

**RELATIONSHIP OF STUDENTS' PERSONALITY TRAITS AND
ACADEMIC SELF REGULATION SKILLS AT COLLEGE LEVEL**

BY

Nida Rahman



NATIONAL UNIVERSITY OF MODERN LANGUAGES

ISLAMABAD

JANUARY, 2023

**RELATIONSHIP OF STUDENTS' PERSONALITY TRAITS AND
ACADEMIC SELFREGULATION SKILLS AT COLLEGE LEVEL**

By

Nida Rahman

B.ED Hons, University of Malakand Dir Lower, 2018

A THESIS SUBMITTED IN PARTIAL
FULFILMENT OF THE REQUIREMENTS FOR
THE DEGREE OF

MASTER OF PHILOSOPHY

In Education

To

DEPARTMENT OF EDUCATIONAL SCIENCE
FACULTY OF SOCIAL SCIENCES



NATIONAL UNIVERSITY OF MODERN LANGUAGES,
ISLAMABAD

□ Nida Rahman, 2023



NATIONAL UNIVERSITY OF MODERN LANGUAGES

FACULTY OF SOCIAL SCIENCES

THESIS/DISSERTATION AND DEFENSE APPROVAL FORM

The undersigned certify that they have read the following thesis, examined the defense, are satisfied with the overall exam performance and recommend the thesis to the Faculty of Social Sciences for acceptance:

Thesis Title: Relationship of Students' Personality Traits and Academic Self-Regulation Skills at College Level

Submitted By: Nida Rahman
Name of Student

Registration #: 1788/MPhil/Edu/F-19

MASTER OF PHILOSOPHY

Degree Name in full

EDUCATION

Name of Discipline

Dr. Farkhanda Tabassum

Name of Research Supervisor

Signature of Research Supervisor

Prof. Dr Khalid Sultan

Name of Dean (FSS)

Signature of Dean (FSS)

Prof. Dr. Aamir Ijaz

Name of Pro Rector (Academics)

Signature of Pro Rector (Academics)

Date

AUTHOR'S DECLARATION

I Nida Rahman

Daughter of Saif Ur Rahman

Registration # 1788-MPhil/Edu/F-19

Discipline Education

Candidate of **Master of Philosophy** at the National University of Modern Languages do hereby declare that the thesis **“Relationship of Students’ Personality Traits and Academic Self-Regulation Skills at College Level”** submitted by me in partial fulfillment of MPhil degree, is my original work, and has not been submitted or published earlier. I also solemnly declare that it shall not, in future, be submitted by me for obtaining any other degree from this or any other university or institution.

I also understand that if evidence of plagiarism is found in my thesis/dissertation at any stage, even after the award of a degree, the work may be cancelled, and the degree revoked.

Signature

Date

Nida Rahman

Name

ABSTRACT

Title: Relationship of Students' Personality Traits and Academic Self-Regulation Skills at College Level

The study aimed to determine relationship between students' personality traits and academic self-regulation skills at college level. The major objectives of the study were : to assess the level of big five personality traits (openness, conscientiousness, extroversion, agreeableness, and neuroticism) and academic self-regulation skills (self-planning, self-monitoring, self-control, self-evaluation and self-reaction) of college level students, to determine the relationship between students' personality traits and academic self-regulations skills, to compare personality traits and academic self-regulation skills of college level students. Two theories were used as a theoretical framework of the study; big five personality traits by costa and mccare in 1992 and, academic self-regulation skills by Zimmerman in 2010. This was a quantitative descriptive correlational study. The population of the study was all the college level students (4699) of district Dir lower KP. 510 college level students were sample of the study. Data were collected from 10 colleges, which included five male and five female colleges. Simple random sampling technique was used as sampling technique. Two close ended questionnaires were adapted to use as data collection tools. Mean, independent sample t test and regression statistical test were applied to analyze the data. The results showed significant relationship between student's personality traits academic self-regulation skills. The result showed that there is significant difference between personality traits of male and female students at college level. Student's personality traits and academic Self- regulation skills have shown positive and significant correlation. Curriculum may be more social and academic activity embedded to enhance student's personality traits and academic Self-regulation skills as these two variables have significant correlation. College administration may develop inductive programs like exhibitions, funfairs, debates, sports, educational trips etc., to help students for improvement of their extroversion and openness to experience. Female students may be provided the opportunities for exposure to social world in order to enrich their personality traits through sports, social work, study and excursion trips etc.

TABLE OF CONTENTS

Chapter	Page
THESIS AND DEFENSE APPROVAL FORM.....	iii
AUTHOR’S DECLARATION.....	iv
ABSTRACT.....	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES.....	ix
LIST OF FIGURES.....	xii
LIST OF ABBREVIATION.....	xiii
ACKNOWLEDGEMENTS.....	xiv
DEDICATION.....	xv
1. INTRODUCTION	
1.1 Background of the study.....	1
1.2 Rationale of the Study.....	4
1.3 Statement of the Problem.....	6
1.4 Objectives of the Study.....	6
1.5 Hypotheses of the Study.....	7
1.6 Significance of the Study.....	7
1.7 Theoretical Framework.....	9
1.8 Delimitation of the Study.....	11
1.9 Operational Definitions.....	11
1.10 Methodology of the Study.....	13

2. REVIEW OF THE RELATED LITERATURE

2.1	Introduction.....	17
2.2	Personality.....	20
2.3	Models of personality.....	22
2.3.1	Big Five Personality Traits.....	21
2.3.2	Eysenck’s Theory of Personality.....	30
2.3.3	Gordon Allport’s Personality Trait Theory.....	33
2.4	Self-Regulation.....	34
2.5	Academic Self-Regulation	36
2.6	Models of Self-Regulation.....	38
2.7	Self-Regulated Learning Stages.....	41
2.8	Cyclic Phase Model.....	42
2.9	Related studies with Self-Regulated Learning.....	50
2.10	Literature in Pakistan.....	50
2.11	Interconnection between personality traits and students self-regulation skills.....	51
2.13	Overview of Research Variables	52
2.14	Chapter Summary.....	55

3. RESEARCH METHODOLOGY

3.1	Research Methodology.....	56
3.2	Research Approach	56
3.3	Research Design	56
3.4	Population of The Study.....	57
3.5	Sample of The Study.....	57
3.6	Sampling Technique.....	58
3.7	Sample Size	58
3.8	Instrumentation.....	58

3.9	Validity of The Tool.....	60
3.10	Pilot Testing.....	61
3.11	Reliability of The Tool.....	61
3.12	Data Collection Procedure.....	67
3.13	Data Analysis.....	67
3.14	Research Ethics	69

4. DATA ANALYSIS AND INTERPRETATION

4.1	Introduction.....	70
4.2	Descriptive Analysis and Interpretation.....	71
4.3	Inferential Data Analysis and Interpretation.....	75
4.4	Chapter Summary.....	85

5. SUMMARY, FINDINGS, RESULTS DISCUSSION CONCLUSIONS AND RECOMMEDATIONS

5.1	Summary.....	86
5.2	Findings.....	87
5.3	Discussion.....	91
5.4	Conclusions.....	94
5.6	Recommendations.....	95
5.7	Limitation of the study.....	98

REFERENCES.....	100
------------------------	------------

APPENDECIES.....	i
-------------------------	----------

LIST OF TABLES

Table	Title	Page No.
Table 1.1	Population of the study	14
Table 1.2	Sample of the study	14
Table 3.1	Population of the study	57
Table 3.2	Sample of the study	57
Table 3.3	Detail of Sample size	57
Table 3.4	Details of BFFS	59
Table 3.5	Details of ASRSS	59
Table 3.6	Experts suggestions on tool during validation	60
Table 3.7	Cronbach of Reliability of BFFS	61
Table 3.8	Cronbach of Reliability of ASRSS	62
Table3.9	Cornbach's Alpha coefficient of constructs of Big five Factor scale	62
Table3.10	Cornbach's Alpha of coefficient constructs of Academic self-regulation skills scale	63
Table3.11	Inter scale correlation of constructs of Big Factor scale	63
Table3.12	Inter scale correlation of (ASRSS)academics elf- regulation skills scale	64
Table3.13	Intersection correlation between Big Five Factor scale and Academic Self- regulation Skills Scale	65
Table3.14	Item correlation of BFFS and ASRSS Item Correlation	66
Table 3.15	Details of research objectives, hypothesis and statistical tests	68
Table 4.1	Demographic sample data of college of male and female students	71
Table 4.2	Demographic sample data of college students with respect to age	72
Table 4.3	Program wise demographic of sample data college students	73
Table 4.4	Locality wise demographic of sample data college students (N=510)	74
Table 4.5	Level of personality traits (openness, conscientiousness, extroversion, agreeableness and neuroticism) in college level students (N=510).	75
Table 4.6	Level of Academic Self-Regulation Skills in college level	76

students

Table 4.7	Correlation of Personality traits and academic self-regulation skills of college level students	77
Table 4.8	Relationship between student's personality traits and academic self-regulation skills of college level students	77
Table 4.9	Correlation of openness to experience and academic self-regulation skills at college level students	79
Table 4.10	Relationship of students' openness to experience and academic self-regulation skills at college level	78
Table 4.11	Correlation of openness to conscientiousness self-regulation skills at college level students	80
Table 4.12	Relationship of students' conscientiousness and academic self-regulation skills at college level	80
Table 4.13	Correlation of students' extroversion and academic self-regulation skills at college level students	81
Table 4.14	Relationship of students' extroversion openness to experience and academic self-regulation skills at college level	82
Table 4.15	Correlation of openness to agreeableness and self-regulation skills at college level students	82
Table 4.16	Relationship of students' agreeableness and academic self-regulation skills at college level	82
Table 4.17	Correlation of students' neuroticism and academic self-regulation skills at college level students	83
Table 4.18	Relationship of students' neuroticism and academic self-regulation skills at college level	83
Table 4.19	Gender wise comparison of students personality trait at college level	84
Table 4.20	Gender wise comparison of students' Academic Self-regulation	84

	skills male and female students	
Table 5.1	Alignment of objective, finding, conclusion and recommendation	96

LIST OF FIGURES

Sr. No	Title	Page No.
Figure1:	Theoretical Framework	09
Figure 2.1:	Big Five Peronality Traits	22
Figure 2.2:	Eysenk's Theory of Personality	32
Figure 2.3:	Gordon Allport's Personality Trait Theory	33
Figure 2.4:	Triadic Model of Self-Regulated Learning	38
Figure 2.5:	Current Version of Cyclic Model	45
Figure 3.1:	Research Design	57
Figure 4.1.:	Gender Based Division of Respondents	71
Figure 4.2:	Program Wise Division of Respondents	72
Figure 4.3:	Program Wise Division of Respondents	73
Figure 4.4:	Locality Based Division of Respondents	74
Figure 4.5:	Graphical Representation of Regression	78

LIST OF ABBREVIATION

ASRS	Academic Self-regulation Skills
BFFT	Big Five Factor Theory
CANOE	Conscientiousness, Agreeableness, Neuroticism, Openness and Extroversion
PEN	Psychotism Extroversion Neuroticism
SRL	Self-Regulated Learning

ACKNOWLEDGEMENTS

My research work could never be completed without scholarly guidance, moral support and intellectual assistance of my supervisor Dr. Farkhanda Tabassum, whose inspiring guidance, scholarly advice, and constant encouragement have contributed much in the completion of this study. I enjoyed working with her as I witnessed an unselfish attitude towards the work, and every moment of our interaction has been a process of tremendous learning experience.

I am extremely thankful to my respectable teachers dr. Saira Nudrat, Shazia Zameer, Dr. Asghar Ali, Dr Iqbal Amin, and Dr. Iqbal A. Shahnavi for their timely help, guidance and appreciated suggestions regarding tool validation.

I acknowledge the love and affection to my dearest Friends Haleema Batool, Shah Hussain, Naznin Khan, Sunbal khan who helped me throughout my research journey, .I am thankful to all those whose work I benefited directly or indirectly to complete this study.

I offer my sincerest thanks from the core of my heart to my loving Father Saif ur Rahman and mother Wahida Bagum whose heartily support and prayers brought ever success in my life. I am also thankful to my brothers for their assistance in data the collection process. I could not have completed this study without the favor of all these people. I am humbled, and grateful to each of them. Thank you all.

NIDA RAHMAN

DEDICATION

Dedicated to

My loving Parents

Saif ur Rahman & Wahida Bagum

My Dear Brothers

Sangeen Khan

& Haamid Khan

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Personality is a distinct and relatively permanent way of thinking, feeling, and acting that defines a person's reaction to a situation. When talking about personality, we mean why a person behaves in a particular way. A very abstract concept, personality has always been one of the main concerns of psychologists in classifying people based on their behavior. It is the most important way in which individuals differ in their enduring emotional, interpersonal, experiential, attitudinal, and motivational styles and is influenced by relatively stable characteristics.

Term personality trait is defined as a person's characteristics of feelings, thoughts and behaviour. Personality refers to one's consistent pattern of feelings, thinking and behaviour (Abdood, 2020). Traits refer to long lasting or durable characteristics that influence and have impact on individual's conduct or behavior in life. Personality traits is characterized in terms of traits or characteristics such as introverts, extroversion, helpfulness, openness, honesty, consciousness, friendliness, and these traits are the characteristics that explain consistencies in behaviours. These personality traits show individual's characteristics, patterns of thoughts, behaviour, emotions and feelings (Stangor & Walinga, 2014).

According to Psychologists there are five fundamental dimensions or traits of human personality (Cherry, 2020). Big five factor model or theory is another name of the of the personality trait theory. Currently these big five personality traits are the generally recognized theory of personality in scientific community. It is generally accepted to be the most scientifically sound and valid method of conceptualizing differences between individuals. The name given to this model is because the model proposes five major dimensions through which human personality can be measured. Each trait or dimension is all different, distinct and independent from one another. Acronyms CANOE and OCEAN are generally used for big five traits of personality. Acronym CANOE stands for

conscientiousness, agreeableness, neuroticism, and openness to experience, and extroversion (Stangor & Walinga, 2014).

Conscientiousness is a trait of personality which refers to act dutifully, punctual, self-discipline, responsible, strives to achieve their set goals. Individual who has this trait of personality are good in planning, they have performance for planning than spontaneous behavior. Agreeableness is dimension of personality that refers to the tendency to be cooperative, compassionate rather than antagonistic and suspicious towards other, people who have this trait of personality have general concern for social harmony and reflect individual difference, they the value of getting along with each other. These people are usually friendly, kind, supportive, willing, generous and cooperative. They are compromising their own interest for the sake of others. Personality trait neuroticism refers to experience emotional instability and negative emotions, such as depression, anger, anxiety and impatience. Individual who scores high in neuroticism feel ordinary situation as threatening and slight frustrations as desperately tough. These people might have trouble coping effectively, thinking clearly. Neurotic people usually make decisions with stress.

Openness to experience is a personality trait, people who have general appreciation for emotion, act, imagination, curiosity, adventure, new or unique ideas and different experience. Those people usually appreciate unconventional, distinctive and unique decoration in their home. People who have this trait of personality usually have a large number of books with varieties on different topics. Their music library has verity of music collection and work of art in display. Extraversion is personality trait of big five personality model refers to the capacity to anticipate (positive) emotion, and look for ways to stimulate being social and enjoy, seek happiness in others' company. People who have this trait of personality are usually talkative, they enjoy being with people, bring attention to themselves, and assert themselves. They want to be the center of the show, enjoy parties and social gatherings/activities (Stangor & Walinga, 2014).

In educational literature the term Self-regulation was first appeared in 1960s. Self-regulation refers to one's collective actions to accomplish set/desired goal. According to Hoyle (2006) Self-regulation is defined as the process through which individual control his/her feelings, thoughts, and behaviour. Self-regulated people can effectively manage their social surroundings and their own perceptions. Self-regulated people are consistent in their standards of behaviour and goal. According to Commissiong

(2020), self- regulation refers to student's metacognitive, behavioural and motivational competencies to academic performance and success. Self- regulation is (active process) in accordance with which students constantly manage and organise their emotions, feelings, thoughts, behaviour and surroundings in order to accomplish set ends/goals (Ramdas & Zimmerman, 2011).

According to Hoyle (2006) self- regulation is very important to adaptive functioning to all fields of life. Individuals who are not self- regulated face many problems in life, those who are not self- regulated are unable to control their social and personal experience; do not come up with the accomplishment of important set goals. Students who are self- regulated are proactive and they manage their time wisely, develop life skills (Reshman, 2018). In educational context the term self- regulation refers to self-generated feeling, actions, emotions and thoughts systematically adopted and planned as needed to affect students' motivation and learning.

Self- regulation is a process which consists of processes such as goal setting concentrating on and attending to instruction, using of effective and new strategies to code, organise, classify and rehears data to be remembered, using resources effectively, creating productive work environment, managing time effectively, looking for help when necessary, monitoring work performance, the value of learning, holding positive beliefs on one's abilities, indicators affecting the anticipated outcomes of learning and self-satisfaction of on's own efforts (Reshman, 2018).

Self- regulation refers to the degree learners are active in their learning motivationally, metacognitively and behaviourally. Self- regulated-learning (SRL) was first appeared in 1980s. SRL is used to explain students' self- regulated behaviour to achieve academic goal (Dinsmore, Alexander, & Loughlin, 2008). Learner might self-regulate different dimension of their learning such as their rationale for studying, performance outcome they strive for methods they use and environment and resource they use to achieve their goals.

It has been observed that students differ significantly and have distinct behavioural patterns that help to explain their individual identity. Personality traits of students are vital avenues to help students take ownership of their own learning. Having knowledge of students' personality traits is a preliminary and important step to identify the kind of self-regulation skills that will be appropriate for students.

1.2 Rationale of the Study

Students at college level are required to control and monitor their thoughts and actions, activities, and to manage, organise the stuff or material they are learning (importance of self- regulation at college level) so this study was an attempt to guide students to monitor and improve their academic performance.

Literature showed that self- regulated learning is connected and related with personality traits and need to be explored (Bidjerano, & Dai, 2007). For most students, college learning is described by self- directed learning circumstances and they are facing new unfamiliar learning environment. According to Lin & Huang, (2013) students dropout rate are increasing and the phenomena of college dropout underline the importance of self- regulation skills for dealing with such autonomous learning contexts. While personality traits and students' learning abilities appear to be linked, few studies have examined personality traits and relationship within a theoretically grounded SRL framework to date.

