill the gap by examining the correlation between personality trait and CT on writing of EFL learners.

## **2. Aim and Objectives of the Study**

The main aim of this study is to provide an insight into relationship between CT and personality traits on writing ability of EFL learners at AMU. Being critical thinker is very imperative, because it may lead students to involve in discussion, ask more questions, better and faster decisions and finally take more benefits in a short time and limited number of sessions. Moreover, the critical thinkers' feedback may have positive impact on the other students in order to take a more dynamic role in their writing. Therefore, this study is going to find out the relationship between personality traits and CT on writing of EFL learners. According to this goal, this study is going to have the following research objective:

1. To investigate variance in writing that can be explained by personality traits and to investigate the most effective aspect of personality trait on the students' writing.

2. To investigate variance in writing that can be explained by CT and to investigate the most effective aspect of CT on the students' writing.
3. To investigate the relationships between CT and personality traits.
4. To investigate relationship between learners' CT and their age.
5. To investigate relationship between learners' personality traits and their age.
6. To investigate differences in Aligarh Muslim University EFL learners' CT in terms of gender.
7. To investigate differences in Aligarh Muslim University EFL learners' personality traits in terms of gender.

### **3. Research Questions**

This study has focused on nine main research questions:

1. How much of the variance in writing can be explained by personality traits? Which aspect of personality traits is more effective on the students writing?
2. How much of the variance in writing can be explained by CT? Which aspect of CT is more effective on the students writing?
3. Is there any significant relationship between learners' CT and their personality traits?
4. Is there any significant relationship between learners' CT and their age?
5. Is there any significant relationship between learners' personality trait and their age?
6. Is there any significant difference among Aligarh Muslim University EFL learners' CT in terms of gender?
7. Is there any significant difference among Aligarh Muslim university EFL learners' personality trait in terms of gender?

### **4. Research Hypothesis**

Based on the above-mentioned research questions, the following null hypotheses have been formulated:

1. Variance in writing can't be explained by personality traits and there is no difference between aspects of personality traits on the students writing.
2. Variance in writing can't be explained by CT and there is no difference between aspects of CT on the students writing.

3. There is no significant relationship between learners' CT and their personality traits.
4. There is no significant relationship between learners' CT and their age.
5. There is no significant relationship between learners' personality traits and their age.
6. There is no significant difference among Aligarh Muslim University EFL learners' CT in terms of gender.
7. There is no significant difference among Aligarh Muslim university EFL learners' personality traits in terms of gender.

## **5. Methodology**

### **5.1 Design of the Study**

Overall design of the current research was correlational, which happens to be the most effective method for the present research study, as it offers a non-obtrusive approach to the inquiry and find results in identification of significant relationships between study variables (Creswell, 2002). Since the data are derived from primary sources (EFL Students) here, it is a type of Primary research, which was carried out to answer specific issues or questions. It involved questionnaires and surveys with individuals and small groups. It is a type of quantitative research too as questions were arrived deductively. The researcher started his work by posing some hypotheses, and numerical indices were derived from the utilized tests through statistical analysis to test the hypotheses. This study involved two independent variables including personality trait and CT. The dependent variable of this study is writing. Figures 4.1 and 4.2 (in thesis) demonstrate the proposed models of the present study.

#### **Proposed model I:**

This proposed model shows the correlation among aspects of Personality traits (Extroversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience) and correlation between these aspects and writing.