According to Ghyasi *et.al.*, (2013), students differ significantly and have distinct behavioural patterns that help to explain their individual identity. Personality type influenced the self-regulated skills that students adopted. Students with personality traits such as conscientiousness, extraversion, and agreeableness are likely to be actively engaged in the classroom, which is an important element for students' success. The current study will find the relationship of students' personality traits and academic self-regulation skills.

Under graduate students are able to manage their academic self- regulation; they are able to regulate their selves. They their goals and they manage their behavior to achieve set or desired goals Research study found that students have positive self-regulation; they plan for their academic goals, self- evaluated, evaluate their weaknesses and strengths. Students use self- planning skill to achieve their goals (Jamiris and Hartati, 2017).

Under graduate students are able to manage their academic self- regulation; they are able to regulate their selves. Undergraduate students plan their goals and they manage their behavior to achieve set or desired goals (McLellan & Jackson, 2016).

Personality formation is a central factor of the educational mandate which accounts for considering students' personality in teaching and research. Personality

research in school showed a pervasive influence of personality traits on student outcomes such as students' wellbeing, emotional states or academic performance (Kirch *et al.*, 2019). Students' personality plays a significant role in shaping their educational experiences (Matthews *et al.*, 2006).

Research studies have been carried out on variables self- regulation and personality traits at any level, despite this study there is still a gap in literature concerning the relationship between personality traits and academic self- regulation skills at college level, and this study was an attempt to specifically fill that gap in literature.

According to Lin and Huang, (2013) students' personality problems are increasing and this phenomena underline the importance of self- regulation skills for dealing with autonomous learning contexts. So both are interlinked for their academic and personality development

Overacker, (2018) stated that self regulation has great importance for learners because classes are more demanding and have less supervision at college level than in secondary education. Under graduate students set their goals and they manage their behavior to achieve desired goals. They plan their academic goals and evaluate their weaknesses and strengths through self-regulation skills according to their personality perspectives (Jamiris and Hartati, 2017).

The main purpose of attending a college is to prepare students for real life. At the college level, self-regulation is even more important as classes are both more demanding and have less supervision than in secondary education (Overacker, 2018). Many students enter college without a good understanding of how to learn effectively, and how to build good personality traits, and continuing in that way may affect their mindset towards college-level classes and lead them to feel discouraged. The present research study was an attempt to determine the relationship of students' personality traits and academic self-regulation skills at college level at district Dir, khyber Pakhtunkhwa (KP).

Research work in the district Dir, khyber Pakhtunkhwa and on the selected topic under study is very few. Students at college level have already developed Self- regulation skills relevant to their personality traits needs to be explored in district Dir, khyber Pakhtunkhwa.

1.3 Statement of the Problem

Understanding who you are, personalizing your learning, and making efforts to be engaged academically are important ingredients for the educational success of college students. Personality traits affect students' self-regulation and the routine success or failure they experience. Many students enter college without a good understanding of how to learn effectively. Promoting self-regulated learning among learners and letting them take responsibility of their own learning by taking advantage of self-regulation skills is a key factor in learning situations and later in life. It is imperative for students to learn academic self regulation skills related to their personality traits which is a key factor in learning situations and later in life. Hence, the respective study is designed to determine the relationship between students' personality traits and academic self regulation skills at college level at Khyber Pakhtunkhwah.

1.4 Objective of the Study

Objective of this study were:

1. To assess the level of big five personality traits (openness to experience, conscientiousness, agreeableness, extraversion and neuroticism) of college level students
2. To assess the level of academic self- regulation skills (self- planning, self- monitoring, self- control, self- evaluation and self- reaction) of college level students
3. To determine the relationship between personality traits and academic self- regulation skills of college students
 - 3a. To determine relationship of openness to experience and academic self- regulation skills of college students
 - 3b. To determine relationship of conscientiousness and academic self- regulation skills of college students
 - 3c. To determine relationship of extroversion and academic self- regulation skills of college students
 - 3d. To determine relationship of agreeableness and academic self- regulation of college students
 - 3e. To determine relationship of neuroticism and academic self- regulation skills of college students

4. To compare personality traits and academic self- regulation skills of male and female students at college level.

1.5 Hypotheses of the Study

HO₁: There is no statistical significant relationship between student's personality traits and academic self- regulation skills.

HO_{1a}: There is no statistical significant relationship between student's openness to experience and academic self- regulation skills at college level.

HO_{1b}: There is no statistical significant relationship between students' conscientiousness and academic self- regulation skills at college level.

HO_{1c}: There is no statistical significant relationship between students' extroversion and academic self- regulation skills at college level.

HO_{1d}: There is no statistical significant relationship between students' agreeableness and academic self- regulation skills (self- planning, self- monitoring, self- control, self- evaluation and self- reaction) at college level.

HO_{1e}: There is no statistical significant relationship between students' neuroticism and academic self- regulation skills (self- planning, self- monitoring, self- control, self- evaluation and self- reaction) at college level.

HO₂: There is no significant difference between male and female students regarding personality traits.

HO₃: There is no significant difference between male and female students regarding academic self- regulation.

1.6 Significance of the Study

Self- regulation skills are very essential for students at any level however these skills are more essential and important for college level students and students of higher education because they are exposed to great deal of study material, activities and responsibilities in a short span of time. This study may be beneficial to all the stake holders, principal, teachers and parents. This study may also provide guidelines to curriculum planers to make such curriculum which enhance academic self- regulation. This study may provide guidance to students to enhance their academic self- regulation. Since students' self- regulation skills play a significant part in academic fields, the

findings of the study may be useful in creating educational and suggestive programs that consider academic self-regulation skills with comparable personality traits of students. Current research study contributes to educational psychology literature. Different research studies have been done on the relationship of personality traits and academic self-regulation skills at university level, but the current study will fill the gap by adding relationship of personality traits and academic self-regulation skills at college level.

Finding of current study is significant for college administration college administration may get the recommendation of the study to enhance their teaching learning process.

The findings of the current research study are significant for the curriculum planner. The recommendations of this study are beneficial for curriculum planners. They may get insight that how to improve academic self-regulation skills.

The current study is also beneficial for the curriculum planners. They can get awareness regarding personality traits of college level students.

This may be beneficial for all the teachers. This study may provide guidance to teachers arrange and incorporate activities in classroom that promote students Self-regulation skills.

The population of this study was college students, college students face pressure, stress because they have to complete more work in less time. This study may be helpful for students in a way to monitor their own ability, study and use different strategies to improve their learning.

1.7 Theoretical Framework

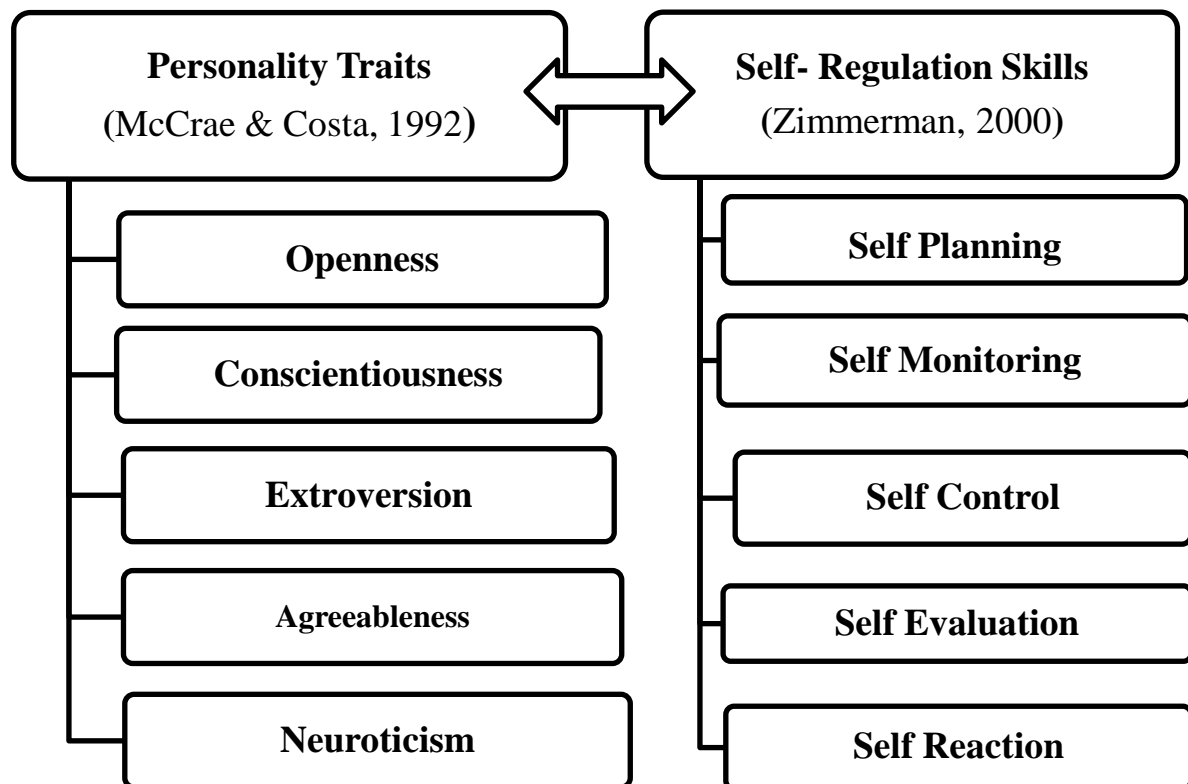


Fig: 1 Theoretical Framework

The current study was conducted to assess and determine the relationship of students' personality traits and academic self-regulation skills at college level. The theoretical framework was consisting of big five personality traits (FFT; McCrae & Costa, 1992) and Self-regulation skills.

1.7.1 Personality Traits

Big five personality traits is a personality theory which contains big five factors that are openness to experience, conscientiousness, extroversion, agreeableness and neuroticism.

Openness to Experience

Features of openness (also called intellect) are aesthetic sensitivity, awareness of one's emotions, vivid imagination, preference for novelty and variety and intellectual curiosity.

Conscientiousness

Individuals having this feature are efficient, consistent, organized, methodical, planned, neat, and reliable. They show self-discipline, act dutifully, and aim for achievement. They tend to set clear goals to direct their efforts and to exert greater effort.

Extroversion

It characterizes those individuals who are active, sociable, assertive, energetic, enthusiastic, outgoing, talkative, and have positive affect. Extraverts seek out stimulation and the company of others and engagement with the external world.

Agreeableness

Individuals who are forgiving, not critical or skeptical, considerate, kind, compassionate and trustful can be considered having agreeable behavior. Agreeable people also have an optimistic view of human nature and they believe people are basically honest, decent, and trustworthy.

Neuroticism

People high in neuroticism always feel inferior, worthless, helpless, tense, and anxious. It is a tendency to get nervous easily and feel vulnerable. This category is also referred to as emotional stability that is in opposite with neuroticism because those who score high on emotional stability are characterized as being self-confident and relaxed.

1.7.2 Self- Regulation Skills

Self- regulation cyclic phase model (Zimmerman, 2000) which entails of three phases; (forethought, performance and self- reflection) these three phases have further five self- regulation skills that are self- planning, self- monitoring, self- control, self- evaluation and Self- reaction.

Self- Planning

It refers to self- generated thoughts and actions systematically designed to set goals and plan action to achieve desired goals. Self- planning includes goal setting and self- motivation.

Self- Monitoring

It is defined as the deliberate attention to one's own behaviour. Students who are self- monitor are aware of and concern about ways other reacts to them. They actively change their behaviour to adjust to other reaction.

Self- Control

It refers to ability to manage over emotion, impulses, behavior to achieve desired goals. Self- evaluation refers to reflective thinking, when student think about their activities they compare their present performance to a standard.

Self- Reaction

It is defined as the ability to one's own reaction to his/her performance and strategies which one use for managing the result of reflective thinking.

1.8 Delimitation of the study

The current research study was delimited to:

1. Two close ended questionnaires were used for data collection tools to collect data from students.
2. The study was delimited to college (Intermediate) level only.
3. Ten colleges were included in this study, five male colleges and 5 female colleges according to researcher approach.

1.9 Operational Definitions

1.9.1 Personality Traits

Personality traits refers to one's enduring characteristics that influence individual behaviour, enduring characteristics refers to the set of personality pattern such as conscientiousness, openness, extroversion, agreeableness and neuroticism.

1.9.2 Openness to Experience

Openness to experience is a personality trait that is defined as the appreciation for adventures, emotions, actions, curiosity, imaginations, and variety of experience. Students who have openness to experience trait of personality are highly imaginative, open to experience, they have artistic creative mind, they like to read number of books and have unique collection of book in their library.

1.9.3 Conscientiousness

Conscientiousness is a personality trait which is defined as a person's ability to act obediently, self-discipline, dutifully and aim of achievement. Students who are conscientious prefer planning and spontaneous behaviour.

1.9.4 Extraversion

It is one of the personality traits which is defined as tendency to seek out stimulation and experience positive emotion and the company of others. Students who are extroverts are more outgoing, they take participation in debates, they like to attend parties and part of social gathering, they have more energy to expend in social settings.

1.9.5 Agreeableness

Dimension of personality which refers to the tendency to be cooperative, supportive and getting along. Students who have this trait of personality value getting along with others. These students are very friendly, cooperative, willing to compromise and help their fellows.

1.9.6 Neuroticism

Neuroticism is defined as to experience negative emotion like anger, depression anxiety, and emotional instability.

1.9.7 Self- Regulation

Self-regulation refers to self-generated thought, emotion, and feeling of students to achieve their goals. Students who are meta cognitively, behaviorally and motivationally active in achieving goals and in their learning process are called self-regulated students.

1.9.8 Self- Planning

Self-planning refers to students' self-generated thoughts and actions systematically designed to set plan to achieve desired goals. Self-planning includes goal setting and self-motivation.

1.9.9 Self- Monitoring

Self-Monitoring refers to students' tendency to regulate and monitor their emotions, self-presentation and behavior in response situation and social environment.

1.9.10 Self- Control

Self- control refers to students' ability to regulate their responses to avoid and resist undesirable/unwanted behavior and achieve their set goals.

1.9.11 Self- Evaluation

Self- evaluation is defined as students' ability to evaluate their decisions, strength, weaknesses, action and progress they have made.

1.9.12 Self- Reaction

Self- reaction is a self- regulation skill that refers to student's reaction to their own work (academic performance) planning and tactics which they use to manage and cope with the result of reflective thinking.

1.9.13 College Level

Intermediate level students who have completed their matriculation, students of first year and second year (intermediate level).

1.10 Methodology

The present study determines the relationship of student's personality traits and academic self- regulation skills of college level students at Khyber Pakhtunkhwa (KP). It was a quantitative study having correlational descriptive research design.

1.10.1 Approach

Approach of this study was quantitative. The data were analyzed by using data analysis software statistical package for social sciences (SPSS). The result of the study was in facts and figure.

1.10.2 Design

The design of the study was descriptive correlational study; step wise regression test was applied to find out relationship of students' personality traits and academic self-regulation skills.

1.10.3 Population of the Study

All college level students of District Dir (lower) khybar Pkhatunkhwa was the population of the study. All government male and female college students of district Dir was included in the population of the study. The list is attached in annexure

Table No 1.1

Population of the college level students at district Dir lower

District	Gender	No of Colleges	Total No students
Dir Lower	Male	7	
	Female	5	4699

1.10.4 Sample of the Study

10 government colleges at District Dir (KP) lower were taken as sample of the study. Five male and five female Public colleges were the sample of the study. List of names of Public colleges at District Dir. Lower is attached in Annexure.

Table No 1.2

Sample of college level students at district Dir lower

District	Gender	No of students	Sample of students	Total no of students
Dir Lower	Male	2700	300	
	Female	1,399	300	600

1.10.5 Sampling Technique

Simple random sampling technique was used as a technique for sampling of the study. This technique was chosen because the sample of this study was college level male

and female students. This technique (simple random sampling technique) is better to use to get the data, when the population size is greater.

1.10.6 Instrumentation

Two close ended questionnaires were used for data collection. Academic self-regulation Scale (ASRS) to measure students' academic self-regulation skills the researcher adapted five point likert scale Academic self-regulation skills scale (ASRS) developed by Akhtar and Mahmood, (2013). The scale consists of 31 Items. The author has granted permission to the researcher through email. Permission letter is attached in annexure.

1.10.7 BFFS (Big Five Factor Scale)

To measure personality traits the researcher adapted Big Five Factor Scale (BFSS), five point likert scales of DeYoung, Quilty, and Peterson, (2007). This scale consists of 50 items. Each construct has 10 items. The author has granted permission to the researcher via email. Permission letter is attached in annexure.

Big five factors scale contains five constructs (Openness to experience, conscientiousness, extraversion, agreeableness and neuroticism) and 50 items. Each construct has ten items.

Academic self-regulation skills scale consists of five constructs, 31 statements. Self-planning has nine statements, self-monitoring has six statements, Self-control has five statements, self-evaluation has five statements and self-reaction has six statements.

1.10.8 Data Collection

Data was collected by personal administration of the questionnaires. To collect the data two close ended questionnaires were used as a data collection tool. Academic Self-regulation Skills Scale (ASRSS) was used to measure academic self-regulation skills of students and Big Five Factor Scale (BFFS) was used to measure personality traits of students.

11.10.9 Data analysis

Statistical package for social sciences (SPSS) was used to analyse the data. Mean score was applied to assess the level of student's personality traits and academic self-regulation skills. Step wise regression was applied to find out the relationship of students' personality traits and academic self-regulation skills. Step wise regression include the

first step correlation between two variable and on the bases of significant positive correlation linear regression test was done to determine the relationship between the research variables (personality traits and academic self- regulation skills). To compare gender base difference regarding personality trait and academic self- regulation skills independent sample *t* test was applied.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

For most students, college learning is characterized by several self- directed or autonomous learning circumstances and so provides an unusual learning environment. The increasing rates of student dropout and the phenomena of students' dropout underline the importance of self- regulation skills for dealing with such autonomous learning contexts. Low neuroticism and anxiety are associated with high conscientiousness and openness to new experiences, and high agreeableness among students who have self- regulation skills (Lin & Huang, 2013).

In educational literature the term self- regulation was first appeared in 1960s. Self- regulation refers to one's collective actions to accomplish set/desired goal. Hoyle (2006) defined self- regulation as a competence of a person to manage and control his/her feelings, thoughts, and behavior. Self- regulated people can effectively manage their social surroundings and their own perceptions. Self- regulated people are consistent in their standards of behavior and goal. According to Commissiong (2020) self- regulation refers to Students' metacognitive, behavioral and motivational competencies to academic performance and success. Self- regulation is an active process whereby students consistently manage and organize their feelings, thoughts, emotion behavior and environment in order to accomplish set objectives (Ramdas & Zimmerman, 2011).

Self- regulation plays a very important part to adaptive functioning to all fields of life (Hoyle, 2006). Individuals who are not self- regulated face many problems in life, those who are not self- regulated fail to control their social and personal experience; they do not contribute to the accomplishment of their set important goals. In educational context the definition of self- regulation refers to self- generated feeling, thoughts, actions or emotion that are systematically adopted and planned as needed to affect student's motivation and learning (Hoyle, 2006). Self- regulation is a process which consists of processes such as goal setting concentrating on and attending to instruction, using code information to be remembered, use of new and effective approaches to organize, rehearse and, using resources effectively, establishing productive work environment, managing time effectivly, monitor their performance, look for support and help when needed, the

value of learning, holding positive views about one's abilities and skills, experiencing pride, and satisfaction with one's efforts, and the factors which influence learning and the anticipated outcomes of actions (Akhtar & Mahmood, 2013).

Self-regulation refers to the degree learners are active in their learning motivationally, metacognitive and behaviorally. Learner may control and regulate different dimension of their learning such as efforts towards their set goals, their purpose and motivation for learning, the performance outcome students strive for, methods they use and environment and resource they use to achieve their goals. Metacognition refers to student's ability and capability to use their knowledge to set goals and plan strategies to accomplish set goals, behaviorally active means what students are actually doing to achieve set goals, motivationally active means being aware of self-motivation, generating self-motivation and maintaining attention and interest during performing task to achieve set goals.

Term personality trait is defined as a person's characteristics of emotional state, thoughts, behavior and feeling. Personality is defined as an individual's consistent pattern of feelings, thinking and behaviors (John, Robin, & Pervin, 2008). Traits refer to relatively long lasting features or characteristics that effect and influence individual's behavior in life. Personality traits is characterized in terms of traits or characteristics such as introverts, extroversion, helpfulness, openness, honesty, consciousness, friendliness, and these traits are the characteristics that explain consistencies in behavior. Personality traits reflect people's, feelings, behavior, characteristic and patterns of thoughts, (Stangor & Walinga, 2014).

Early theories of personality showed number of personality traits, According to Gordon Alford there are 4,000 personality traits. According to psychologists there are five basic traits/ dimensions of personality (Cherry, 2020). The big five personality traits are also called five factor model of personality. This is currently the most accepted theory of personality in scientific community worldwide. Big five personality trait model is mostly believed the best scientific way of identifying personality difference in individuals. The name given to this model is because the model proposes five major dimensions through which human personality can be measured. Each trait or dimension is all different, distinct and independent from one another. Acronyms used for big five personality

model are CANOE or OCEAN, (O=openness to experience C=conscientiousness, E=extroversion A=agreeableness, N=neuroticism) (Stangor & Walinga, , 2014).

Conscientiousness is a trait of personality is defined as a person's ability to act dutifully, disciplined, struggle to aim of achievement and perform responsibilities. People who have these traits of personality are good in planning; they have performance for planning than spontaneous behavior. Agreeableness is dimension of personality that refers to the tendency to be cooperative, compassionate rather than antagonistic and suspicious towards other, individuals who are high on this trait reflects individual deference in general concern for social harmony. Individual who has this personality trait agreeableness, they value gatherings and like to get along with friends; these people are very friendly, kind, helpful, generous and compromise their interest with those of others. Neuroticism is defined as the ability to experience negative feelings, emotions, like anxiety, anger, emotional instability and depression. Individuals with a high score on neuroticism are more inclined to see everyday situations as frightening and tiny irritations as hopelessly difficulty, minor frustration. They may struggle to think clearly, cope properly, and make stress-related judgments and decision making with stress (Stangor & Walinga, 2014).

Openness to experience is a personality trait which refers to an individual tendency to have general appreciation for actions, emotion, imagination, curiosity, adventure, unusual ideas and variety of experiences. Those individuals who have this trait of personality usually have unconventional and distinctive decoration in home. Individuals who follow this dimension of personality are likely to have a large variety of books on different topics; they have diverse collection of music and work of art in display. Extraversion is personality trait of big five personality model that refers to the tendency to look for the stimulation and experience positive emotion and enjoy others' company. People who have this trait of personality are usually talkative, they enjoy being with people, they have always found around people, like social gathering and want to be the center of attention all the time. They want to draw others attention towards themselves, enjoy parties and social activities (Stangor & Walinga, 2014).

The link between self- regulation and personality traits is commonly stated as one in which either personality refers to consistent and specific inclinations to self- regulate or individual differences to regulate the overall self- regulation process (Hoyle, 2006). In

these processes self- regulation generally leads to mental forms or process through which a person controls his/her emotions, feeling, behavior and contemplation. It starts from the premise that people regularly observe and interpret situations and self- regulate in predictable ways in response to them. The self- regulatory strategy serves as motivation for a desired self, which are impacted by barriers and possibilities that are either self-created/generated or met throughout life, these self- generated processes helps in achieving desired set goals. Individual differences are viewed from this perspective as exhibiting processes of self- regulation of one's most significant and valued self- goals. They show a growing self- construction and regulating meaning system aimed at achieving various identity aims (Hoyle, 2006).

2.2 Personality

"Personality" is originated from a Latin word "Persona," that means a mask worn by theatre performers to symbolize their personality and role in a show; and one's real self, which encompasses one's basic drives, feelings, habits, and beliefs motivation (Chan, 1996). According to Allport (1974), Personality is "a dynamic arrangement within the individual psychological systems that govern his or her particular responses to the environment. Personality, according to Robbins (2001), is "the whole sum of an individual's reactions, responses, communication and interactions with others. "Personality is a collection of an individual features, variables and characteristics". Personality is made up of non-changing human qualities or characteristics that can be used to forecast or predict one's short-term behavioral patterns. Personality refers to a set of human attributes that do not change quickly over time and can be used to anticipate one's short-term behavioural patterns.

Personality refers to an individual's overall impression that sets them apart from others, as well as a distinct behavioural pattern and way of thinking that they maintain over time as they change to their surroundings. Intellectuals and Scholars are mostly curious about the pattern or characteristics of personality traits. As a result, several theories or models relating to personality trait features have been proposed. Neuroticism, openness to experience, agreeableness extroversion and conscientiousness which are divided into five characteristics, have been in the spotlight as a highly explanatory model over other theories or models. Several theories or models relating to traits of personality or features have been proposed. These five factors of personality have been in the spotlight as a highly explanatory model over other theories or models. According to Costa

and McCrae (1992) personality can be categorized in five basic components. From previous studies Costa and McCrae (1992) discovered five common personality traits, using joint factor analysis, which was based on numerous personality-related and psychological ideas.

Personality analysis is important in psychology as it gives insight in the understanding of the nature of an individual, which leads to improved interaction and behavior expectations. Personality is one of the most complicated and interconnected subjects in humans, as it is a shared system of innate and essential psychological qualities that contribute to the creation of the social environment from birth to old age. (Abdood *et al*, 2020). Personality is the characteristic that distinguishes one person from other; each person has his or her own personality, skills, capabilities, and prospects. Moreover, The impact of cultural material on upbringing, how an individual detects and satisfies needs, and how an individual expresses his or her feelings, relationships with others, and the ability to identify good and bad are all factors that influence personality. Thus, it (personality) is the consequence of the combination of epigenetic and environmental elements, not just biological or social factors (Abdood *et al*, 2020).

Each person's personality is defined by his or her strengths and possibilities. Personality shapes people's actions, feelings, and thoughts, as well as their capability to adapt to all dimensions of life (Clark & Schurer, 2011). Humans have tried to categorise personality for a long time into general attributes and distinct patterns based on external characteristics and physical characteristics. Personality, according to the characteristics spectrum, is a combination of various features that constitute a generally permanent feature (Abdood *et al*, 2020). To classify human qualities, scientists have developed a number of theoretical frameworks.

Traits are innate or acquired physical, mental and social and emotional characteristics. They enable to recognize the individual and to comprehend him or her. All of the ports tried to limit the quantity of personal attributes identified, but there are a lot of them. As a result, psychologist's discovered a model that defines the core traits of personality by grouping similar features and categorizing them into an independent pattern that can be used across culture and individuals (Abdood *et al*, 2020).

2.3 Models of Personality

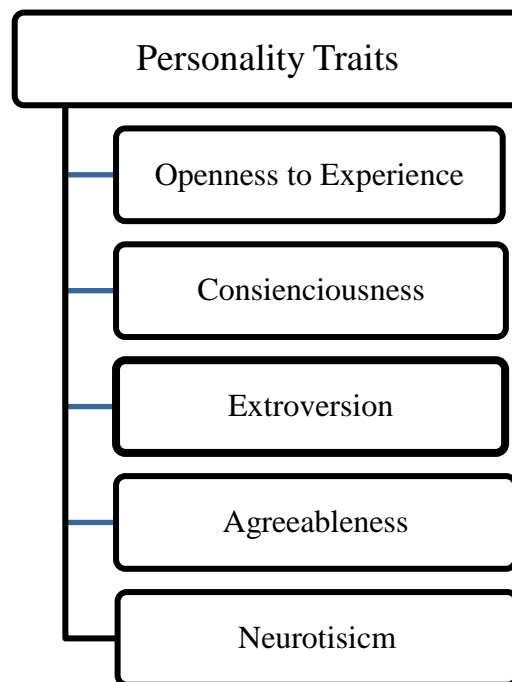


Figure 2.1 Big Five Peronality Traits

2.3.1 Big Five Personality Traits

The big five traits model, often known as the five factor model (FFM), is a personality trait model made up of five components or dimensions. Big five factor model was arose from applying the fundamental ideas of the psych lexical approach were used to create this model to personality which is conceptually started with the so called lexical hypothesis (De Raad, 2000).

The accessibility of the big five conceptual framework, particularly in its integration with circumflex arrangements, shapes a fine-grained framework that can be utilized for the reason of understanding the semantic of other conceptual framework. Passakos and De Raad (2009) used big five model of personality successfully for the classification of a list of instinctual. Kohnstamn *et al.* (1998) found that for all free potryayals of people in their study might be classified within the big five framework. Kohnstamn (1998) using big five factor theory described the traits of the many characters. The "big five factors" are the general components of personality traits.

Personality model big five factors show a wide spectrum of dimensions of personality; every traits or dimension shows detailed, different and specific characteristics of personality (John *et al.*, 2008). Still some studies have shown that that big five factor

model neglected or dropped some feature or characteristics that should be considered while assessing personality behaviours. Paunonen and Jackson (2000) re-examined the work of Saucier and Goldberg, which was completed in 1998, to investigate these disputes and came to the conclusion that there might be some other personality characteristics than those included in big five personality traits. Major differences in human behaviour were identified by Paunonen and Jackson (2000), who discovered that certain personality characteristics were not included in the Big Five personality traits. Smith and Canger (2004) described the big five factor model of personality is very important because it classifies personality traits in a meaningful way, it also gives a conducting research studies regarding personality, furthermore it contains all the basic characteristics of personality.

The personality model (BFF) includes 5 dimensions that have been empirically derived utilising descriptive traits. Goldberg (1992) reanalyzed research formerly carried out (Peabody & Goldberg, 1989) as he became satisfied that there have been mistakes in prior research carried out regarding personality traits. 1,431 adjective phrases were gathered in seventy five groups in order to explain personality of individuals (Goldberg, 1990). Hirschfeld (2008) defined the "Big Five" as the most prominent and visible personality qualities, as well as the five aspects that this model covers.

Openness to Experience

This term describes the tendency to experience new ideas and sensations, to encounter new feelings and engage in intellectual activities, good hobbies (Busato, Prins, Elshout & Hamaker, 2000). The terms referred for openness to experience are culture, intellect, or creativity and affection or Tender-mindedness (Goldberg, 1994).

The personality trait openness to experience has characteristics such as insight, creativity, imagination, curiosity and inventiveness. Individuals that score well on openness to experience have a diverse set of interests. These people have the tendency of experiencing new and novel ideas. They are attracted by other people and the environment around them. They enjoy taking part in new activities and learning new things. They are curious human beings and keen to analyse new matters and experience novel things. People who score high on this trait are more adventurous and creative while those individuals who do not score high on this trait may have difficulty thinking abstractly and tend to be more traditional.

Students who score high on this trait are very inventive, ready to take risks and explore novel things, creative, focused to face and overcome new challenges. They are happy to think about abstract concepts, while those students who score low on this traits are usually resist to new ideas, they does not enjoy new things and dislikes abstract or conceptual concepts. These students dislike change and they do not enjoy new things.

Individuals who were categorized as openness-to-experience in the literature studied were unconventional, broadminded creative, and innovative (Smith & Canger, 2004). Individuals with openness to experience personality characteristic are less likely to engage in interpersonal interactions that satisfy their emotional or physical needs (Smith & Canger, 2004). The openness-to-experience feature also includes receptivity to new ideas, a desire for a variety of sensations, awareness to inner sentiments, and intellectual curiosity (Grehan *et al.*, 2011). Openness to experience is a variable in maintaining an open attitude toward new things.

Personality trait openness to experience has sub constructs namely feelings, ideas, actions, values, fantasy and aesthetics. Generally openness to experience is associated with unconventional attitudes, behavioural flexibility, vivid imagination, intellectual curiosity and aesthetic sensitivity (McCrae, 1992). According to Costa and McCrae (1992) people who have this trait (openness to experience) are usually non-conservative in their opinions and thoughts, innovative, imaginative, artistic and dreamy. Artists and poets are the best examples of individuals who are high on this trait (McCrae & Costa, 1997).

Openness to experience in the context of personality model (BFF) refers to openness to exploring new ideas or openness to experience, it does not mean to an individual's ability to disclose or open or disclose their thoughts, feelings or emotions. According to some researchers openness to experience is also called "Intellect" it means that individual high on openness to experience are intelligent, these people think abstractly (Tylor & Whiteman, 2009). These people are more likely to be smart, creative, and adventurous. They appreciate and enjoy new ideas and having new experiences (Bjurerh, 2007).

This attribute contains qualities such as ingenuity and insight. People that are good at this feature have a wide range of interests in novel things and ideas. They are enthusiastic to learn new things, appreciate new ideas and are fascinated by the world and

by other people (Cherry, 2020). These individuals are more bold, imaginative, and ingenious. People that score low in this area tend to be more traditional and conservative, and it may be difficult for them to think abstractly (Cherry 2020).

Conscientiousness

Personality trait conscientiousness is defined as "encompassing inhibitive and proactive characteristics", inhibitive characteristics include aspect including such as "moral carefulness and caution", and the proactive side encompassing qualities like "desire for achievement and devotion to work" This dimension conscientiousness is characterised by high levels of thinking, intellect good impulse control, and goal-directed behaviours (Bidjerano and Dai, 2007). These individuals are generally goal-oriented, disciplined, well-ordered, efficient and well-organized. These individuals are well planned, they pre plan their activities, Keep track of deadlines and evaluate how their activities affect others. Students that are conscientious spend time studying for tests, pay attention to details, and appreciate having a defined plan.

These students finish their work on time and important tasks right away. Students who score low on conscientiousness dislike schedules and structure, they are not organise and make messes and do not take care of their selves and items. They are not responsible and fail to return things; they do not like to put things back on its right place, they fails to complete necessary and assigned tasks on time. These people are described as conscientious like to follow rule anmd regulations, willing to adapt to the group's norms, organizational procedures, by laws and rules and regulations (Smithikrai, 2008).

According to Hofmann and Jones (2005), people who have conscientiousness as a personality attribute have recurring behavioural regularities such as organisation, efficiency, correctness, precision, cleanliness, stability, consistency, constancy, thoroughness and efficiency. The literature reviewed indicated that people who are considered conscientious have traits including purposefulness, determination, self-control, a desire to succeed, and reliability (Grehan, Flanagan, & Malgady, 2011). This is an aspect of adhering to social norms. Conscientious persons are organised, trustworthy, prepare well, disciplined, and dependable on themes that demand success, in contrast to being careless, neglectful, and sloppy (van Lieshout, 2000).

Conscientiousness is linked with persistence, accountability and responsibility (Busato, Prins, Elshout & Hamaker, 2000). Key aspects of the personality trait

conscientiousness include proficiency, directiveness, devotion, dedication, excellence, accomplishment, accountability, deliberative consciousness, goal attainment, and thoughtfulness. Efficiency, organization, dedication, and production are the most common characteristics of conscientious people. As a result, differences in performance may be linked to conscientiousness trait of personality.

Conscientiousness is defined as a person's ability to persevere and set goals. Conscientious people are motivated and well-organized, and they can put off immediate satisfaction in favour of long-term goals. Impulsive and easily distracted people have a low degree of this personality trait. Conscientiousness, a personality attribute, is linked to frontal lobe activity in the brain. The executive brain, often known as the frontal lobe, is responsible for controlling and moderating brain's innate impulses and other sections of the brain. For example, if a person wants to eat a piece of sweets (cake) the frontal lobe steps in and reject to eat cake that's not a healthy food which does not fit in out healthy diet. Individual who are high on this personality trait use frontal lobe of the brain in order t regulate and keep their impulses on track.

This dimension of personality is characterised by high levels of thinking, strong impulse control and self- controlled, self- directed and goal-directed behaviour. Extremely conscientious people are typically well-organized and have well defined goals and objectives. They plan ahead, think about how their actions may affect others, and keep deadlines in mind (Cherry, 2020).

Conscientiousness is most related trait of personality that is related to self-regulation. Though conscientiousness is characterized differently in psychometric and lexical, it generally refers to the ways in which people govern their action, behavior or conduct.

Students with a high level of conscientiousness are self- assured, disciplined, confident self- controlled, orderly, and organised, whereas those with a low level of conscientiousness lack confidence in their capacity to regulate their behaviour and are impulsive, distractible, and postpone (Costa & McCrae, 1992).

Extraversion is defined by its high degrees of emotional expressiveness, friendliness, talkativeness, assertiveness, and excitability (or extroversion). Extraverts are happy, gregarious people who thrive in social situations and enjoy a lot of fun and parties.