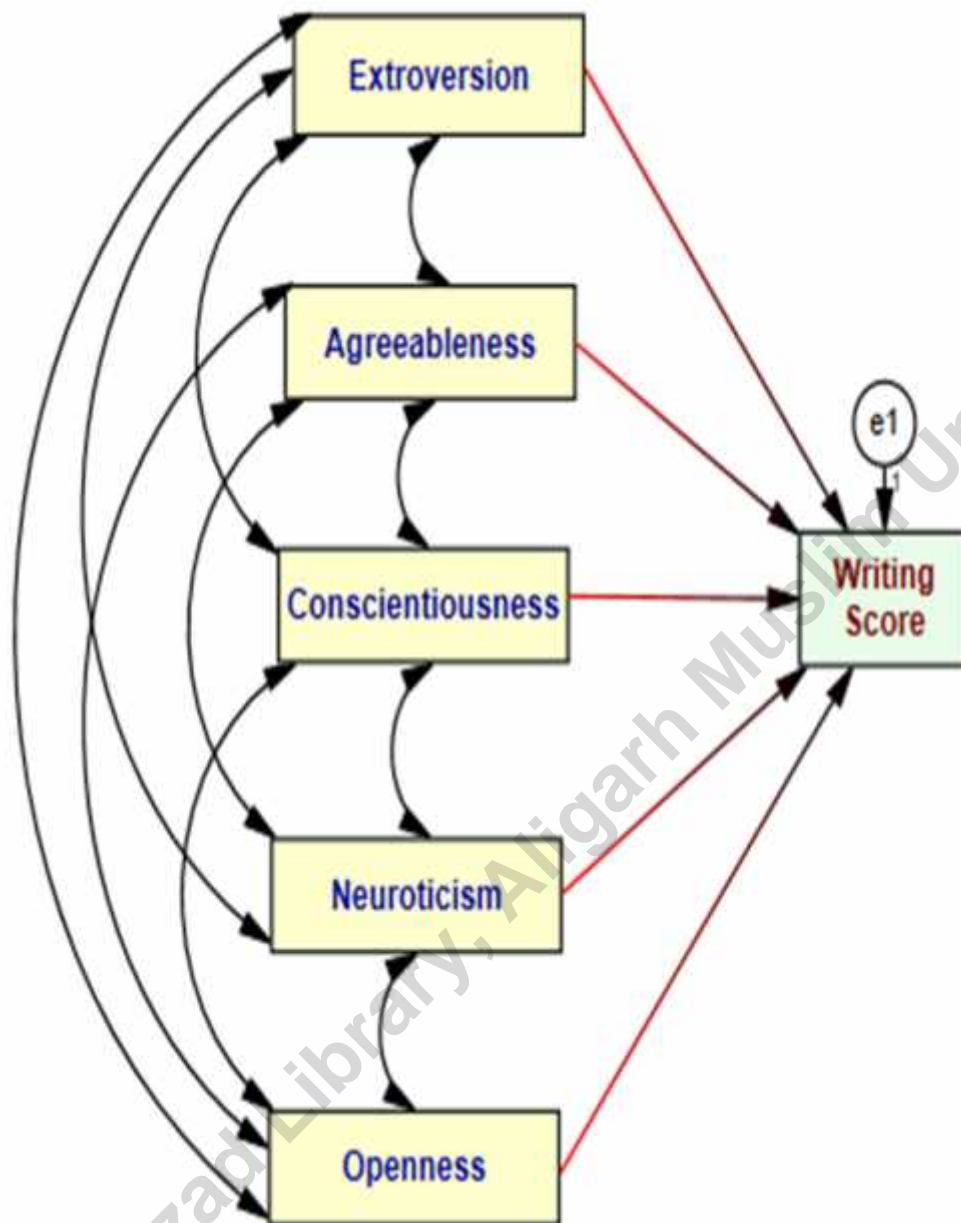


Figure 4.1 (in thesis) Proposed Model of correlation between personality traits and Writing

**Proposed model II:**

This proposed model shows the correlation among aspects of CT (Analysis, Inference, Evaluation, Inductive reasoning and Deductive reasoning) and correlation between these aspects and writing.

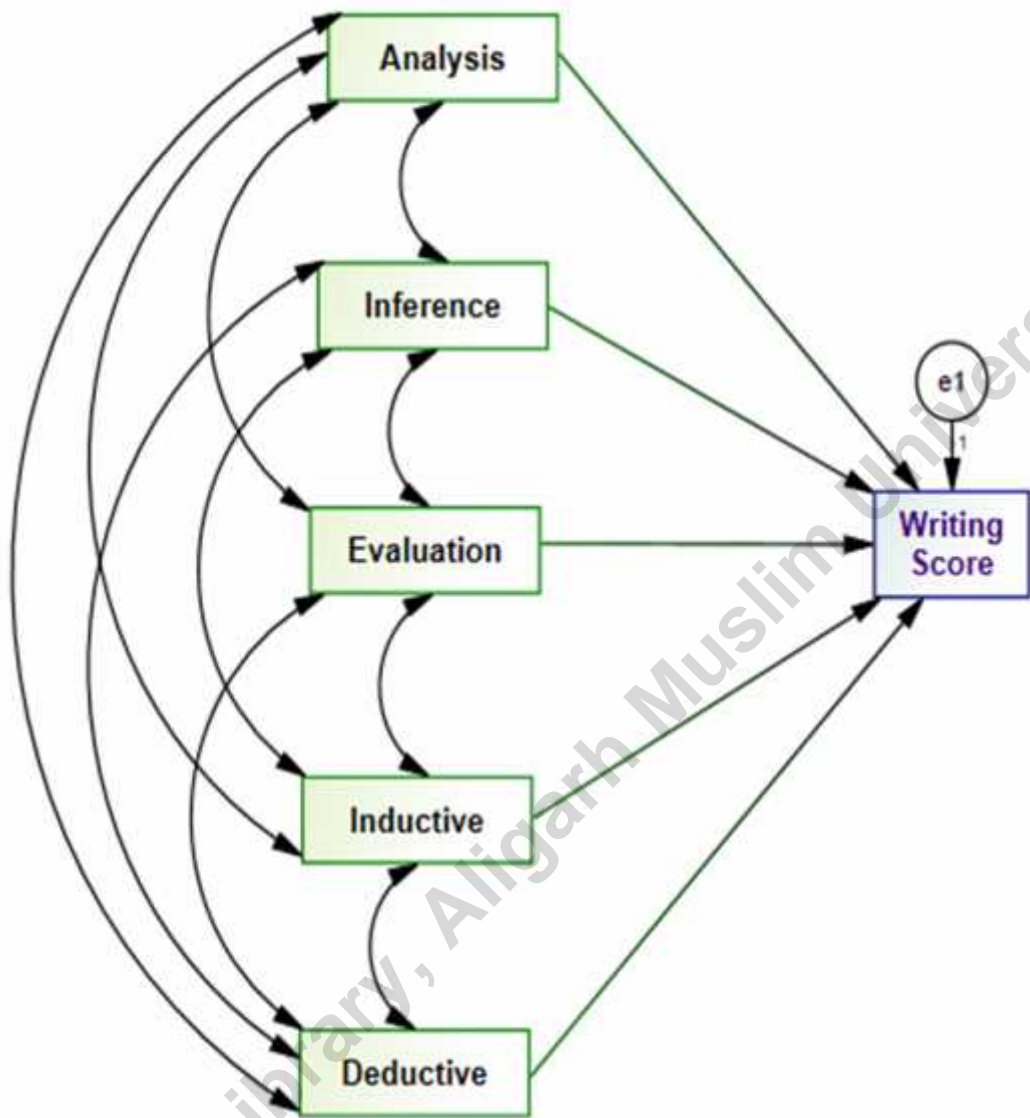


Figure 4.2 (in thesis) Proposed Model of CT and Writing

## 5.2 Participants

The population of the present study included students who are learning English at Aligarh Muslim University as foreigner students. This study is comprised of two phases including the validation of questionnaires (pilot study) and the main survey. Each of these phases had its own participants with their distinct characteristics. In order to clearly show who participated in each phase, the following subsections are provided.

### 5.2.1 Participants and Sampling for the Validation Phase (Pilot study)

The participants for the validation phase were EFL learners at AMU from two language proficiency levels, different ages, both the genders, and various educational backgrounds. The respondents to the personality trait questionnaire included 350 (187 female and 163 male) learners for reliability estimation, and the Confirmatory Factor Analysis (CFA). Moreover, the respondents to the critical thinking questionnaire included 236 (128 female and 108 male) learners for these analyses.

### 5.2.2 Participants and Sampling for the main Survey Phase

For the second phase of this study, convenience sampling was employed. The participants for this part were 300 EFL students at AMU belong to different age groups, genders, language proficiency levels, and countries holding different academic degrees. The reason for doing so was to accomplish diversity and hence generalizability of the findings. They were 167 females and 133 males whose age varied from 17 to 41 ( $M=26.65$ ,  $SD=5.44$ ).