People get stimulated and happy when they found people around, they enjoy others company and get along with other. Individuals with low extraversion (or introversion) tend to be quiet and lack the enthusiasm to participate in social situations. In contrast people who are not extroverts (introverts) require a period of alone and silence after engaging in social activities in order to recharge. Introvert do not enjoy social gathering and avoid parties and debates (Cherry 2020).

Extroversion is a personality trait that expresses an individual's tendency to seek stimulation from the outer environment. Extroverts actively engage in social activities. They can easily get familiar with others. Extrovert people can easily participate in debates exhibitions and parties. They like to do a lot of fun and parties.

Students who are high in this trait likes to be the center of attention, likes to meet new people, and so on Likes to strike up talks with strangers, and has a large social network of friends and acquaintances, find new friends easily, they are energy bombs and feel energized when around other people. These students speak before think. Students who are not extroverts become weary when forced to interact with others, find it difficult to initiate discussions, and despise doing little things. They do not make friends easily and do not like to be the center of attention. They think before they speak, and prefer solitudes. They find it difficult to start conversations (Cherry 2020).

According to McCrae and John (1992), extraversion describes conduct that is upbeat, energetic, positive lively, social, outspoken, and welcoming. Because of their outgoing nature, extraverts find it simpler to create connections (Mushonga & Torrance, 2008). According to Zhao and Seibert, persons with high extraversion are thrill seekers, energetic, enthusiastic, and loved others, as well as huge gatherings. Low extraverts are quiet, reserved, and self- sufficient individuals who like to be alone. According to Zhao and Seibert, extraversion is a key component of managerial job. Extraverts like working, socialising, and motivating others, and as a consequence, they make their workplace happy. According to Barrick, Parks, and Mount (2005) extroversion is personality trait that is related to active interactions with others and active social contact.

Extroverted personality traits include a high level of activity (arousal), the sense of positive emotions, impulsivity, aggression, and a desire for social behavior (Busato, 2000). Low Extraversion (introversion), on the other hand, is marked by a calm, reserved attitude.

Agreeableness

This personality dimension refers to cooperation and trust. Honesty and trust are two personality characteristics that fall under this category. This personality component encompasses acts of compassion, trust, charity, love, and other pro-social behaviours. People those have this personality trait are more helpful and cooperative, whereas those who are disagreeable are even dishonest and more aggressive.

Students who have a high degree of this quality are interested in people, care about them, and feel compassion for them; they appreciate supporting and supporting their peers who are in need of assistance; and they love to help others and contribute to the pleasure of others.

Students who have low scores on this personality characteristic are uninterested in others, do not take interest in others life and unconcerned about how they feel. They do not like to solve others' problem and help others. They like to manipulate other to get what they want and insult and belittles others.

In the domains of trust, honesty, altruism, obedience, tender-mindedness, simplicity, and humbleness, agreeableness refers to how individuals interact with one another (Patrick, 2011). Students who have a high level of this attribute take interested in other's life, care for people, and show sympathy for them; they value supporting and assisting their peers in need; and they like assisting and giving to the enjoyment of others. People who have this trait (agreeableness) usually have high sympathy and trust everyone easily, compassion, kindness, while low levels of agreeable people have qualities like distrust, self- centeredness, and anger. According to Jensen-Campbell and Graziano (2001), agreeableness has nothing to do with anger, aggression, or interpersonal problems, but rather with how people sustain healthy interpersonal connections with others.

People with the personality attribute of agreeableness, according to Hofmann and Jones (2005) should act in predictable ways that are polite, respectful, pleasant, and helpful, as well as kind and cooperating. People with high degrees of agreeability strive for group cohesion or unity and have positive views about their coworkers. A factor that contributes to the harmonious maintenance of interpersonal relationships is agreeableness trait of personality.

Friendly, courteous, and modest behaviour is referred to as agreeableness (also known as Sociability). This feature is linked to a proclivity for kindness and nurturing (Busato, 2000). It includes the sub-constructs of honesty, trust, altruism, humility, compliance, and soft-heartedness. Individuals who are agreeable might be defined as compassionate, nice, warm, and tolerant). According to Costa & McCrae (1992) this personality trait has a negative relationship with and, Conscientiousness along with Psychoticism. This personality trait is a major factor in social behaviour.

Agreeableness refers to a person's willingness to put others' interests ahead of his or her own. Individuals with a good Agreeableness score are empathetic and like to support, serve and care for others. Individuals with low Agreeability score exhibit less sympathy and put their own concerns ahead of others (Cherry, 2020).

Neuroticism

Neuroticism is a fifth trait of personality which refers to moodiness, sadness, emotional instability and mood swings. Individuals who have this trait of personality feel anxiety, short tempered, mood swings, distress, and intolerance. While those individuals who have are low on this trait (neuroticism) are more resilient calm (emotionally) stable. Students who score high on this trait experience more stress, anxiety and upset about each walk of life. They get distressed and worry easily and usually experience dramatic shifts in mood. They are concerned and find it difficult to recover from stressful happenings. Student who score low on this trait are emotionally stable and deals well with stress. They are rarely feels anxious or unhappy and do not care much, unconcerned and easygoing.

Every individual has different personality traits among which neuroticism is trait with different emotional stabilities and adjustments (Zhao & Seibert, 2006).

Individuals having relaxed, calm, even tempered, and self- confident traits are usually score low on neuroticism; according to Judge and Ilies (2002) depression, stress and anxiety are the forms of poor emotional adjustment.

Patrick (2011) said that neuroticism is the combination of an individuals' personality like self- consciousness, depression, vulnerability, impulsiveness, hostility, and anxiety. Personality of an individual has different trait such as depression, anxiety, embarrassment, insecurity and worries (Patrick, 2011). People with high level of neurotic personality face many challenges in their practical life, they cannot solve issues because

of anxiety, depression and negative thoughts, and they are always in an instable situation (Renn, Allen, & Huning, 2011).

According to Judge and Ilies (2002), the emotional-instability that is depression, stress and anxiety are the indicators to identify neuroticism although these signs of personality trait show the poor emotional adjustment. To adjust the emotion in a well manner is the skill of a good leader. Individual with high level of neuroticism cannot handle their emotions and they cannot maintain a positive or a good relation with their coworkers and they cannot monitor their subordinates' performance that may result risk maximization, output of the company and also their status quo. Such kinds of leaders are unable to exhibit conscientiousness, or extraversion and collective openness at a high level of rate. Low emotional stability or negative emotionality are two terms used to define neuroticism. Neuroticism is a negative emotion-related component of personality.

Neuroticism refers to negative emotions as well as sadness, anxiety, fear, shame, guilt and negative energy. Neuroticism describes an individual's tendency of negative emotion and negative energy. It is a sign when people experience negative emotions when something is wrong in the world. Guilt is a response having done something wrong and fear is a response to danger. However, to a given situation not everyone has the same reaction. Low neuroticism makes individuals more vulnerable to ignore their misfortune, but high neuroticism makes people more ready to react to a situation when they are experiencing intense negative emotions (Lau, 2013).

Neuroticism is a personality characteristic characterised by mood swings, sorrow, emotional instability and depressed mood. Individuals who score high on this trait are more likely to feel stress, anxiety, moodiness and unhappiness, whereas those who score low are more emotionally stable and calm (Cherry 2020).

Sometimes neuroticism is described as negative emotionality or low emotional stability. Neuroticism is characterised by a tendency for worry, negative emotions, hostility, despair, anxiety and unhappiness (Busato, Prins, Elshout & Hamaker, 2000).

2.3.2 Eysenck's Theory of Personality

PEN model was proposed by a well-known psychologist Hans Eysenck. PEN stands for psychoticism, extroversion and neuroticism. Pen model was derived from factor analytic studies of Eysenck in 1985. According to Eysenck personality is divided into three broad categories or variables (psychoticism, extroversion and neuroticism). The

PEN model argues that personality qualities are organised in a hierarchical order, neuroticism against emotional stability, psychoticism as opposed to impulse control, extraversion as opposed to introversion, and neuroticism versus emotional stability (Ruch, 2018). According to Eysenck biological factors such as hormone levels, cortical arousal as well as environmental factors such as learned behaviour, influence a person's score on certain personality traits. Before inventing the PEN model of personality Eysenck tried to assess personality in two dimensions: neuroticism-emotional stability and extraversion-introversion (Ruch, 2018).

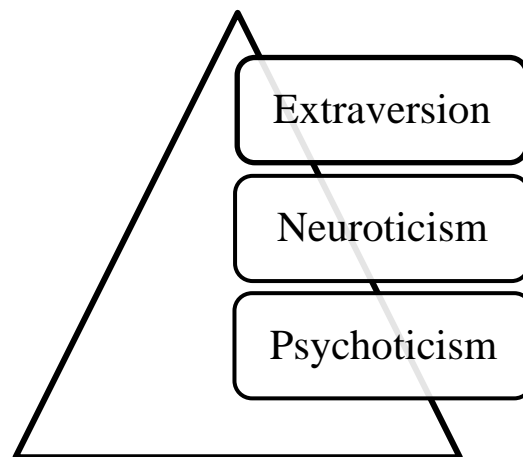


Figure. 2.2 Eysenk's Theory of Personality

Extraversion- Introversion

People who participate more in social activities and enjoy social gatherings have high level of extroversion. Extroverts are at ease in large crowds, outgoing and conversational. They always want to be the center of attention; they draw people's attention towards themselves and can easily make friends, having a large network of friends. In contrast introverts are those who do not have a large circle of friends and do not enjoy social gatherings. Introverts are very reserved kind of people, quieter and usually avoid large crowds or social gatherings. They feel hesitant to interact with unknown people. Introverts are those who are usually engaged in meaningful activities and prefer to be in contact with small group of friends.

Carl Jung (1875-1961), a Swiss psychoanalyst, suggested that psychic energy or mental energy of a person shows the degree of introversion and extraversion degrees. Carl Jung believed that with Introverts; channel their psychic energy inwardly, less sociable activities and leading to more inward-focused. In contrast extraverts direct their psychic energy outwards, towards other people, to make more social relationships.

Neuroticism-Emotional Stability

According to Eysenck (1983) neuroticism is the second dimension of PEN model of personality. The move from emotional stability to emotional instability is known as neuroticism. Anxious and stressed persons have a high neuroticism score. Neurotic people feel helpless all the time, inflating their importance, worry over small issues, and stressed.

When a person concentrates on the negative parts of a situation rather than the positive ones, their perspective might become too pessimistic. They may feel bitter or jealous of others who, in their opinion, are in a better position than they are. Other features of neuroticism include perfectionism and a tendency to feel unsatisfied, disappointed or easily irritated and annoyed when their objectives or goals are not accomplished. A low neuroticism score indicates that a person is more stable emotionally. Neurotic people accept that by putting less expectations on oneself, They would be better prepared to deal with adversity and misfortune. Neurotic people are more accepting of others' imperfections and stay calmer in difficult times. According to bio psychological theory neuroticism is positively related to the behavioural inhibition system (BIS), which impacts behaviour in order to avoid unfavorable consequences such as punishment (Gray, 1970).

Psychoticism-Normality

Psychoticism-Normality is the last dimension of PEN model of personality.. Psychoticism-Normality component of this model differs from low psychoticism (normality) to high psychoticism (psychoticism). People who have greater psychoticism scores are more prone to irresponsible or bad behavior. They may also violate society norms and be motivated by a need for immediate fulfillment, regardless of the consequences.

According to PEN model of personality high levels of psychoticism, decrease a person's sensitivity/ openness or reactivity to conditioning, revealing that they do not respect societal norms or standards established via reward and punishment. According to this theory, people want to be part of illegal behaviour when they seek to satisfy their own interests while neglecting commonly recognised norms and laws and rules of behaviour.

2.3.3 Gordon Allport's Personality Trait Theory

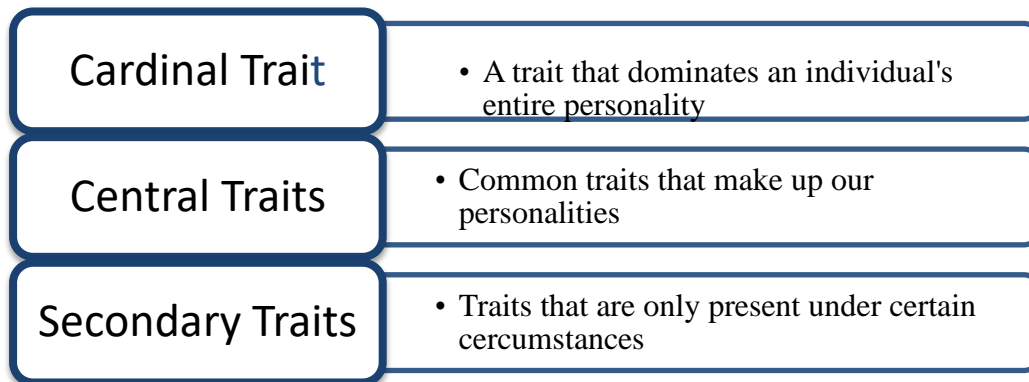


Figure. 2.3 Gordon Allport's Personality Trait Theory

Traits are personal qualities or characteristics that determine a person's actions or conduct. How that individual shows these qualities is affected by their level of comfort in social situations, what they feel to be important in their lives, and other variables.

Gordon Allport (1937) identified three levels of personality attributes within a hierarchy. Every individual's contains cardinal qualities, secondary traits, and central traits. With Allport's view, the three various levels in the hierarchy of characteristics are essentially levels of preference found inside the individual. The following is a summary of the three levels.

Cardinal trait

These are the characteristics that influence a person's behavior and thinking processes. They're at the top of the hierarchy, and they're the foundation of what's known as "master control." This characteristic becomes the individual's exclusive passion. For example, Scrooge McDuck adores money. His desire for wealth would be a cardinal trait.

Central traits

These are the generic characteristics that everyone possesses on some level. For example, everyone is loyal or compassionate. They are straightforward, friendly, and occasionally irritable. Some folks are grouchier than others. Some people are more truthful than others. A majority of each person's individualized behaviors are shaped by the mix of these generic features and the cardinal trait.

Secondary traits

These characteristics are at the bottom of the hierarchy and may or may not be present, consistent, or apparent at all times. They are still plentiful, but they are usually only there after something has provoked them. For example, you may like your friend but dislike them if they solely post political rants on their Facebook page.

People can be aware of their personality as a result of the combination of these features, making it a predictable illustration of "who we are." These characteristics can also change with time.

2.4 Self- Regulation

Self- regulation (SR) was firstly mentioned (educational literature) in the 1960s, and it is the ability to the collective activities of people to attain a preferred set objective. Self- regulated learning (SRL) refers to the processes by which students regulate their feelings, emotions, ideas, emotions and behaviors that help students achieve their specific learning objectives and goals (Zimmerman, 2011). Self- Regulated Learning is defined as the mechanisms through which students take active, meaningful part in controlling their own learning Academic engagement or learning (Panadero, 2017).

Zimmerman introduced cyclical phase model for self- regulated students. This cyclical phase model contains three phases n (forethought, performance and self- reflection phase). Fore thought phase includes task analysis self- motivation thoughts. Self- regulated learning (SRL) is an important element for achievement in higher education, because it enables students to be more active and manage their learning and the development of life skills (Reshman, 2018). The use of SRL techniques is often associated with excellent or good academic performance (Broadbent & Poon, 2015), and self- regulation processes can be strengthened with suitable or proper interventions (Zimmerman, 2008). For instance, Teachers should encourage students to engage in metacognitive activities, acquire abilities for applying and modifying self- monitoring techniques, make strategic use of feedback, and create metacognitive knowledge about academic work and task-specific tactics. (Reshman, 2018).

Self- regulation refers to specific type of change one that aligns thinking and behavior with a consciously chosen rule, norm, aim, ideal, or other standard. Self- regulation is the regulation of the self. As a result, it entails altering oneself, or some

aspect of oneself, in order to conform to a particular idea or ideal (standard). Self-regulation is necessary for adapting to the demands and opportunities of a complex social environment.

Human beings are not only social animals but also cultural animals. Their impressive record of achievement and remarkable mental and cognitive abilities owe a great deal to the highly complex self-regulatory strategies they have been able to build in order to coordinate and manage complex situations.

Self-regulation is an important part of human development because if a person is unable to manage her or his own conduct, she or he is said to lack self-regulation capacity. The ability to self-regulate can be demonstrated in overt behaviours shown by a person. For example, she could tell herself to avoid something she needs to avoid or to wait patiently for something she has to wait for, and so on. These are some examples of good self-control. In another approach, she/he will be continually destroying herself/himself, or she/he will avoid acting in a way that is flexible to the conditions around her/him. Self-regulation or self-control shows that a person is aware of the demands placed on her or him by the environment, and that she or he is aware of the actions that must be performed in order to meet those demands. Self-instruction, self-monitoring, and self-reinforcement are all examples of self-regulation, which includes academic self-regulation. Self-regulation entails self-evaluation; it is the process through which a person attempts to comprehend and estimate the value of his or her own abilities. Self-evaluation is the process of determining one's own value or respect. In this situation, an individual compares her or his true self to her or his ideal self, and then determines how well she or he meets social standards and expectations.

Self-regulation relates to an individual's ability to do certain things, such as, they may aware of their own abilities and requirements. They should set fair goals for themselves. They make preparations to attain their objectives, and organise their actions, thoughts, and communication. They observe impulses; acting – rashly, putting in place necessary activities or methods at the appropriate moment; monitoring and evaluating their own performance in respect to their objectives. Having trouble handling problems in an organised manner, thinking and acting strategically in respect to their aims, learning from consequences changing flexibly from one activity to another, from one concept to another, or from one method to another; learning a skill in one environment or context and transferring it to another.

2.5 Academic Self- Regulation

Self- regulated learning referred to students' learning that is guided by their own thoughts, strategic planning, monitoring, assessment, motivation and actions to learn. Self- regulated students, in specific, are aware of their academic weaknesses and strengths, and these students have a list of solutions they may use to deal with the challenges of academic assignments they face on daily basis. These students have creative views of intelligence (as instead of fixed views of intelligence) and relate their achievements and failures to elements within their control (e.g., effort put in on an activity, proper application of methods) Self- regulated learners believe that academic success is directly linked with tackling challenging tasks, practicing their learning, acquiring a full understanding of subject matter, and applying struggle. These features may describe why self- regulated students have a strong intelligence of self- efficacy (Pintrich & Schunk, 2002). Researchers have connected these attributes to success in and out of institute in the educational psychology literature.