Figure 4.3 (in thesis) shows the frequency of learners' age in the present study. As the bar chart displays, age of 25 has the highest frequency (45 participants), and ages of 17 and 41 have the lowest frequencies (1 participant in each of them).

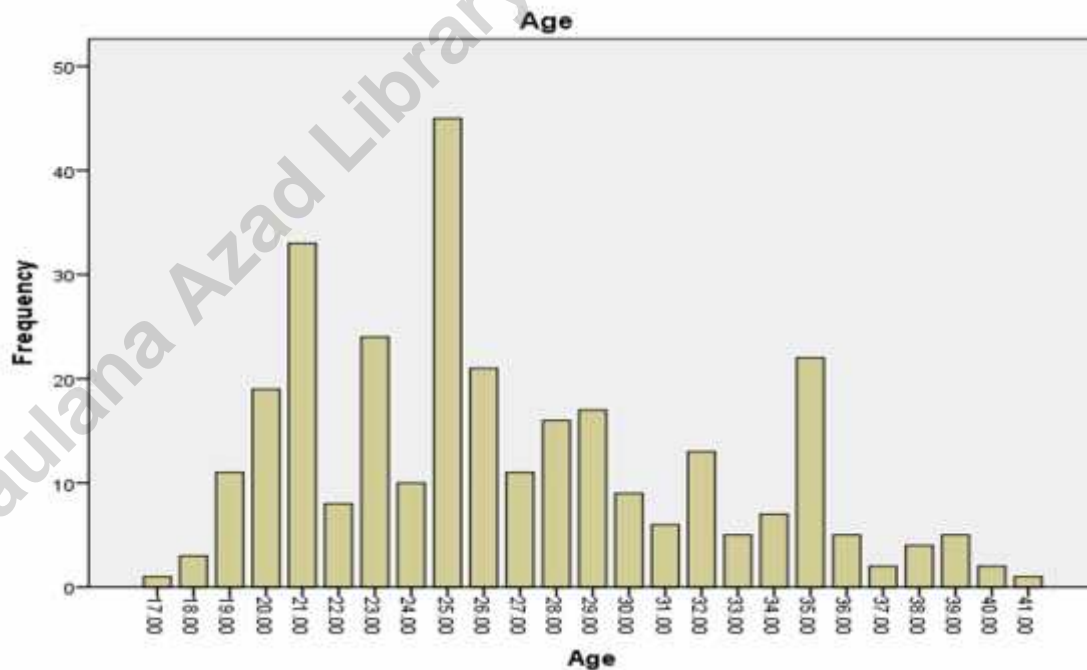


Figure 4.3 (in thesis) the frequency of learners' age in the present study



Figure 4.4 (in thesis) shows the percentage of learners' gender in the present study. As the pie chart shows the females percentage (55.7%) is higher than the males' percentage (44.3) in the second phase of this study.

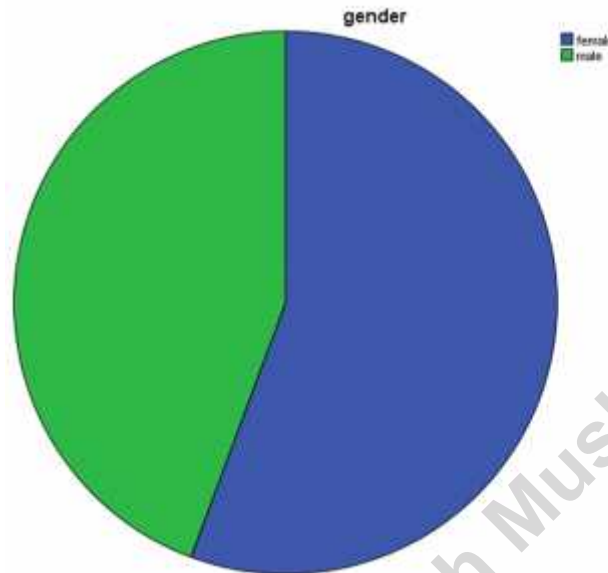


Figure 4.3 (in thesis) the percentage of learners' gender

### 5.3 Instruments

This study utilized two questionnaires and a writing test. These two questionnaires were select from more standard questionnaires in personality traits and critical thinking, then their reliability and validity was checked in the present study population. For validation phase two questionnaires were distributed. For main study phase first after a brief explanation to the participant about the way of filling the questionnaires, the researcher distributed two questionnaires: one on critical thinking and the other on big five factor personality traits, among the participants. After ten days interval, the researcher administered a writing test to find whether there is any correlation between personality traits, critical thinking and students' writing or not.

#### 5.3.1 Personality Traits Questionnaire

In this study a Personality trait questioner (appendix I) Goldberg (1992) were used. This questionnaire included 10 items about conscientiousness, 10 items about extraversion aspect of personality trait, 10 items about agreeableness, 10 items about neuroticism, and 10 items about openness to experience.

### **5.3.2 Critical Thinking Questionnaire**

In this study Peter Honey's (2004) critical thinking questionnaire (appendix II) were used. This questionnaire included 30 items to evaluate the skills of analysis, inference, evaluation and reasoning.

### **5.3.3 Writing Test**

In this study the researcher used a writing test (appendix III) to measure the students writing skill. They were required to write more than one paragraph and their writing level were measured by means of a writing Rubric.

### **5.3.4 Writing Rubric**

A Rubric was developed and used to measure the writing test and report scores in a consistent manner. The researcher used detailed performance descriptors, while assessing the writing test. These band descriptors describe performance in five categories:

- Focus
- Content
- Organization
- Style
- Convention

## **5.4 Procedure**

### **5.4.1 Data Collection**

This study as discussed above was a two-phase research with validation of the questionnaires as the first phase, followed by the survey as the second phase of this research, respectively. The procedure for each of these phases is referred to below:

Phase one of this research was the validation process. This phase is discussed and explained at length in this thesis under each one of questionnaire. (See 4.1.3.1.1.1 and 4.1.3.2.1)

After the questionnaire was validated (as comprehensively was explained in same chapter in instrument section), phase two was administered to 300EFL learners from different countries who are studying at AMU.