Academic self- regulation is the process through which students translate their strengths into academic skills on their own. It is not a cognitive talent like intelligence or an academic competence like reading ability. Learning, according to self- regulation theories, is an flexible process that necessitates cyclical effort on the part of learners, which occurs in three different stages or phases.

Schunk and Zimmerman (2011) the first phase, foresight, refers to the influencing process and believes that lead to learning activities. The next phase of self- regulation is performance and volitional control, which entails processes that take place during the learning process and affect or influence concentration and performance. Self- reflection is the third step that occurs after a learner's efforts have been made and has an impact on them.

According to literature self- regulation can be divided into four main areas/categories which can be applicable to all human social life. First type is that, people frequently try to exert control over their ideas. Attempts to direct reasoning away or towards specific conclusions may be included in these efforts. Attempting to suppress undesirable thoughts, such as annoying music or anxious thought about problems is one of them. It turns out that a person's ability to suppress undesired ideas is also heavily influenced by their current affective state (Wyland & Forgas, 2007). Efforts to focus on

something, such as while attempting to concentrate, are also examples of attempts to regulate thoughts (Forgas, Baumeister, & Tice, 2009).

Second, many people try to manage their moods and emotions. There are six basic categories of this, which include attempts to produce, terminate, or extend good or negative emotional experiences. Affect regulation techniques can be either unconscious or automatic. The category of attempting to end and escape from poor moods are by far the most common and problematic—of these. Indeed, the majority of clinical and counseling psychology is committed to assisting people in achieving this goal when they (all too often) struggle with affect regulation. Another issue with emotional regulation or emotion control is that, unlike the other categories, direct conscious control appears to be ineffectual; therefore people must rely on indirect methods. Indeed, attempting to control one's emotions, such as anger, can sometimes have the opposite impact, causing the unwanted affective state to worsen rather than improve. As a result, one of the most basic facts of human life is that we cannot easily "make" ourselves feel better just by willpower (Forgas, Baumeister, & Tice, 2009).

The third dimension of Self- regulation is impulse control. The word is technically a misnomer, according to Baumeister *et al* (1994), because impulses are essentially spontaneous responses that are generated when a situational cue awakens a latent motive. The person regulates the behavioural application of the urge rather than the impulse itself. Thus, stopping oneself from acting out tendencies to drink alcohol, take drugs, smoke, eat unhealthy foods, spend money foolishly, or commit aggressive acts are most generally referred to as impulse control. Individual differences in impulse intensity and it play an important part in determining of self- control attempts (Forgas, Baumeister, & Tice, 2009).

The fourth category is motivation regulation, which entails summoning the required commitment and mental energy to complete tasks that we might not have completed otherwise. Of course, one could argue that motivation is at the heart of all self-regulation. In a more technical sense, however, it appears that controlling motivation is a subfield of self- regulation research, as some of the researcher argues that people frequently have several and conflicting motivational states, such as the motivation for self- control against the urge for self- improvement, and managing and regulating these states can be difficult (Forgas, Baumeister, & Tice, 2009).

2.6 Models of Self- regulation

2.6.1 Triadic Model of Self- Regulated Learning by Zimmerman (1989)

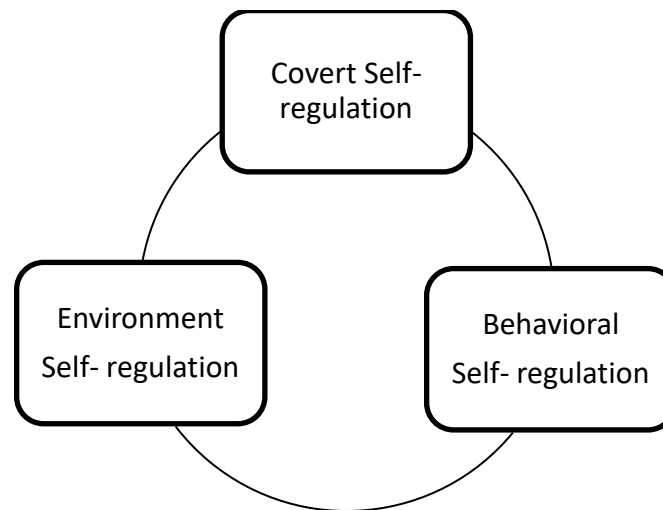


Figure.2.4 Triadic Model of SRL by Zimmerman (1989)

A Triadic model was introduced by Zimmerman in 1989. According to this paradigm, a learner's self- regulation is influenced by three factors: self, behavior, and environment.

The first aspect is the person (self), which refers to the individual or learner, as well as his or her goals for the activities, how he sets his goals, and how he achieves those goals. This ability to set goals and sustain targets has an impact on the learner's self- regulation and plays an important part in self- monitoring and learning progress. If a student sets a goal to complete an assignment and continuously watches his progress graph to determine his ability to complete the task, he has become aware of his ability to complete the task and is managing his learning. In this method, the student transformed his abilities into skills that he uses to practice achieving learning objectives.

The second aspect is conduct, namely the behavior of the learner. Self- reaction and self- observation are included in this section. Self- observation is another characteristic of a learner. The ability to learn something is influenced by a learner's conduct. These three actions have an impact on students' ability to regulate their emotions (Roll & Winne, 2015).

Self- observation is the first behavior. In which the learner assesses his capacity and aptitude to learn and advance toward his objectives. How well is learning going, and

what obstacles can learners confront as a result of their progress and studies? When students know the answers to such questions, they may track their progress toward their objectives (Roll & Winne, 2015). Following self- observation, learners move on to self-judgments.

The learner discovers his ability to compare achievement and performance through self- judgment. In this case, the learner is interested in determining the difference between current and historical performance. The learner reflects on his situation through this contrast. The learner then considers various tactics and methods by which he achieved better results, as well as the weak spots or poor strategies by which he failed to get better results in accordance with the objectives. Another method of self- evaluation is to compare one's performance to that of any outstanding performer or student (Moos & Ringdal, 2012). The learner's learning performance will improve as a result of this, and the learner will acquire the necessary skills and methods.

This is the learner's third characteristic; self- reaction allows the learner to alter his behavior and improve his performance. Learners will be more open to criticism and will learn more effectively as a result. The learner's self- regulation is also influenced by the learner's environment, which is the model's third factor. Environment means the learner's surrounds or actual location in which the learner is undertaking efforts of learning. It can be a place of learning or a place to live. When teachers and parents are also present and can provide assistance or have a good impact on the learner, reaching goals becomes easier. It depends on the learner; some want to arrange their surroundings neatly, while others prefer to relax in their beds or living rooms. In the environment, sound and light are also highly essential. The learner create conducive learning environment. As a result, in Zimmerman's triadic model of SRL, these three elements have an impact on Self-regulation.

2.6.2 Current Version of Cyclic Model (Zimmerman and Moylan, 2009)

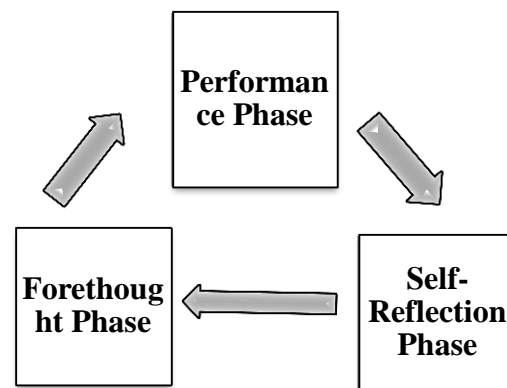


Figure.2.5 Current Version of Cyclic Model

Cyclic phase model was first proposed by Zimmerman in 2000. But in 2009 the same model was revised by Zimmerman and Moylan in 2009. This model is recently used by Sadia (2021). in the revised model include more skills of learners.

By the year 2000, the first model had been shown. After a few years, Zimmerman and Moylan published an updated model in 2009. In the self- control part, they included a learner's greater capacities. Various scholars have debated the self- regulated learning (SRL) approach, attempting to clarify the notion and propose a framework (Winne & Hadwin, 1998). However, Zimmerman and Pantrich's model is cyclical, which highlights the differences between phases more vividly. In this approach, the SRL process becomes more open and understandable.

The cyclic model explains each phase in great detail. The details of the goal/forethought/intentions phase are given in the first phase. This is where the planning and pre-planning takes place. Actions/strategies are introduced in the second phase, which is the performance phase. Here you will find thoughts and ideas relating to action or performance, as well as practise by doing. The third phase of self- reflection focuses on self- reflection and monitoring. Where the after-process items arrive, and the learner assesses the outcome based on the achievement of the objectives. These explanations distinguish the new Model version from the 'open' process (Sadia, 2021)

Some frameworks in the updated SRL model exhibit more parallels than differences (Panadero, 2017); the sole good aspect of this model addressed here is the clear and comprehensive instructional involvement and intervention from the instructor.

2.7 Self- Regulated Learning Stages

Self- regulated learning is a type of learning that may be controlled through a set of skills. These skills direct the learner to SRL, where he or she can focus on independent behaviour, self- motivation, devotion, and positive emotions. These abilities assist pupils in achieving their objectives. Teachers and educators can play an important part in this process by effectively transmitting these abilities to students. Teachers must be familiar with these skills as well as how to apply them for this work (Demiroren, Turan & Tasdelen, 2020).

Self- regulated learning is a technique for pupils to better control their behavior, emotions, thoughts and actions in order to effectively manage their learning experiences. This process occurs when a student's intentional behaviours and processes are directed at learning knowledge or abilities. In general, SRL models are organised into steps. One prominent cycle model discusses three important phases: planning and forethought, performance monitoring, and performance reflections (Sadia, 2021).

Planning involves students' viewpoint, and pupils gain specialized information about the scope and vision of the main work, which is why they plan everything. The second step is performance, during which students complete practical tasks in accordance with the plan and obtain valuable learning experiences. Students can then assess their progress and determine whether it is appropriate for their goals and standards. The third step, which follows practical experience, is reflection. At this stage, a student evaluates the learning experience and reflects on ideas and feedbacks, as well as saving this knowledge as a new concept and saving it as a new concept and saving it as a new concept and saving it as a new concept and saving it as a new concept and saving it (Sadia, 2021).

Self- Regulated Learning (SRL) is a method through which the students manages and control their emotions, thoughts, and surroundings. Self- regulated learning enables students to govern their thoughts in accordance with their goal criteria and learning process that is beneficial and directly connected to the educational or learning experiences. Self- regulated learners can also manage their time and their activities wisely (Ramdass & Zimmerman, 2011).

Self- regulated learners are intrinsically driven; they guide their selves, activities, take responsibility for their own learning. Self- regulated learners do not easily accept

failure and they have the strength to try again and again, these learners does not require someone to direct them to tell them what to do and t how to do? The students acquire knowledge faster and more effectively (Sadia, 2021). That is why everybody who wishes to study for an extended period of time wishes to be self- regulated students. Self-regulated students are aware of their goals and needs to attain them in a more efficient manner, which makes the task harder for the learner and prepares them for future assignments.

Self- regulated learning is a procedure in where the students go through the entire process and completes it in their own way, filling in any gaps and redoing any mistakes. The learners take initiative over and over and avoid all defects. The learners retain the lessons from this entire process for the rest of their life and can apply the learnt point's tin order to have a better family and social life.

In view of Hoyle (2006), people who are able to self-regulate themselves effectively could manage their perceptions about their social surroundings, demonstrate consistent positive behaviours, and succeed in goals they set for themselves. Weimer (2016) alleged that self-regulation is universal for every learner and does not mean that it is a trait that may exist in some students and not in others. Rather, it entails the selection of and utilisation of specific processes (goal setting, monitoring progress, efficient use of time, and self-evaluation of selected methods) that must be individually adapted to various learning tasks. Mirhashemi and Goodarzi (2014) equally indicated that learners' ability to monitor their motivation and emotions is important for their learning.

2.8 Cyclic Phase Model

Cyclical phase model is Zimmerman model which comes under social construct theory, this model has three phases each phase provide feedback to future task. This is one of Zimmerman's most detailed and comprehensive models of self- regulation (Pandaro.E & Tapia.J, 2014). Cyclic phase model has the phases namely forethought phase which include skill goal setting and self- motivation. Forethought phase is the first phase of cyclic model of self- regulation, this phase includes process of task analysis and it requires self- regulation skills such as goal setting and self- motivation. this phase includes process of task analysis and it student analyze the task set goals plan how to work to achieve the set goals, need self- motivation to motivate themselves to reach to

established goals, this phase has two skills of self- regulation self- monitoring and goal setting (Panadero & Tapia, 2014).

Performance phase is the second phase of cyclic model of self- regulation which includes student performance and actual implementation of selected strategies, this phase is actual performance phase, this phase has two self- regulated skills self- observation and self- control (Panadero & Tapia, 2014.) Self- control refers to regulatory process such as imaginary, self- instruction, attention and focusing (Zimmerman, 1998). Self- observation refers to monitoring strategies such as self- recording and self- recommendation. Third phase of cyclic model is self- reflection phase (Panadero & Tapia, 2014).

A study was conducted title “Student engagement, self- regulation, self- satisfaction, and success in online learning environment” a cross sectional research study having 385 students and 61 faculty was taken as sampled to collect data, the study found significant correlation among construct. Student engagement and self- regulation and significantly predicted perception of student success (Commissiong, 2020).

A study was conducted titled “developed self- regulation skills; the role and importance of homework” with the purpose to evaluate the relationship between self- regulation and homework from the elementary grades to college. According to this study self- regulation skills such as setting goals, time management, completing tasks, and challenging tasks, are very important for not only students’ academic success but for successful professional writers, articles, scientist as well (Rammdass & Zimmerman, 2011).

Self- regulation, because of its documented importance in academic achievement, self- regulation is one of the new emerging topic and interest to educational educators and researchers (Pintrich, 2000). According to educational psychologist, by using social- cognitive theory, students' self- regulation abilities and performance (academic) are mutually correlated (Bandura, 2001)

Self- regulation is not only considered an academic performance or a mental ability but it is defined as the self- directive ability of learners by which academic skills are translated into mental abilities. Recent research showed that student’s self- regulation is an important stimulus to academic achievement. The interest of researchers have been

increasing in the area of educational psychology in investigating how the regulation of learning strategies and processes can contribute to improve their academic achievements (Zimmerman, 2008).

A research was conducted by Zimmerman in (2010) aiming to explore and study the processes through which they regulate their academic learning. He described a general definition of SRL and identifies distinctive characteristics of this capability to acquire skills and knowledge.

In 1980s a plenty of researched published on self- regulation in the social psychology and journals of personality, the concept of SRL also started to get published in the journals of educational, clinical, organizational and health psychology in late 1990s (Zeinder, 2000). It was concluded by Boekeats that a number of related but different construct and labels of self- regulated learning were befallen in between the timeline of 1980s and 2000. This term was also used in slightly a different way on the basis of research context. For instance, self- regulation was referred to the mental health of patient whereas it also taken in a learning context. In order to discuss the differences and similarities among different construct and domains of self- regulation Boekeats called a panel of three experts from three different fields of interest including educational psychology, organizational psychology and health psychology. Schunk (2000) claims that the differences in the academic achievements of students are not only because of differences in their skills and abilities alone but the other elements, like self- regulation, should also be considered in this respect. The main point behind this assumption is the argument that the leaners with high effective self- regulation always possess (high degree) intrinsic motivation. These students always have greater redness to skills and abilities and absorb them for a longer period of time as compared to those who do not have self- regulation. They are also able to relate their prior knowledge and learning experiences effectively and efficiently, they also have critical, cognitive and metacognitive strategies (Reshman, 2018). In educational context the behavioral theories in self- regulated learning have a backdrop heavy concentrate on students' self- control mechanism (self- instruction, self- evaluation, self- reflection, self- monitoring and self- reinforcement) instead of considering the internal state (motivation, beliefs, thoughts, emotions etc).

In 2015 Muhammad and Abu bakar conducted a study to pinpoint the between academic achievement and self- regulated learning at college level in Malaysia. 364 undergraduate pupils from (nine) colleges were selected randomly as sample of the study.

The result revealed that self-regulated learning (SRL) has a significant association with academic performance, and it is a good indicator of good academic achievement.

At the University of Hawaii, Bail (2008) explored the influence of self-regulated learning (SRL) skills on learners' academic progress in certain courses. The self-regulated learning skills development training program was administered to the 79 pupils in the experimental group, whereas the 78 pupils in the control group. Findings revealed that learners in the experimental group, who improved their self-regulated learning skills outperformed, showed better academic performance those in the control group in terms of academic accomplishment. Similarly, Perels, Dignath, and Schmitz (2009) found that self-regulation intervention inside normal mathematics sessions can support self-regulation competences and mathematical accomplishment.

Students can learn to self-regulate via practice and reflection (Zimmerman, 1998). Students can modify, manage and control their actions and emotions to enhance their learning and academic performance since self-regulation is not a personality feature (Pintrich, 1995). Students who are self-regulated are aware of and understand how to use a set of cognitive techniques (practice, organisation, explanation) that help them in presenting, transforming, organising, elaborating, and recovering data (Winne, 1995; Zimmerman, 2001) They understand how to organise, regulate, motivate, monitor and drive their mental processes toward the attainment of personal objectives, which is known as metacognition (Corno, 2001).

Students who are self-regulated manage their academic activities, demonstrate motivational beliefs exhibit adaptive emotion such as the adoption of learning goals, academic self-efficacy the formation of positive feeling toward tasks or goals (e.g. satisfaction, enthusiasm, joy), and the ability to modify and control them according to the needs of the pre-determined activities and the specific learning situation (Zimmerman, 2002).

Self-regulated learners decide, organise, and monitor the time and effort they put into projects and assignments, and they know how and when to make and arrange favourable settings, such as finding an acceptable study place and seeking help from teachers and peers when they face difficulty (Zimmerman, 2001)

According to Danial Goleman (1998), self- control is the ability to manage impulsive feelings and distressing emotions well. It is the ability to stay composed, unflappable and positive, think clearly and stay focused under pressure (Goleman, 1998).

Self- planning comprises students' attempts to establish what goals or objectives they want to accomplish and strategic activities they will follow to get their goal or objectives. Students that are capable of self- planning are more likely to establish a set of starting goals that encompass a wide variety of instructional, affective, social, emotional, and objectives or goals (Wolters & Brady, (2020). They want to achieve within the context of a given task. Self- planning identifying implicit or explicit standards for measuring development or completion in relation to certain goals is also part of planning. For example, a general objective to write an excellent paper could be measured by the number of written pages, the inclusion of specific content, or favorable comments. Finally, choosing the specific tactics, strategies or actions they will follow, at least initially, in order to achieve the objectives they have set is an important aspect of planning (Pintrich and Zusho 2007).

2.8.1 Self- monitoring

Self- monitoring skill is one of self- regulation skills that refer to one's ability to regulate and monitor emotions, self- presentations and behavior in response to situation and social environment. Self- monitoring refers to be aware of one's behavior and its impact on the situation. Self- monitoring refers to one's ability to modify behavior in response to social, situational and environmental variables.

Students who score high on self- monitoring are tend to change their behavior according to situation and environment. They can easily adjust with the situation and environmental change; they monitor their selves regarding environmental, situational and social change. While those who score low in self- monitoring behave in accordance with their own internal feeling and needs. They do not easily adjust with environmental change. Self- monitoring can affect students in different ways, for example students who monitor their salves interact with different people and by this interaction they adapt to different social situation. Students who have this skill are more likely to interact with a wide range of people and they can easily adjust to new situation and *get along* with people. Students who do not have self- monitoring skill cannot adjust in new environment, they feel uncomfortable in social setting, and they do not interact with a lot

of people that's why they avoid gatherings and they pay attention to how other see them and how others are acting.

According to Zimmerman (2000) students' ongoing awareness of different characteristics of their own participation during academic work is referred to as monitoring. Monitoring, according to Pintrich and Zusho (2007), entails Students who pay close attention to the processes and effects of their own intellect, motivation, emotions, action, and ambition. Maintaining awareness of one's level of comprehension, learning or understanding, is part of this skill. Students' monitoring of their emotion and motivation has been recognized as important aspects of self- regulated learning (Miele and Scholer, 2018).

2.8.2 Self- Control

Self- control skill is defined as voluntary management or regulation of emotions, attention and behavior in service of individually valued standards and goals (Duckworth, 2012). According to Baumeister, Vohs, and Tice (2007) self- control refers to the tendency to change self- responses, particularly to align them with ideas, social expectations, values, morals, and, to support the achievement of long-term goals. Self- control is a self- regulation skill that refers to one's ability to control behavior to avoid temptation and to achieve set goals. It also refers to resist undesirable behavior and to delay gratification.

Self- control is the alignment of feelings, thoughts and actions to achieve set goals. Self- control is all related self- contentiousness. It is self- initiated; it refers to students control on their action, for example, student using mobile phone out it away in order to concentrate on study show self- control of students. Self- control describes the recursive process by which response tendencies (impulses) are generated over time (Duckworth, 2019). Self- control is one of the best self- regulation and study skills. It has been shown that self- control predicts positive and good classroom behavior (Duckworth, 2019). Students who have self- control skill do not rely on parents and teacher more; they can govern conflicts by themselves. Students who have Self- control skill can easily concentrate themselves towards achieving their goals. Self- controlled students are hard to distract. The can concentrates on their study any time. Self- control skill helps students in studies, classroom behavior and homework completion (Duckworth, 2019).

According to Peterson and Seligman (2004), self- control is the ability of a person

maintains regulate his or her own actions in order to accomplish set goals. "Self- control directly impact desired students' outcome (Duckworth, 2012). According to Duckwoth (2012) self- control skill is more important than IQ in college students in predicting school attendance, performance, grades and achieving goals. Duckworth (2004) says that college students who have self- control skill are less likely to form bad habits. College students that have high level of self- control have better classroom behavior, they are more emotionally stable, have better interpersonal relationships than those with less self- control skill (Tangney). Low self- control in college students has been connected to falsehood, gambling, unhappiness and other bad habits (Williams & Williams, 2012). According to Duckworth & Gross, (2014) academic success, improved social relationships, emotional health, and less addictive behaviors are all the benefits of self- control.

The result of a study showed that college students who spend more time on academic and intellectual activities outside the classroom have higher level of self- control, and self- control level is lower in college students who spend more time socializing. Teachers have to motivate learners to spend more time on intellectual and academic activities and less time socializing (Sriram, Glanzer, & Allen, 2018).

2.8.3 Self- Evaluation

According to Yan and Brown (2017), self- evaluation refers to ability of students to analyses and identifies the quality of their academic performance, learning process, academic activities, and other actions. Self- evaluation helps students to improve their academic performance and achieve their set goals. Self- evaluation enables students to value and learn from teacher's feedback. Self- evaluation assists students in check the teacher's grading rubric, compare it to their own performance, analysing performance, and creating performance targets. Self- evaluation skill encourage students to foster deep learning strategies; such as goal setting, analyzing and material, organizing material and in depth understanding, self- management skills and enabling to use skills in new situation (Hattie & Donoghue 2016).

Self- evaluation is a skill through which a person attempts to comprehend and estimate the value of his or her own abilities. Self- evaluation is the process of determining one's own value or respect. In this situation, an individual compares her or his true self to her or his ideal self, and then determines how well she or he meets social

standards and expectations. Self- evaluation is concerned with skills that are the outcome of a combination of what a person wants to achieve and how they want to do it

Students must take an active role in their learning in order to receive this type of feedback, which may improve learning, accountability, and responsibility. According to Huxham (2007) self- evaluation provide feedback to students regarding their performance by comparing it to teachers' feedback. It helps students to overview and corrects their own work. It impact students learning positively (Gibbs and Taylor, 2016).

Self- evaluation is very important skill as it provides students feedback on the progress of their work toward goals, the success of specific techniques, and insight of their abilities or skills. Self- evaluation enables students to develop of inferences about their current status and progress toward their goals as a result of their examination (Wolters & Brady, (2020). Students might either conclude that they relatively perform well, and strive to make some good (if not excellent) development toward their goals, or that their implemented plans and progress toward their goals are not proceeding as expected. Self- evaluation enables learners to reassess their views about task, themselves, their tactics and their aims (Wolters & Brady, 2020).

2.8.4 Self- Reaction

Self- regulated learning is defined as the processes by which pupils think, feel, and act in ways that help them achieve their specific learning objectives or goals (Zimmerman, 2011).

Self- reaction refers to the various ways in which pupils react or reflect to the outcomes, goal, or consequences that arise after completion of assignment. This process includes learners' instant, and sometimes affective, reflexive, and motivational responses related with completing a task or obtaining feedback on their level of failure or failure success (Pintrich 2000; Zimmerman 2000). These psychological consequences are based on how students view their causal attributions in terms of focus, controllability, and stability, and involve students' emotional responses as well as their expectations for future task accomplishment. According to Zimmerman (2000) Self- reaction skill is significant because it has an impact on students' future goal-setting, planning, and motivation. Self- Reaction skill also comprises the improvement and production of meta-level information, attitude or beliefs prompted by feedback made when learners identify the results of their participation and compares them to set or standard criteria. Self-

reaction skill involves student's revision, confirmation or additions students' reaction also contains their revision, confirmation, or addition to their metacognitive knowledge with respect to plans, the tasks, or themselves as students (Wolters & Brady, 2020).

2.9 Related Studies with Self-Regulated Learning

Yang, Chen, and Chen (2018) performed a study aimed to identify the influence of SRL (self-regulated learning) on learners' academic performance and, the study also tested the influence of self-regulated learning on learners' prior knowledge. This study aimed to look at the differences in behaviour between students with high previous knowledge and those with little previous/ background knowledge in the context of SRL (self-regulated learning). The gap in learning performance between high previous learning of students and low prior learning students was found to close with further learning, and they used distinct self-regulated learning strategies. The research also discovered found a similarity in the phases of forethought and self-reflection across students with high previous knowledge and those with low prior knowledge. However, the study's findings revealed a difference in performance in the second phase of self-regulated learning, where students with poor prior knowledge were shown to be reliant on notes and quiz records but students having high prior knowledge were shown to be autonomous in this manner .

A study (Jouhari, Haghani, & Changiz, 2015) performed to find out the elements that influence self-regulated learning, namely the methods and skills that students use. This qualitative research discovered five primary elements that influence self-regulated learning. In conclusion, the factors influencing students' self-regulated learning suggest that facilitating elements can be used by students individually, while preventing elements' influence can be reduced.

2.10 Literature in Pakistani Context

Pakistani culture is diverse in many ways; however studies and student behavior are major challenges in schooling. One reason is health, as good mental and physical health is necessary for rich, logical thinking and reasoning (Arshad, Zaidi, & Mahmood, 2015). Cognition is inextricably tied to learning and education. According to Zimmerman (2000), students can learn more effectively if they have self-regulated learning skills. SRL provides the ability to understand independently and more effectively. Some research has been done in the setting of Pakistan.

Ahmad (2012) conducted a correlational study to investigate correlation between self-regulated learning and academic self-efficacy. Gender was the focus of the study, and the results revealed a close link between the two characteristics. Girls were also higher with academic self-efficacy, while boys were better at self-regulated learning, according to the findings.

A study was attempted to determine to “relationship between academic self-efficacy and personality traits. It was a quantitative correlational study. The finding indicated that agreeableness, conscientiousness, openness to experience has (positive) relationship with academic self-efficacy, and these all have negative correlation with neuroticism (Abdood *et al*, 2020).

A research studies was conducted by Akhtar and Mahmud (2013) the purpose of the study was to gather information regarding academic self-regulation and develop a scale on students’ academic self-regulation. 410 university students were selected as respondents. This scale contains five constructs of academic self-regulation; self-monitoring, self-planning, self-reaction, self-instruction, and self-evaluation. Whole scale internal consistency was recorded 0.83. This scale is used by the researcher for the present study as academic self-regulation skills scale to measure academic self-regulation skills of college level students.

2.11 Interconnection between personality traits and students self-regulation skills

A study conducted by Bidjerano and Dai (2016) on relationship of personality traits and self-regulation suggested that combinations of personality variables may be more important than individual personality variables when it comes to differences in self-regulated learning. Individuals high in conscientiousness and openness to experience are more likely to be self-regulated learners than those who are low in conscientiousness and openness to experience. Individuals low in neuroticism coupled with high agreeableness and conscientiousness are likely to be self-regulated learners, compared to individuals with different combinations of personality variables (Bidjerano and Dai, 2008).

Students with higher levels of conscientiousness and lower levels of neuroticism may be better able to manage their expectations of teachers and seek help from alternative sources compared to students with other combinations of conscientiousness and neuroticism (McLellan & Jackson, 2016).

The high level of self-regulation gives better opportunities for voluntary behavior regulation and control. The low level of self-regulation is an evidence of the more spontaneous and impulsive individual activity (Morosanova, 2013).

Among the higher-order dimensions of personality, conscientiousness is the most clearly relevant for self-regulation. Conscientiousness generally concerns the ways in which people characteristically manage their behavior. People who are high on conscientiousness are confident, disciplined, orderly, and planful, whereas people who are low on conscientiousness are not confident in their ability to control their behavior and are spontaneous, distractible and the characteristic are sternly linked with self-regulation (Hoyle, 2006)

2.11 Overview of Research Variables (Relationship between Personality Traits and Self- Regulation Skills)

A study was conducted on the relationship between personality traits and self-regulated learning strategies in New York by Temi Bidjaro and David Yun Di in 2007, the population of the study was 219 under graduate students 28% male and 72% female. Results revealed that significant correlation between personality traits (openness and conscientiousness) and self- regulated strategies (Bidjerano & Dai, 2007).

A study was done to investigate the correlation among academic achievement, SRL strategies and the “Big Five model of personality”. The study’s main objective was to determine at the correlation in personality traits, SRL (self- regulated learning), and students’ academic performance. The study’s second main objective was to check if the personality model; big five factors and self- regulated learning dimensions could be used to predict students’ academic achievement. The findings of this study suggest that adopting self- regulated learning techniques and four personality traits (extraversion, openness, agreeableness, and conscientiousness) influence academic achievement. Personality traits are predicted by self- regulated learning. Self- regulating learners perform well in their academic than non-self- regulated learners. Because the self-regulated learners are active students support learning and increase academic performance at any level by establishing suitable and appropriate environment, learning time and place management, ask for help from peers of similar ages, and the selection of tough activities and intrinsic motivation. These pupils also demonstrate a high level of self- efficacy and skills, as well as a commitment to their goals and enjoyment of their achievements. The

results this research study showed significant difference in academic achievement of female and male students, high mean score of male students was recorded that showed that male students are better in academic performance than female students. No significant gender base difference was found in SRL and personality traits (Babakhani, 2014).

Self- Regulated learning appears to be linked to a variety of personality factors. Individual differences which are consistent over settings or time explain individual characteristics of cognition, conduct, feelings emotions and actions are known as personality traits. Openness to experiences is associated to constructive and elaborative learning, while conscientiousness is favorably related to efforts, consistency, SRL, analytic learning and motivation. Conscientiousness and openness to new experiences were associated to metacognitive and elaborative learning methods, as well as higher use of time management and effort control strategies (Bidjerano & Dai, 2007). Effective learning styles that include SRL skills are associated with conscientiousness and openness to new experiences, and are thus favorably related to academic accomplishment. Personality trait extroversion may support effective learning because social activities such as asking help are likely to be encouraged; however, extraverted pupils appear to have fewer insightful problem-solving skills (Matthews, 1997). In the case of personality characteristic emotional instability, Bidjerano and Dai (2007) found that being neurotic has a detrimental impact on learning and is negatively associated to academic outcomes.

A qualitative study was carried out on topic “the role of self- regulation and its influence to academic achievement” by Jamaris and Hartati (2017) in Indonesia. The main aim was to find out the relation and influence of self- regulation on academic achievement of undergraduate learners. It was found that undergraduate learners are able to manage their academic self- regulation; they are able to regulate their selves. Undergraduate students plan their goals and they manage their behavior to achieve set or desired goals. Result of this study also revealed that undergraduate students have positive self- regulation; they plan their goals, focus on achieving their set goals. Under graduate students perform their academic activities well, they have skills like self- evaluation (evaluate their strengths and weaknesses), self- reaction, self- observation, self- monitoring. The result study also found the undergraduate students use self- regulated strategies and make positive efforts to accomplish their planned goal, and have positive self- efficacy (believe they can do).

A quantitative correlational study was performed by Hakimi, Hejazi and Lavasani (2011). The study aimed to determine relation of students' personality traits and academic achievement. 285 learners were selected for this study. It was found that that academic performance and personality traits were significantly correlated. Significance difference was found in male and female students regarding personality traits.

A study was carried out by Komarraju, Karau and Schmeck (2007) on "Role of personality traits in predicting college students' academic motivation and achievement". The result of the study showed that Conscientiousness, openness to experience, and agreeableness are the more common traits of college students. The study also revealed that conscientiousness, openness to experience positively affect student achievement as these personality traits are connected to students achievement.

A study as carried out by Viari, Rad and Torabi in 2012 aimed to check the impact of personality traits on academic performance on the mediating role of academic motivation". 250 college students were selected as respondents of the study. The findings revealed that more common trait of college student is conscientiousness. Findings of the study revealed that personality traits conscientiousness and openness to experience of college students positively affect students' academic performance.

A quantitative correlation study was carried out on in Germany. Data was collect from 270 university students and 567 college pupils. It was found that students who score high on conscientiousness is associated with higher performance (academic) of university and college pupils. The result of the study also showed that personality trait conscientiousness is positively linked with university and college students study satisfaction.

Dörrenbächer & Perels, (2016) investigated personality traits and SRL strategies using a survey sample of 337 undergraduate students, the study revealed that low levels of neuroticism moderately and highly predicted self-regulated learning components identified in students. Furthermore, the study revealed that higher levels of extraversion, conscientiousness, agreeableness, and openness in students predicted a moderate to high SRL strategies used by students.

Bruso (2019) found that students with extraversion, conscientiousness, agreeableness, and openness, but not neuroticism, predicted more frequent use of SRL strategies. Ghyasi *et al.* (2013) explored the relationship between personality types and

self-regulated learning strategies of language students in Iran. Using a sample of 231 undergraduate students, the study revealed that personality traits influenced the various learning strategies that students adopted. Particularly, the findings also showed that students who reported high on conscientiousness, in most cases, could use all strategies, especially when it came to managing time and study environment, and those who scored high on extraversion were more likely to use peer learning and other help-seeking strategies.

According to Mahama *et al.* (2022), personality trait plays significant role in students' engagement in the classroom, self-regulated learning. Personality traits such as openness, extraversion, conscientiousness, and agreeableness mostly predict aspects of self-regulated learning and academic engagement of students.

2.12 Chapter Summary

This chapter review of related literature included detailed definitions of the research variables personality traits and academic self-regulation skills. This chapter also covers the constructs of the research variables. The theoretical framework is explained in detail. Related theories were also included in this chapter. Personality traits are predicted by self-regulated learning. Self-regulating learners perform well in their academic than non-self-regulated learners. Because the self-regulated learners are active students support learning and increase academic performance at any level by establishing suitable and appropriate environment, learning time and place management, ask for help from peers of similar ages, and the selection of tough activities and intrinsic motivation. Majority of researchers who investigated the relationship between students' personality traits and self-regulated learning found that students with high levels of openness, conscientiousness, extraversion, and agreeableness exhibited behaviours of goal attainment, mindfulness, adjustment, proactiveness, and goal setting in their learning. Moreover, literature supports that these variables have been studied with other variables. This chapter also includes the literature related to research variables.

CHAPTER 3

RESEARCH MEHODOLOGY

3.1 Research Methodology

This study is an attempt to determine the relationship of students' personality traits and academic self-regulation skills at college level. This chapter includes research approach, research design, population of research study, sample size, sampling technique, instrumentation, details of instrumentation, ethical consideration, data collection procedure, data organization and data analysis.

3.2 Research Approach

Research Approach of this study was quantitative. A quantitative approach was used because this study determined the relationship between student's personality traits and academic self-regulation skills at college level. The current study has quantitative approach that investigates relationship between two variables by using statistics and numbers to explain and analyze the findings. This study includes data analysis; data was analyzed in numbers using mean, to identify the mean score of students' personality traits and academic self-regulation skills and independent sample *t* test. Step wise regression was done to find out relationship between variables.

3.3 Research Design

Research design is a framework which explains the research process of how research will be done. Research design refers to a plan of action and method throughout the research to attain the objectives. Research design of the current study is descriptive correlational research design. Present study investigated the relationship of students' personality traits and academic self-regulation skills. Data was collected through close ended questionnaire and to draw conclusions, collected data were converted into numeric form by using statistical application.