#### 5.4.2 Data Analysis

The data collected through questionnaires coded and entered into the SPSS software (version 24) and Amos software (version 24). Data analysis, similar to the data collection, was executed differently for the two distinct interrelated phases. The following two subsections demonstrate the data analysis procedure for the two phases of the current study.

Data analysis for the first phase of this research included Cronbach's Alpha (for reliability and item consistency), and confirmatory factor analysis (CFA).

In statistics, Confirmatory Factor Analysis (CFA) is a special form of factor analysis, most commonly used in social research (Kline, 2010). It is used to test whether measures of a construct are consistent with the researcher's understanding of the nature of that construct (or factor). As such, the objective of confirmatory factor analysis is to test whether the data fit a hypothesized measurement model. This hypothesized model is based on theory and/or previous analytic research (Preedy & Watson, 2009). In the present thesis, in order to validate critical thinking and personality trait questionnaires, CFA were utilized through AMOS software.

Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is most commonly used when one has multiple Likert questions in a survey/questionnaire that form a scale and one wishes to determine if the scale is reliable. In statistics (classical test theory), Cronbach's alpha is used as a (lower-bound) estimate of the reliability of a psychometric test (Cronbach, 1951).

It has been proposed that alpha can be viewed as the expected correlation of two tests that measure the same construct. By using this definition, it is implicitly assumed that the average correlation of a set of items is an accurate estimate of the average correlation of all items that pertain to a certain construct. Alpha coefficient ranges in value from 0 to 1 and may be used to describe the reliability of factors extracted from dichotomous (that is, questions with two possible answers) and/or multi-point formatted questionnaires or scales (i.e., rating scale: 1 = poor, 5 = excellent). The higher the score, the more reliable the generated scale is. Nunnally (1978) has indicated 0.7 to be an acceptable reliability coefficient but lower thresholds are sometimes used in the literature (Nunnally, 1978). In the present thesis, to examine the reliability of the scales, Cronbach's alpha was used.

To put it in a nutshell, for the final administration of the questionnaire as the second phase, different statistical methods were used depending on the research questions raised at the beginning of the study. The main statistical methods were path analysis, descriptive statistics, and Pearson correlation, independent sample t-test.

Creswell (2002) says that descriptive statistics includes central tendency (mean, median, mode), variability (variance, standard deviation, range), and relative standing (Z score, percentile rank). Number of participants, minimum and maximum scores, means and standard deviations of each of the scales used in the study are presented in next part of this chapter.

In statistics, path analysis is used to describe the directed dependencies among a set of variables. It can be viewed as a special case of structural equation modeling (SEM) in which only single indicators are employed for each of the variables in the causal model. That path analysis is SEM with a structural model, but no measurement model. Other terms used to refer to path analysis include causal modeling, analysis of covariance structures, and latent variable models. To answer the third and fourth research questions, Path analysis was utilized.

The Pearson product-moment correlation coefficient (or Pearson correlation coefficient, for short) is a measure of the strength of a linear association between two variables and is denoted by  $r$ . It was developed by Karl Pearson from a related idea introduced by Francis Galton in the 1880s (Galton, 1886). The Pearson correlation coefficient,  $r$ , can take a range of values from +1 to -1. A value of 0 indicates that there is no association between the two variables. A value greater than 0 indicates a positive association; that is, as the value of one variable increases, so does the value of the other variable. A value less than 0 indicates a negative association; that is, as the value of one variable increases, the value of the other variable decreases. The stronger the association of the two variables, the closer the Pearson correlation coefficient,  $r$ , will be to either +1 or -1 depending on whether the relationship is positive or negative, respectively (Gayen, 1951). In the present thesis to find possible relationship between learners' critical thinking, personality trait, writing score and their age, Pearson product-moment correlation coefficient was used.

The independent-samples t-test is used when one performs an experiment and one has obtained mean scores from two independent groups. One measures both scores

oneself, and one only has two of them (if one has three groups, one could not use a t-test). For example, one might assign students randomly to one of two treatments, and then at the end of the experiment one would test them and has two mean scores. One want to know whether one group performed better or worse than the other group (Larson-Hall, 2010). A t-test is most commonly applied when the test statistic would follow a normal distribution if the value of a scaling term in the test statistic were known. When the scaling term is unknown and is replaced by an estimate based on the data, the test statistics (under certain conditions) follow a Student's t distribution (Rice, 2006). In the present thesis, Research Questions 8 and 9 were assessed using independent-samples t-test.

## **6. Findings**

On the basis of study results, the following findings can be listed:

1. The results of path analysis showed that among five sub-factors of EFL learners' personality traits (Extroversion, Agreeableness, Conscientiousness, Neuroticism, Openness to Experience) four of them (Extroversion, Conscientiousness, Neuroticism, Openness to Experience) are significant predictor of their writing score. There is a non-significant path from Agreeableness to writing score in this model. Moreover, it was found that Neuroticism is a negative significant predictor of writing score. As the result indicates, among five personality traits, Openness to Experience is more effective on the students' writing. In addition Openness to Experience has the highest correlation and agreeableness has the lowest correlation. This finding answers the first research question. Following table and figure are related to this finding:

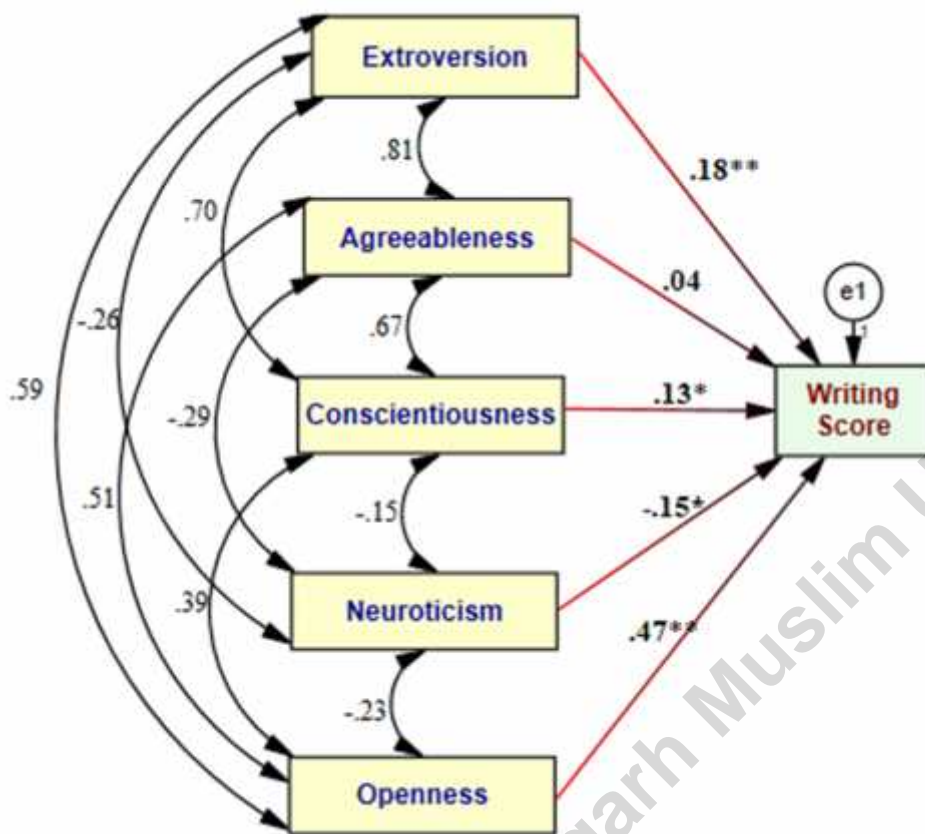


Figure 4.72 (in thesis) the schematic representation of the relationships among EFL learners Personality Traits, and Their writing score

Table 4.85 (in thesis)

Results of Correlation between learners' personality traits, and their writing score

	1	2	3	4	5	6
<b>1.Extroversion</b>	1.00					
<b>2.Agreeableness</b>	.75**	1.00				
<b>3.Conscientiousness</b>	.62**	.71**	1.00			
<b>4.Neuroticism</b>	-.33**	-.30**	-.19**	1.00		
<b>5.Openness to Experience</b>	.58**	.56**	.41**	-.26**	1.00	
<b>6. Writing score</b>	.42**	.06	.30**	-.50**	.58**	1.00

\*\*Correlation is significant at the level of 0.01

- In response to the second research question, the results indicated that among five sub-factors of EFL learners' critical thinking (Analysis, Inference, Evaluation, Inductive reasoning, Deductive reasoning), four of them (Analysis, Inference, Evaluation, Inductive reasoning) are significant predictor of their writing score.

There is a non-significant path from Deductive reasoning to writing score in this model. As the result indicated, among five sub-scales of critical thinking, Inference is more effective on the students' writing. Moreover, as it was found, among five sub-factors of critical thinking, inference has the highest correlation and Deductive reasoning has the lowest correlation with writing score. Following table and figure are related to this finding:

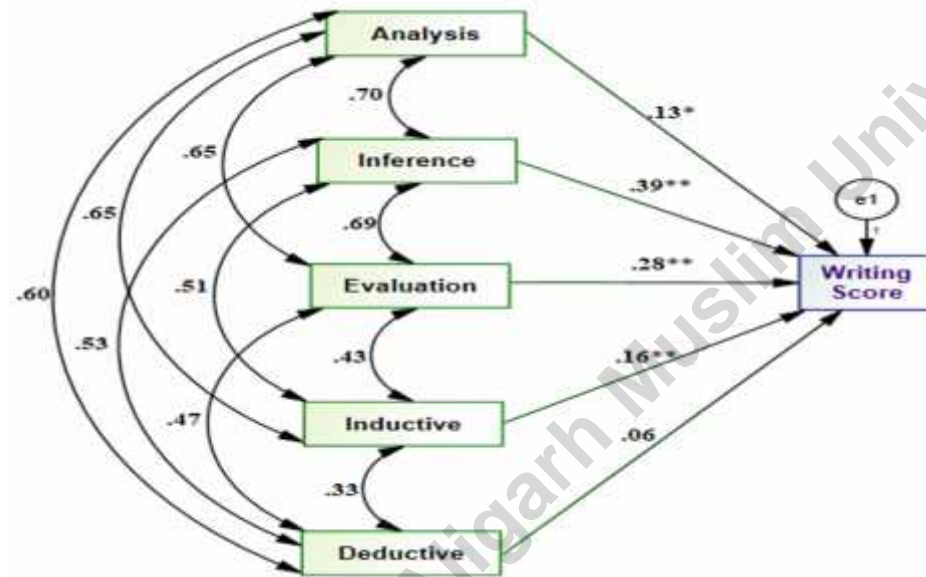


Figure 4.73 (in thesis) the schematic representation of the relationships among EFL learners Critical Thinking, and Their Writing Score

Table 4.87 (in thesis)

Results of Correlation between learners' critical thinking, and their writing score

	1	2	3	4	5	6	7
<b>1. Analysis</b>	1.00						
<b>2. Inference</b>	.73**	1.00					
<b>3. Evaluation</b>	.66**	.72**	1.00				
<b>4. Inductive reasoning</b>	.69**	.53**	.47**	1.00			
<b>5. Deductive reasoning</b>	.56**	.55**	.49**	.41**	1.00		
<b>6. Total Critical Thinking</b>	.73**	.82**	.69**	.69**	.50**	1.00	
<b>7. Writing Score</b>	.49**	.58**	.49	.38**	.02	.62**	1.00

\*\*Correlation is significant at the level of 0.01

3. Among five sub-factors of personality traits, openness to experience has the highest correlation and agreeableness has the lowest correlation with Total Critical Thinking. Therefore there is a significant correlation between critical thinking and learners personality traits. The finding answers the third research question. Following table is related to this finding:

**Table 4.88 (in thesis)**

**Results of Correlation between learners' critical thinking, and their personality**

	<b>Ex.</b>	<b>Ag.</b>	<b>Con.</b>	<b>Neu.</b>	<b>OP.</b>
<b>1. Analysis</b>	.39**	.11*	.63**	-.40**	.60**
<b>2. Inference</b>	.35**	.12*	.56**	-.30**	.65**
<b>3. Evaluation</b>	.60**	.04	.29**	-.44**	.44**
<b>4. Inductive reasoning</b>	.21**	.09	.15**	-.20**	.27**
<b>5. Deductive reasoning</b>	.16**	.44**	.27**	-.20**	.19**
<b>6. Total Critical Thinking</b>	.49**	.17**	.51**	-.39**	.63**

\*\*Correlation is significant at the level of 0.01

\*\*Correlation is significant at the level of 0.01

4. In response to the fourth research question, among five sub-factors of critical thinking, Analysis has the highest correlation and Deductive reasoning has the lowest correlation with learners' age. Following table and figure are related to this finding:

**Table 4.89 (in thesis)**

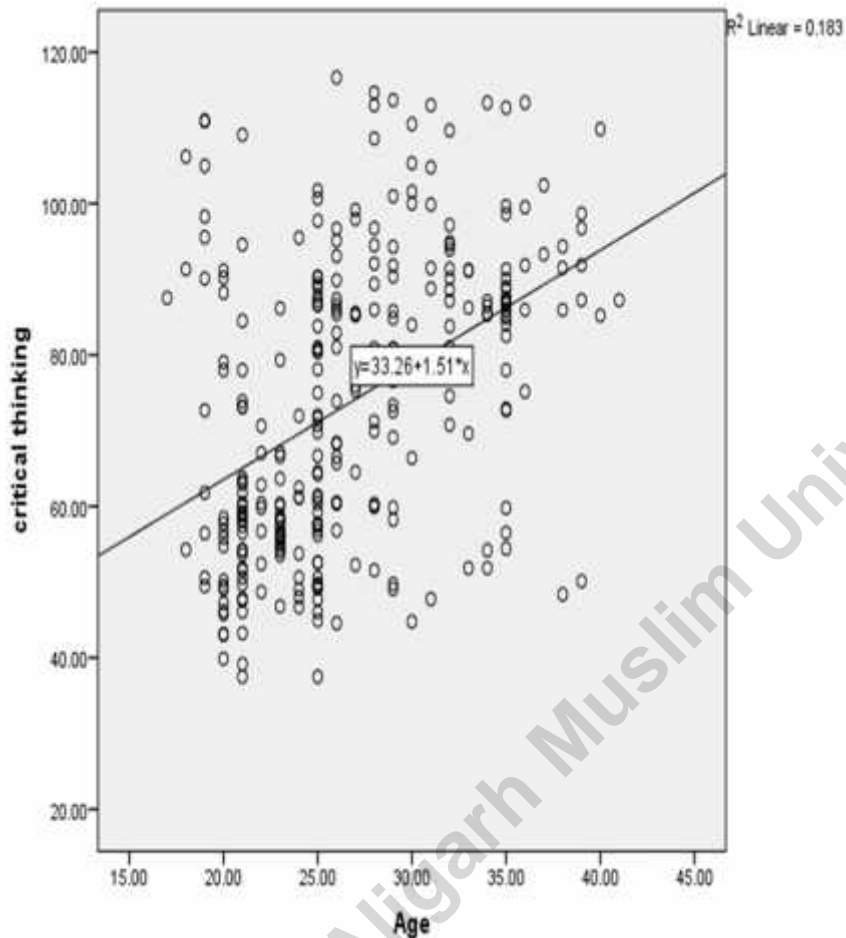
**Results of Correlation between learners' critical thinking, and their age**

	<b>Analysis</b>	<b>Inference</b>	<b>Evaluation</b>	<b>Inductive</b>	<b>Deductive</b>	<b>Total CT</b>
<b>Age</b>	.55**	.42**	.53**	.30**	.12*	.42**

\*\*Correlation is significant at the level of 0.01

\*\*Correlation is significant at the level of 0.01





**Figure 4.74 (in thesis) Scatter Plot of Relationship between age and total critical thinking**

5. According to results of fifth research question, among five sub-factors of personality trait, two of them has positive significant relationship with age: agreeableness and Conscientiousness. However, there is negative relationship between learners' age and neuroticism. In addition, it was found that there is not any significant relationship between Extroversion, Openness to Experience, and age of the learners. Following table is related to this finding:

**Table 4.90 (in thesis)  
Results of Correlation between learners' personality trait and their age**

	<b>Ex.</b>	<b>Ag.</b>	<b>Con.</b>	<b>Neu.</b>	<b>OP.</b>
<b>Age</b>	.08	.11*	.40**	-.34**	.05

\*\*Correlation is significant at the level of 0.01

\*\*Correlation is significant at the level of 0.01

6. Results showed that the mean score of the females was higher than the males in the Critical Thinking questionnaire. Results demonstrated that there was a significant difference between gender and total critical thinking. However, the

results indicated that there is not any significant difference between gender and Deductive reasoning. This finding answers the sixth research question. Following tables and figure are related to this finding:

**Table 4.91 (in thesis)**

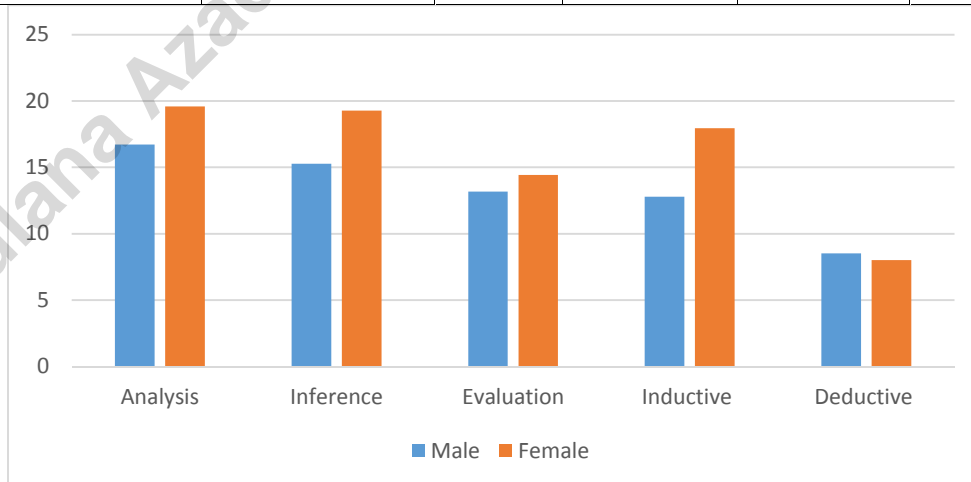
**Descriptive Statistics of Males and Females' Scores in critical thinking**