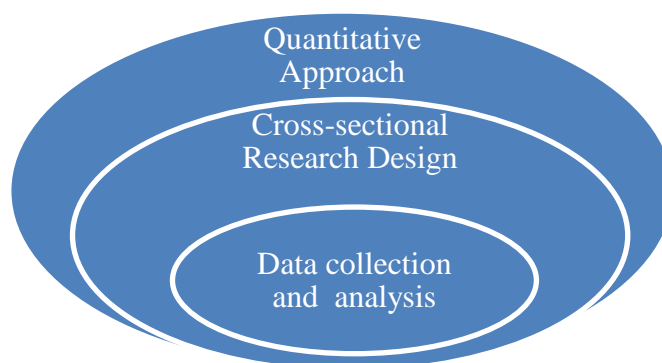


Figure 3.1 Research Design

3.4 Population of the Study

All college level students of District Dir (lower) Khybar Pakhtunkhwah (KP) was the population of the study. All government students of public colleges of district Dir was the population of this study.

Table no 3.1

Population of the college students in Dir lower

District	Gender	No of Colleges	Total no of students
Dir Lower	Male	7	4699
	Female	5	

3.5 Sample of the Study

The sample of the study was 600 students of 10 public colleges at District Dir. lower KP. Five male and five female of public colleges was sample of the study. List of names of Public colleges at District Dir. Lower is attached in Annexure.

Table no 3.2

Sample of the college students at district Dir

District	Gender	No of Colleges	Sample of Colleges	Total no of colleges
Dir Lower	Male	7	5	4699
	Female	5	5	

Table no 3.2 showed sample of the study. Total 10 colleges were included in this research study. 5 male colleges and 5 female colleges were included in the study.

3.6 Sampling Technique

It is usually impossible to have access to all the participants of research population therefore the researcher select a sample size from whole population of research study, for the selection of participants of sample, the researchers use simple random sampling technique. Simple random sampling technique was used as sampling technique of the study. This technique was chosen because the sample of this study is college male and female students, the population size is greater simple random sampling technique is better to use.

3.7 Sample size

Table No 3.3

Detail of sample size of college students in Dir lower

Variables	Total population	Calculated sample size	Returned responses (response rate)
Male	2700	300	218
Female	1,399	300	292
College students	4699	600 (14%)	510 (12%)

Table no 3.3 showed that total population of the research study was 4099. Total sample was 600 which were 14% of the total population. 300 questionnaires were distributed among male students and 300 questionnaires were distributed in female students. The returned responses were 510 which were 12% of the total population. The returned response rate was 85%.

3.8 Instrumentation

Two questionnaires were used for data collection.

BFFS (Big Five Factor Scale)

To measure personality traits the researcher adapted Big Five Factor Scale, five point likert scales of DeYoung, Quilty, & Peterson, (2007). This scale contains five constructs (Openness _to _experience, conscientiousness, extroversion, agreeableness and neuroticism and 50 items. Each construct has 10 items. The author has granted permission to the researcher. Permission letter is attached in annexure.

ASRSS (Academic self- regulation skills Scale)

To measure students' academic self- regulation skills the researcher Academic self- regulation skills scale (ASRSS) developed by Akhtar & Mahmood 2013. This scale is consisting of 31 Items. The author granted permission to the researcher through email. Permission letter is attached in annexure.

Table no 3.4

Details of Big Five Factors Scale

Tool	Constructs	Statements	Total Items
	Openness to experience	1,2,3,4,5,6,7,8,9,10.	
	Conscientiousness	1,2,3,4,5,6,7,8,9,10.	
BFFS	Extraversion	. 1,2,3,4,5,6,7,8,9,10.	50
	Agreeableness	1,2,3,4,5,6,7,8,9,10.	
	Neuroticism	1,2,3,4,5,6,7,8,9,10.	

Big five factors scale consists of five constructs (openness to experience, conscientiousness, extroversion, agreeableness and neuroticism) and 50 items. Each construct has ten items.

Table No 3.5

Details of Academic self- regulation skills scale

Tool	Constructs	Statements	Total Items
ASRS	Self- planning	1,4,5,6,8,9,11,12,14	
	Self- monitoring	2, 21, 28, 29, 30,31	
	Self- control	3, 10, 13, 16, 19	31
	Self- evaluation	7, 15, 17, 24, 25, 26	
	Self- reaction	18,20, 22, 23, 27	

Academic self- regulation skills scale is consists of five constructs and 31 statements. Self- planning has nine statements, self- monitoring has six statements, self- control has five statements, self- evaluation has six statements and self- reaction has five statements

3.9 Validity of the Tool

The validation of every research instrument is very important. In the current research study two close ended questionnaires were used to measure the variables. The questionnaires were validated from five experts. Validity certificates are attached in the annexure. The expert suggested some changes which were incorporated at the time.

Table No. 3.6

Expert suggestions on tool during validation

Sr.No	Name of Expert	Suggestions
1	Dr. Saira Nudrat Assistant professor (Education Department NUML Islamabad)	She suggested to improve language and grammatical mistakes in some items.
2	Dr. Iqbal Amin Khan Lecturer (Education	He suggested to give a code to each item. So items were given codes accordingly.

	Department UOM)	
3	Dr. Asghar Ali Assistant professor (Education Department UOM)	He suggested the researcher to change items into easy language and change difficult words. He also suggested to define each construct in questionnaire to make it easy for the respondent.
4	Dr. Iqbal Ahmad Shah Assistant professor (Education Department UOM)	He recommended removing double-statement items and make separate statements of few items of the questionnaire.
5.	Dr. Shazia Zameer Assistant Professor (Education department NUML Islamabad)	She recommended changing the sentence structure of few items. She also suggested removing repetition of items.

The researcher incorporated all the suggestions given by the respected validators and got the signed certificates. The certificates are attached in annexure (Appendix-E).

3.10 Pilot Testing

Pilot testing is very important step of checking reliability of the tool. It helps in checking the reliability of the tool (Afzal, 2020). Pilot testing is very important before actual data collection because pilot testing helps in bringing refinement in instrument and check whether respondents are having any difficulties in answering the items or not (Afzal, 2020). The researcher distributed 125 questionnaires among college level students, 110 valid responses were obtained. Therefore pilot testing was done with 110 responses.

3.11 Reliability of the Instruments

Table no 3.7

Cronbach's Alpha of Big Five Factor Scale (N=50)

No of Item	Cronbach's Alpha
50	.803

A reliability analysis was carried out on the big five factor scale that contains 50 items (BFFS=50). Cronbach's value is .803 which is above 0.70. It shows that the questionnaire reach acceptable reliability, $\alpha = 0.803$. As $\alpha = 0.803$ thus this tool is reliable and well-constructed enough to collect data.

Table no 3.8

Cornbach's Alpha of Academic self- regulation scale (N=31)

No of Item	Cronbach's Alpha
31	.811

A reliability analysis was carried out on the academic self- regulation scale that contains 31 items. Cronbach's value is .811 which is above 0.70. It shows that the questionnaire reach acceptable reliability, $\alpha = 0.811$. This tool is reliable and well-constructed enough to collect data. The instrument (questionnaire) was divided into two constructs; each construct has five sub constructs). Total number of items is 81.

Table No 3.9

Cornbach's Alpha coefficient of constructs of Big five Factor scale (N=50)

Variable	Construct	Items	Cornbach's alpha
	Openness to experience	10	.702
	Conscientiousness	10	.764
Personality Trait	Extraversion	10	.733
	Agreeableness	10	.744
	Neuroticism	10	.762

This table showed the cronbach's alpha reliability for the constructs of big five factor scale. The scale contained five constructs. Each construct has 10 items. Cronbach's value for Openness to experience is recorded .702, .764 for conscientiousness, .733 for extraversion, .744 Agreeableness, and .762 is recorded for Neuroticism.

Table No 3.10

Cornbach's Alpha of coefficient constructs of Academic self- regulation skills scale (N=31)

Variable	Constructs	Items	Cornbach's alpha
Academic self- regulation skills	Self- planning	9	.778
	Self- monitoring	6	.704
	Self- control	5	.720
	Self- evaluation	6	.784
	Self- reaction	5	.792

This table showed the cronbach's alpha reliability for the constructs of academic self- regulation skills scale. The scale contained five constructs. Cronbach's value for self- planning is recorded .778, .704 is recorded for self- monitoring, .720 for self- control, .784 self- evaluation, and .792 is recorded for self- reaction.

Table 3.11

Inter scale correlation of constructs of Big Factor scale

Variables	Openness to Experience.	Conscientiousness	Extraversion.	Agreeableness.	Neuroticism.
Openness to experience	1				
Conscientiousness	.186**	1			
Extraversion	.140**	.127**	1		
Agreeableness	.154**	.170**	.217**	1	
Neuroticism	.131**	-.161**	.240**	.134**	1

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

Table no 3.11 shows inter section correlation of constructs of personality traits. Highest inter section correlation was found between neuroticism and extroversion (.240**) and between agreeableness and extroversion which is .217** while lowest intersection correlation was found between extroversion and conscientiousness (.127**). The correlation between all the sub scales was statistically significant.

Table 3.12

Inter scale correlation of (ASRSS)academicself- regulation skills scale

Constructs	Self- Planning.	Self- monitoring.	Self- Control.	Self- Evaluation.	Self- Reaction.
Self- Planning	1				
Self- monitoring	.407**	1			
Self- Control	-.152**	.015	1		
Self- Evaluation	-.155**	-.106*	.089*	1	
Self- Reaction	.318**	.347**	.005	-.003	1

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

Table no 3.12 shows inter section correlation of constructs of academic self-regulation skills. Highest inter section correlation was found between self- monitoring and self- planning (.407**) while lowest inter section correlation was found between self-reaction and self-evaluation (-.003).

Table No 3.13

Intersection correlation between Big Five Factor scale and Academic Self- regulation Skills Scale

	Openness to Experience	Conscientiousness	Extroversion.	Agreeableness.	Neuroticism.	Self- Planning.	Self- Monitoring.	Self- Control.	Self- Evaluation.	Self- Reaction.
Openness to Experience	1									
Conscientiousness	.186**	1								
Extroversion	.140**	.127**	1							
Agreeableness	.154**	.170**	.217**	1						
Neuroticism	.131**	-.161**	.240**	.134**	1					
Self- Planning	.020	.300**	-.048	.051	-.289**	1				
Self- Monitoring	.034	.207**	-.059	.103*	-.175**	.407**	1			
Self- Control	.108*	.060	.143**	.073	.214**	-.152**	.015	1		
Self- Evaluation	.119**	-.060	.201**	.159**	.227**	-.155**	-.106*	.089*	1	
Self- Reaction	.083	.017	.106*	.040	.038	.318**	.347**	.005	-.003	1

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

Table no 3.143 portrays intersection correlation between all the construct personality traits and academic self-regulation skills. Highest correlation was found between self- monitoring and self (.407**) while the lowest correlation was found between self-reaction and self-evaluation (-.003).

Table 3.14

Item correlation of BFFS and ASRSS Item Correlation (N=81)

Items	Correlation	Items	Correlation	Items	Correlation
O1	-.217**	E8	-.118**	SP5	.124**
O2	.120**	E9	-.027	SP6	.138**
O3	-.105*	E10	-.094*	SE7	-.001
O4	.065**	A1	-.143**	SP8	.124**
O5	.022	A2	.093**	SP9	.138**
O6	.160**	A3	.084*	SP10	-.043
O7	.022*	A4	-.107*	SP11	.186**
O8	.056*	A5	.211*	SC12	.121**
O9	-.063	A6	.123**	SC13	-.106*
O10	-.020*	A7	.157**	SE14	.087*
C1	.253**	A8	.209**	SE15	-.091*
C2	-.045	A9	.173**	SC16	-.121**
C3	.069*	A10	-.028*	SR.17	.173**
C4	.239**	N1	-.148**	SR.18	.194**
C5	.149**	N2	-.164**	SC19	.109*
C6	.098*	N3	-.155**	SR20	-.156**
C7	.151**	N4	-.140**	SM21	.157**
C8	.235**	N5	-.091**	SR22	.156**
C9	.102**	N6	-.050	SR23	-.252**
C10	.217**	N7	-.090**	SE24	-.148**
E1	.113**	N8	-.174*	SE25	-.148**
E2	-.167**	N9	-.120**	SR26	-.142**
E3	.139*	N10	-.154**	SM27	.202*

E4	-.128**	SP1	.098*	SM28	.089*
E5	.191**	SM2	.146**	SM29	.016
E6	.096*	SC3	.163**	SM.30	.114*
E7	.098*	SP4	.072	SM.31	.101*

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

Note. O= Openness to experience, C= Conscientiousness, E=Extroversion, A=Agreeableness, N= Neuroticism, SR= Self- regulation.

3.12 Data Collection Procedure

To a researcher data collection is a process of gathering data through a research tool from selected population and to analyze that data in order to draw findings and conclusion.

Data was collected by personal administration of the questionnaire so that valid and reliable data may be collected. Two close ended questionnaires were used. ASRSS was used to measure Self- regulation skills of students and BFFS was used to measure personality traits of students.

Before collected the final data for the current study, the researcher requested department of educational science, FSS NUML, to give an endorsement latter for data collection (attached in annexure). The researcher personally visited and administered the questionnaires to get reliable data. Permission letter were distributed among principals before data collection to get permission. 600 questionnaires were distributed among male and female college level students. The researcher personally distributed and explained the questionnaire to students. The returned response rate was 85%. Some questionnaires were unfilled.

3.13 Data Analysis

Data was analyzed by using SPSS. Mean test was applied to check the mean score. Regression test were applied to check the relationship between Students' personality traits and academic self- regulation skills of students. To examine the difference between male and female college_students regarding academic self- regulation skills and personality traits independent sample t- test was applied.

Table No 3.15

Details of research objectives, hypothesis and statistical tests

Objectives	Research Hypothesis	Statistical test	Assumption
Objectives 1 To assess the level of personality traits in college level students		Mean	To assess the mean score of personality traits.
Objectives 2 To assess the level academic self-regulation skills at college level students		Mean	To assess the 1 mean score of academic self regulation skills.
Objectives 3 To determine the relationship between students' personality traits and academic self-regulation skills of college level students.	H ₀ 1 There is no significant relationship between students' personality traits and academic self-regulation skills	Regression	To find out the relationship between students personality traits and academic self-regulation skills.
Objectives 4a To compare	H ₀ 2a	t-test	To find out difference between

personality traits of male and female students	There is no significant difference in students' personality traits of male and female college students	t-test	personality traits of male and female students.
Objectives 4b To compare academic self-regulation skills of male and female students	H ₀ 2b There is no significant difference in students' academic self-regulation skills of male and female college students	t-test	To compare mean score difference of male and female students regarding academic self-regulation skills.

3.14 Research Ethics

Research ethics is defined as the norms, values, and official or organisational arrangements that help to regulate and constitute scientific activities. The codification of scientific morals in practise is referred to as research ethics.. The researcher followed research ethics while conducting this study.

The researcher requested the experts for the validation of the tool. The researcher got endorsement letter from the department of Educational Science NUML to collect the data. Before data collection the researcher personally visited the college and granted permission from the principles to collect data from the students. The researcher did not ask any unethical questions from the respondents. The researcher personally administered the questionnaire and directed the students properly.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

Chapter four is the most important part a research study. It is consists of data analysis and data interpretation. This research study investigated the relationship of student's personality traits and academic self- regulation skills at college level. Data were collected from college level male and female students. Statistical test (Mean, independent sample t test correlation, and regression) were applied to analyze the data. This chapter includes two major sections. Section 1 is about the descriptive analysis and section 2 is about inferential data analyses. Four descriptive variables were added which is further analyzed through applying frequencies. Four statistical tests were used in order to achieve the findings of objectives. The results of the tests were mentioned and interpreted in the tables.

4.2 Section 1

4.2.1 Descriptive Analysis and Interpretation

Table No 4.1

Demographic sample data of college of male and female students (N=510)

Gender	<i>f</i>	%
Male	218	42.7%
Female	292	57.3%
Total	510	100%

This table illustrates the gender wise distribution of respondents. This table shows that 42.7% (218) respondents were male students and 57.3% (292) respondents were female students. The total number of students was 510.

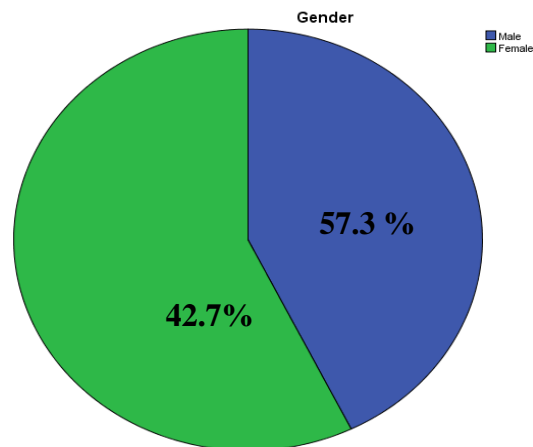


Fig:4.1 Gender based division of college level students

Table No 4.2

Demographic sample data of college students with respect to age (N=510)

Age Range	<i>f</i>	%
15-17(years)	305	59.8%
18-20 (years)	199	39.0%
21-23 (years)	6	1.2%
Total	510	100%

This table illustrates the age wise distribution of students. Age ranges from 15-17 years, 18-20 years and 21-23 years. This table shows that 59.8% (305) students were from 15-18 years, and 39.0% (199) students were from 19-21years and 1.2% (6) students were from 22-24 years. The total number of students was 510.

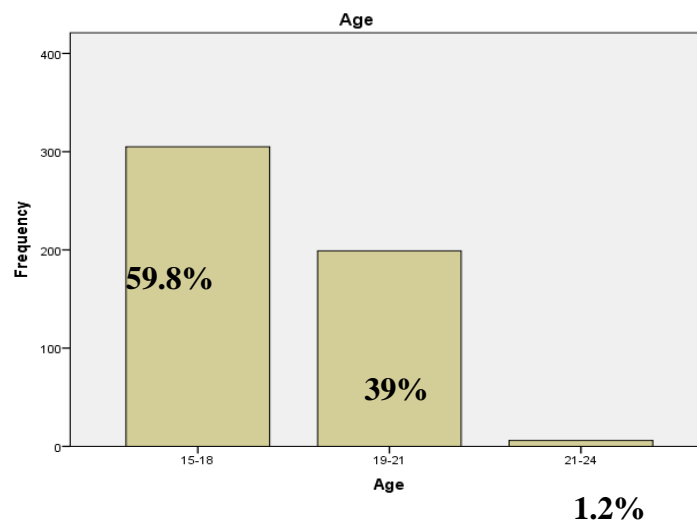


Fig:4.2 Division of college level students with respect to age

Table No 4.3

Program wise demographics data of college students (N=510)

Sr. No	Program	<i>f</i>	%
1	Arts	242	47.5%
2	Pre-Medical	211	41.4%
3	Pre-Engineering	32	6.3%
4	Computer Science	25	4.9%
	Total	510	100%

This table illustrates the program wise distribution of students. 47.5% responded were from Arts, 41.4% were from Pre-medical, 6.3% students were from pre engineering and 4.9% students were computer science program.