	Gender	N	Mean	SD
Analysis	Female	167	19.58	7.38
	Male	133	16.71	6.63
Inference	Female	167	19.28	8.36
	Male	133	15.28	8.42
Evaluation	Female	167	14.44	3.10
	Male	133	13.18	2.98
Inductive reasoning	Female	167	17.95	4.89
	Male	133	12.78	3.81
Deductive reasoning	Female	167	8.03	2.53
	Male	133	8.53	2.00
Total Critical Thinking	Female	167	79.30	18.61
	Male	133	66.50	17.74

**Table 4.92 (in thesis)**

**Results of the Independent-Samples T-Test between Male and Female Regards to in Critical Thinking**

	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Analysis	3.491	298	.001	2.86	.82
Inference	4.096	298	.000	3.99	.97
Evaluation	3.552	298	.000	1.25	.35
Inductive reasoning	10.008	298	.000	5.17	.51
Deductive reasoning	-1.829	298	.068	-.49	.26
Total CT	6.041	298	.000	12.80	2.1



**Figure 4.75 (in thesis) Differences in Learners' Critical Thinking in Terms of Genders**

7. In response to the seventh research question, results indicated that the mean score of the females was higher than the males in Extroversion, Conscientiousness, and Openness. However, the mean score of the males was higher than the females in Agreeableness and Neuroticism. As indicated by analyses, there were significant differences between gender and all five personality traits. Following tables and figure are related to this finding:

**Table 4.93 (in thesis)**

**Descriptive Statistics of Males and Females' Scores in personality trait**

	<b>Gender</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>
<b>Extroversion</b>	female	167	32.5172	6.74687
	male	133	29.1231	6.04984
<b>Agreeableness</b>	female	167	24.1317	7.22241
	male	133	26.7368	5.56762
<b>Conscientiousness</b>	female	167	24.6419	8.57960
	male	133	21.1368	6.91434
<b>Neuroticism</b>	female	167	23.3234	9.10201
	male	133	25.6692	8.87943
<b>Openness</b>	female	167	22.3506	9.12173
	male	133	18.6433	9.31807

**Table 4.94 (in thesis)**

**Results of the Independent-Samples T-Test between Male and Female Regards to in Critical Thinking**

	<b>t</b>	<b>Df</b>	<b>Sig. (2-tailed)</b>	<b>Mean Difference</b>	<b>Std. Error Difference</b>
Extroversion	4.530	298	.000	3.39410	.74931
Agreeableness	-3.427	298	.001	-2.60511	.76022
Conscientiousness	3.825	298	.000	3.50507	.91644
Neuroticism	-2.242	298	.026	-2.34582	1.04645
Openness	3.464	298	.001	3.70736	1.07028

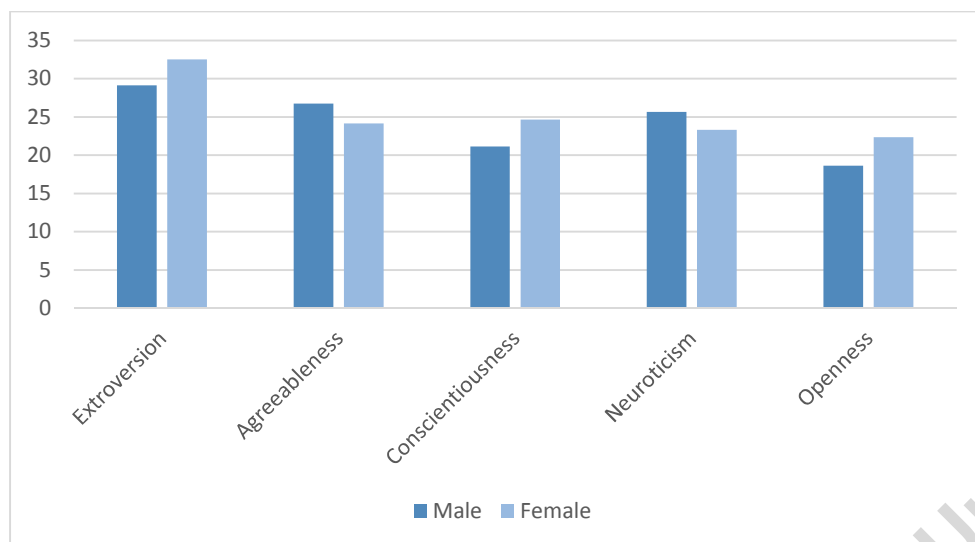


Figure 4.76 (in thesis) Differences in Learners' Personality trait in Terms of Genders

Besides the above findings relating to seven research question, the research could identify some additional findings, which are listed below:

1. Most of the foreigner students who participated in this study are Extroverts and there is a significant relationship between Extroversion and writing.
2. The researcher could draw the model of the relationship among EFL learners' personality traits and their writing score. This model indicates the relationship between personality traits sub-factors and their writing score completely.
3. The researcher could draw the model of the relationship among EFL learners' critical thinking and their writing score. This model indicates the relationship between critical thinking sub-factors and their writing score completely.

## 7. Outline and Organization of the Study

This thesis organized into the following five chapters:

### Chapter 1: Statement of Intent

This section provides background and rational, key words, aim and objectives, research question and such other aspects pertaining to the topic.

### Chapter 2: Review of Literature:

This chapter included an overview of literature available on personality traits, CT and writing.

### **Chapter 3: Personality Traits, Critical Thinking And Writing: A Theoretical Overview**

This chapter discussed theoretical overview on Personality Traits, CT and writing. It is organized into three major parts: 1) Personality Traits, 2) CT, and 3) Writing. The first part contains definitions of personality traits, its measurement and big five personality traits scales, the second part included definitions of CT and background of CT and finally in third part of this chapter theoretical overview on writing discussed.

### **Chapter 4: Relationship between Personality Traits, CT and Writing of EFL Learners: A Case Study at AMU**

This chapter discussed the design of the study, data collection process, data analysis and interpret. Furthermore, in this chapter the sample size, participants, setting along with the tests or questionnaires employed in the study was discussed. Finally in this chapter the results of the data analysis obtained through some statistical procedures was discussed.

### **Chapter 5: Conclusion, Limitation, Suggestion, Recommendation and Implication**

This chapter provided conclusions, discusses the results and analyzes the findings. In addition, implications and applications of the research in educational contexts as well as new insights into areas where further research can be carried out, explained.

## **8. Conclusion**

Critical thinking is that mode of thinking - about any subject, content, or problem - in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them. It has attracted considerable attention among researchers. Recent study discussed the relationship between critical thinking and personality trait on Writing of EFL learners at Aligarh Muslim University. This study can be concluded as follow:

In chapter one the researcher presented an outline of the current study. In first part of chapter researcher discussed background and rational, definition of key terms. Then in other parts of the chapter, researcher discusses statement of the problem, research methodology and significant scope of study.

In chapter two researcher explored the literature on personality traits, CT and writing extensively on sites like Elsevier, Science Direct, UGC approved journals of India, Master list journals and some sites which are only for thesis and dissertation like ProQuest and Shodhganga, but got no article/ research directly related to the topic of relationship between personality traits and critical thinking on writing. There were no study exactly related to current topic, but there were studies related to personality big five factors and critical thinking and different aspects of learning, which researcher discussed in second chapter.

In the light of chapter three and four it can be said that Personality Trait and Critical Thinking and writing are directly proportionate. The conclusion of recent study shows that EFL learners at Aligarh Muslim University have high personality traits and critical thinking, which can significantly predict students' writing and performances. It was also indicated that personality and critical thinking can predict writing skill. Among the personality trait factors, results revealed that 'Openness to Experience' is the most effective factor on students' writing achievements. Moreover, based on the present study, four factors of personality traits are positively in relationship with writing of students and the 'Neuroticism' is the only one which had negative relationship. According to findings among the CT factors, results indicated that 'Inference' is the most effective factor on the students' writing achievements. On other hand 'gender' and 'age' of learners had a significant correlation with their CT ability and personality traits.

Finally According to the statistical analysis, students who are higher in CT ability are better in writing and those students who have higher personality traits in four factors are also better writer.

## **9. Implication**

### **9.1 Theoretical Implication**

The researcher investigated the relationship between personality traits, critical thinking on writing of EFL learners. It was found that the effect of critical thinking and personality traits are useful and relevant on writing. This study make research richer and theories gets stronger and people get better perspectives toward theories.

Once we have persuaded most of our students that much of their thinking — left to itself — are flawed and that they, like all of us, are capable of improving as thinkers,

we must teach in such a way as to help them to see that we all need to regularly practice good thinking to become good thinkers. Here we can use sporting analogies and analogies from other skill areas. Most students already know that you can get good in a sport only if you regularly practice. We must not only look for opportunities to encourage them to think well, we must help them to begin to understand what it is to develop good habit of thinking.

What do we need to do regularly in order to read well? What must we do regularly and habitually if we are to listen well? What must we do regularly and habitually if we are to write well? What must we do regularly and habitually if we are to learn well? We must recognize that students are not only creatures of habit, but like the rest of us, they are largely unaware of the habits they are developing. They are largely unaware of what it is to develop good habits (in general), let alone good habits of thinking. If our students are truly “beginning” thinkers, they will be receptive to the importance of developing sound habits of thought. We must emphasize the importance of beginning to take charge of the parts of thinking and applying intellectual standards to thinking. We must teach students to begin to recognize their native egocentrism when it is operating in their thinking.

## **9.2 Pedagogical Implications**

The first implication of this study is for EFL teachers. The results of the present study might give insight to EFL teachers so as to make them aware of the higher order thinking skills and personality traits required in second or foreign language learning context. They can help EFL students to develop CT skills.

The second implication would be directed to the syllabus designers and materials developers who may benefit from the findings of the study and develop a better understanding of the role of CT skills and personality traits in language instruction and provide materials which incorporate critical thinking skills among both teachers and their students. Providing teachers’ guide books with the necessary higher-order thinking skills.

Moreover, critical thinking skills can be incorporated in teacher training courses in order to make them aware of different techniques through which CT skills might be taught and practiced in the language classrooms. It may provide some suggestions for in-service training and improving the quality of teaching for teachers.

According to the results of the research, students with high critical thinking and personality traits are successful in writing. For this study policy makers and syllables designers should encourage aspects of personality trait and critical thinking that have more effects on writing.

Based on the findings of this study one way reinforce the belief that instructional interventions are generally effective in fostering students' critical thinking skills, as supported by numerous studies. This is encouraging for educators searching for effective ways to promote this higher order thinking ability.

### **10. Limitation of the Study**

Despite the potential contribution of the present study, the researcher has to acknowledge some limitations inherent in this research. Although, every attempt was made to avoid some of the design, measurement and analytical flaws, there were some limitation which need to be taken into account in future researches.

1. As with most of the research studies conducted under purposive sampling, the validity of the study is questionable and thus caution must be taken in generalizing the finding to other learning context.
2. The current study is probably the first study conducted that studies the Relationship between Personality Traits, CT on writing EFL Learners and lack of prior research studies on topic was one of the main problems.
3. Because present study focused on EFL learners, one of limitation was their lack of fluency in English speaking.
4. One of other main problem of present study having access to participants and organization of them for filling the questionnaire was difficult.
5. The outcome of present study may not be generalized to other places.
6. Lack of information and researchers knowledge may affect the production and may leads to wrong conclusion.
7. Only AMU EFL learners are selected and this may not be a true representative.

### **11. Suggestion for Further Studies**

Finally, these results suggest that EFL learners of Aligarh Muslim University have high personality traits and critical ability, which can significantly predict students' reading comprehension and performances. It was also indicated that some aspects of



personality traits and some aspects of CT are more effective on writing skills. Also the finding of this study suggests that the effect of critical thinking and personality traits are important on writing. Further research is needed to measure critical thinking and personality traits correlation in other skills like, listening and speaking in other context like Indian ESL learners that it can encompass a huge population of the study. Also Measuring the effect of personality traits and critical thinking on speaking or listening can contribute a lot to the field.

Maulana Azad Library, Aligarh Muslim University

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