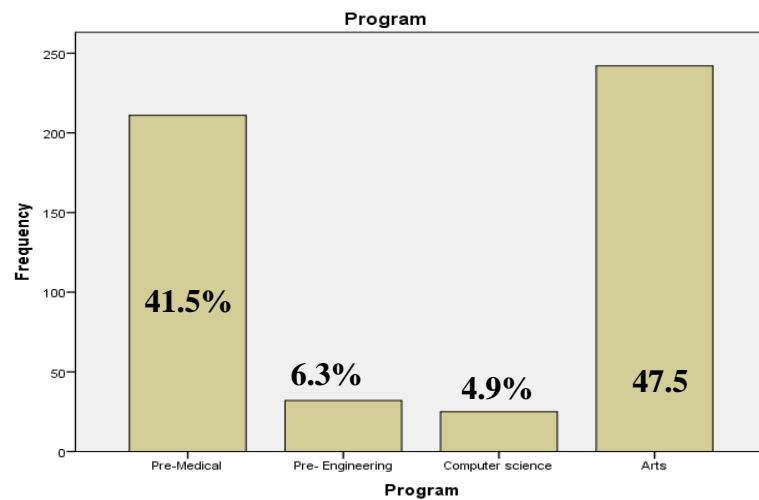


Fig:4.3 Program wise division of college level students

Table No 4.4

Locality wise demographic of sample data of college students (N=510)

Locality	<i>f</i>	%
Urban	232	45.5%
Rural	278	54.5%
Total	510	100%

This table illustrates the locality wise distribution of college students. This table shows that urban students were 45.5% and students from rural locality were 54.5%.

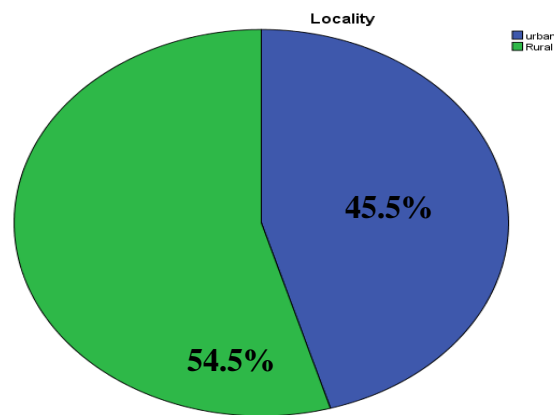


Fig:4.4 Locality based division of college level students

4.2.2 Inferential Data Analysis and Interpretation

Objective No 1

To assess the level of personality traits in college level students

Table 4.5

Level of personality traits (openness, conscientiousness, extroversion, agreeableness and neuroticism) in college level students (N=510)

S/No	Variable	Mean	Remarks
1	Openness	3.51	Agree
2	Conscientiousness	3.91	Agree
3	Extroversion	3.17	Neutral
4	Agreeableness	3.45	Neutral
5	Neuroticism	2.77	Neutral
	Overall Personality traits	3.36	Neutral

Table no 4.5 indicates the mean value of personality traits of college level student. Personality traits have five constructs. The mean score value ranges from 2.77 to 3.91. The mean score value for personality trait openness is recorded 3.51; it means that college level students were agreed with this trait of personality. Second construct is conscientiousness, the mean score value for conscientiousness is recorded 3.91, which is the highest value of the table; it means that most of the college level students were nearly agreed which means that they are having this personality trait. The mean score value for personality trait extroversion is recorded 3.17, it means that majority of the students were neutral with this traits of personality. The mean score value for personality trait agreeableness is recorded 3.45, which shows that majority of college level students were neutral with this trait of personality. Neuroticism is the fifth trait of personality, the mean score value recorded for this trait was 2.77, it shows that majority of college level student were nearly neutral about this trait of personality. Table no 4.5 also showed the overall mean score for Personality traits, which is recorded 3.36.

Objective No 2

To assess the level of academic self- regulation skills at college level students

Table no 4.6

Level of Academic self- regulation Skills in college level students (N=50)

S/No	Variable	Mean	Remarks
1	Self- planning.	4.18	Agree
2	Self- monitoring.	4.39	Agree
3	Self- control.	3.14	Neutral
4	Self- Evaluation.	2.89	Neutral
5	Self –Reaction.	2.98	Neutral
	Overall Academic self- regulation skills.	3.52	Agree

Table no 4.6 portrays the mean value of academic self- regulation skills of college level student. Academic self- regulation skills have five constructs. The mean score value ranges from 2.89 to 4.39. The mean value for self- planning is recorded 4.18; it means that college level students were agreed with construct self- planning, they use self- planning skills. Second construct was self- monitoring. The mean score for self- monitoring skill were recorded 4.39, which is the highest value of the table; it means that college students are agreed with self- monitoring skill. The mean score value for self- control (academic self- regulation skill) was recorded 3.14. It means that college level students were neutral about self- control skill. 2.89 mean score value is recorded for self- evaluation skill that means that college level students were nearly undecided about self- evaluation skill. Similarly to self- control 2.98 mean score value is recorded for self- evaluation skill that means that students were neutral on this skill of academic self- regulation skills.

The overall mean score for variable academic self- regulation skill was recorded 3.52 which mean that college level students were nearly agreed to all the items of academic self- regulation skills.

Objective No 3: To determine the relationship between students' personality traits and academic self- regulation skills of college level students.

Ho₁: There is no significant relationship between students' personality traits and academic self- regulation skills.

Step wise regression was followed to test the above hypothesis. First correlation was checked between two variables. Regression was done on the basis of correlation result. Correlation was applied in order to find the relationship between two variables while regression was applied to see how one variable affects the other.

Step 1

Table No 4.7

Correlation of personality-traits and academic self- regulation skills of college level students (N=510)

Variables	Relationship (r)	Sig (2-tailed)
Personality Traits and Academic self- regulation	.228**	.000

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

Table no 4.7 portrays the Pearson correlation coefficient (r) between personality traits and academic self- regulation skills of college level students. The table shows correlation between two variable is $r = .228^{**}$ and significance value $p = .000$. The value of r shows and p shows that there is positive significant relationship between personality traits and academic self- regulation skills of college level students. So the null hypothesis is rejected. It is concluded that ASRS increase with the increase of personality traits. On the basis correlation of personality traits and academic self- regulation skills regression is done.

Step 2

Regression

Table No 4.8

Relationship of student's personality traits and academic self- regulation skills of college level students (N=510)

Independent Variable	Dependent variable	R Square	β (Coefficient)	t	Sig
Personality Traits	Academic self- regulation skills	.052	.228	17.06	.000

$P < 0.05$

Table no 4.8 showed that R Square value (.052) represents 5% effect of personality traits on academic self- regulation skills. However β value was found .228 which showed positive relationship between personality traits and academic self- regulation skills of students. This relationship was found statistically significant ($p=.000$). Thus the null hypothesis is rejected. It is concluded that academic self- regulation skills of college level students increase with the increase of personality traits.

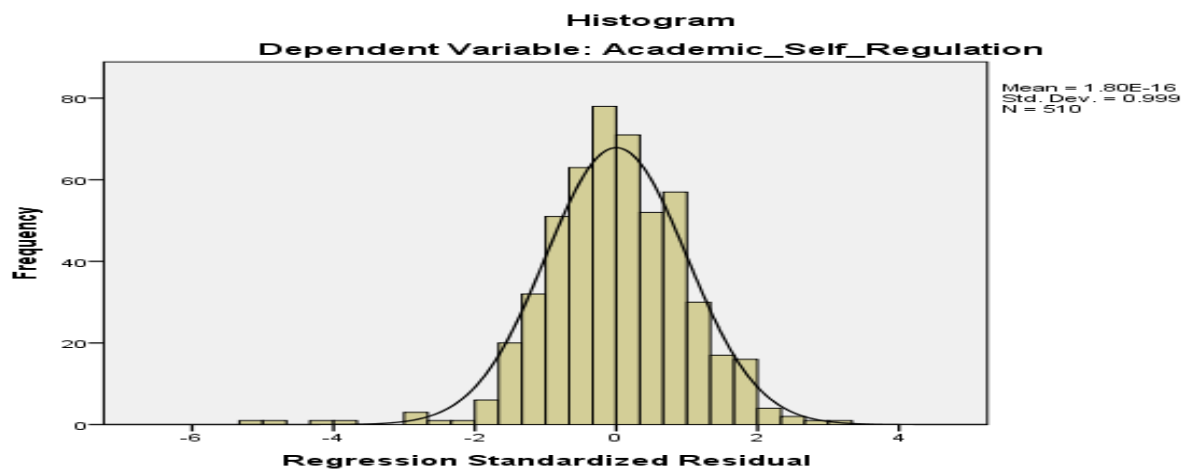


Fig: 4.5 Graphical description of Regression

Ho_{1a}: There is no statistical significant relationship between student's openness to experience and academic self- regulation skills at college level.

Table No 4.9

Correlation of openness to experience and academic self- regulation skills at college level students

Variables	Relationship (<i>r</i>)	Sig (2-tailed)
Openness to experience and Academic self- regulation skills	.159**	.000

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

Table no 4.9 portrays the Pearson correlation coefficient (*r*) between personality trait openness to experience and academic self- regulation skills of college level students. The table shows correlation between two variable is $r = .159^{**}$ and significance value $p = .000$. The value of *r* shows and *p* shows positive significant relationship between personality trait openness to experience and academic self- regulation skills of college level students. So the null hypothesis is rejected. It is concluded that academic self- regulation skills of college students increase with the increase of personality trait openness to experience.

Table No 4.10

Relationship of students' openness to experience and academic self- regulation skills at college level

Independent Variable	Dependent Variable	R Square	β	<i>t</i>	Sig(2-tailed)
Openness to experience	ASRS	.025	.159	31.14	.000

P < 0.05

Table no 4.10 portrays R Square value (.025) that denotes 2% effect of openness to experience on academic self- regulation skills. However β value was found .159 which showed positive relationship between the two variables. This relationship was found statistically significant ($p=.000$). Thus the null hypothesis is rejected.

H_{01b}: There is no statistical significant relationship between student's personality trait conscientiousness and academic self- regulation skills at college level.

Table No 4.11

Correlation of conscientiousness and academic self- regulation skills at college level students

Variables	Relationship (<i>r</i>)	Sig (2-tailed)
Conscientiousness and Academic self- regulation skills	.190**	.000

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

Table no 4.11 portrays the Pearson correlation coefficient (*r*) between personality trait conscientiousness and academic self- regulation skills of college level students. The table shows correlation between two variable is $r = .190^{**}$ and significance value $p = .000$. The value of *r* and *p* show that there is positive significant relationship between personality trait conscientiousness and academic self- regulation skills of college level students. So the null hypothesis is rejected. It is concluded that academic self- regulation skills of college students increase with the increase of personality trait conscientiousness.

Regression

Table No 4.12

Relationship of students' conscientiousness and academic self- regulation skills at college level

Independent Variable	Dependent Variable	R Square	β	<i>t</i>	Sig(2-tailed)
Conscientiousness	ASRS	.036	.190	27.43	.000

p < 0.05

Table no 4.12 reveals the R Square value (.036) denotes 3% effect of conscientiousness on academic self- regulation skills. However β value was recorded .190 which showed positive relationship between conscientiousness and academic self- regulation skills of students. This relationship was found statistically significant ($p=.000$). Thus the null hypothesis is rejected.

H_{01c}: There is no statistical significant relationship between student's personality trait extroversion and academic self- regulation skills at college level.

Table No 4.13

Correlation of extroversion and academic self- regulation skills at college level students

Variables	Relationship (r)	Sig (2-tailed)
Extroversion and Academic self- regulation skills	.139**	.002

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

Table no 4.13 portrays the Pearson correlation coefficient (r) between personality trait extroversion and academic self- regulation skills of college level students. The table shows correlation between two variable is $r = .139^{**}$ and significance value $p = .002$. The value of r and p show that there is positive significant relationship between personality trait extroversion and academic self- regulation skills of college level students. So the null hypothesis is rejected. This is concluded that academic self- regulation skills of college students increase with the increase of personality trait extroversion.

Table No 4.14

Relationship of students' extroversion and academic self- regulation skills at college level

Independent Variable	Dependent Variable	R Square	β	t	Sig(2-tailed)
Extroversion	ASRS	.019	.139	37.44	.002

p < 0.05

Table no 4.14 indicates the R Square value (.019) that denotes .01% effect of extroversion on academic self- regulation skills. However β value was recorded .139 which showed positive relationship between extroversion and academic self- regulation skills of students. This relationship was found statistically significant ($p=.000$). Thus the null hypothesis is rejected.

H_{01d}: There is no statistical significant relationship between student's personality trait agreeableness and academic self- regulation skills at college level.

Table No 4.15

Correlation of agreeableness and academic self- regulation skills at college level students

Variables	Relationship (r)	Sig (2-tailed)
Agreeableness and Academic self- regulation skills	.159**	.000

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

Table no 4.15 portrays the Pearson correlation coefficient (r) between personality trait agreeableness and academic self- regulation skills of college level students. The table shows correlation between two variable is $r = .159^{**}$ and significance value $p = .000$. The value of r and p show that there is positive significant relationship between personality trait agreeableness and academic self- regulation skills of college level students. So the null hypothesis is rejected. It is concluded that academic self- regulation skills of college students increase with the increase of personality trait agreeableness.

Table No 4.16

Relationship of students' agreeableness and academic self- regulation skills at college level

Independent Variable	Dependent Variable	R Square	β	t	Sig(2-tailed)
Agreeableness	ASRS	.025	.159	27.58	.000

P < 0.05

Table no 4.16 indicates the R Square value (.025) that denotes 2% effect of agreeableness on academic self- regulation skills. However β value (.159) which showed positive relationship between agreeableness and academic self- regulation skills of students. This relationship was found statistically significant ($p = .000$). Thus the null hypothesis is rejected.

H_{01e} : There is no statistical significant relationship between student's personality trait neuroticism and academic self- regulation skills at college level.

Table No 4.17

Correlation of neuroticism and academic self- regulation skills at college level students

Variables	Relationship (r)	Sig (2-tailed)
Neuroticism and Academic self- regulation skills	-.289**	.000

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

Table no 4.17 portrays the Pearson correlation coefficient (r) between personality trait neuroticism and academic self- regulation skills of college level students. The table shows correlation between two variable is $r = -.289^{**}$ and significance value $p = .000$. The value of r and p show that there is negative significant relationship between personality trait neuroticism and academic self- regulation skills of college level students. So the null hypothesis is rejected. It is concluded that academic self- regulation skills of college students decrease with the increase of personality trait neuroticism.

Table No 4.18

Relationship of students' neuroticism and academic self- regulation skills at college level

Independent Variable	Dependent Variable	R Square	β	t	Sig(2-tailed)
Neuroticism	ASRS	.084	-.289	44.93	.000

P < 0.05

Table no 4.18 indicates the R Square value (.084) that denotes 8% effect of neuroticism on academic self- regulation skills. However β value (-.289) which showed negative relationship between neuroticism and academic self- regulation skills of students. This relationship was found statistically significant ($p=.000$). Thus the null hypothesis is rejected.

Objective no 4: To compare personality traits academic self- regulation skills of male and female students at college level.

H02.1: There is no significant difference in students' personality traits of male and female college students

Table No 4.19

Gender wise comparison of students with respect to personality trait at college level (N=510)

Variable	Groups	N	Mean	t	df	Sig
Personality Traits	Male	218	171.4	4.483	508	.000
	Female	292	165.9			

$p=.05$

Table 4.19 portrays gender based comparison of personality traits of college level students. Independent sample *t* test was applied to compare the difference in the mean score of male and female students regarding personality traits. It showed that showed gender wise comparison of student's personality traits at college level. This table shows that the mean score value of male students is 171.4 while the mean score value of female students is 167.9. The *t* value (4.483) and significance value (*p*) is .000 which is less than 0.05. It is evident from the table that there is difference in personality traits of male and female college students. Thus the null hypothesis is rejected at .05 confidence level. It is concluded that there is difference in male and female students regarding personality traits.

Table No 4.20

Gender wise comparison of students with respect to Academic self- regulation skills male and female students (N=510)

Variable	Groups	N	Mean	t	df	Sig
Academic Self- regulation skills	Male	218	102.2	2.167	508	.031
	Female	292	100.5			

$p=.05$

Table 4.20 showed gender wise comparison of Academic self- regulation skills of male and female students of college level students at college level. This table showed that *t* value (2.167) was found significant at .031. Thus the null hypothesis is rejected at .05 confidence level. It is concluded that there is difference in male and female students regarding academic self- regulation skills.

4.3 Chapter Summary

Chapter four data analysis and data interpretation comprises analyses part of research work. This chapter includes two sections; descriptive analysis and inferential analysis. Descriptive analysis has the interpretation and results of four demographic variables. While the inferential analysis section includes the interpretation and result of four research objectives. Mean test was applied for the first two objectives, the result showed that the level of personality trait conscientiousness and openness to experience is high than agreeableness, extroversion and neuroticism. The result of second objective showed that at college level student's use self- planning and self- monitoring more than the other three skills of academic self- regulation skills. H_{01} is rejected because positive significant relationship ($r = .228^{**}$) was found between students; personality traits and academic self- regulation skills.. On the basis of significant positive correlation value regression test was done. The results of regression test showed that there is statistically significant relationship between students' personality traits academic self- regulation skills. Personality traits; openness to experience, conscientiousness, extroversion and agreeableness have positive relationship with academic self- regulation skills while neuroticism has negative and significant relationship was found between personality trait neuroticism and academic self- regulation skills at college level. The results showed that there is statistically significant difference in personality traits of male and female students at college level. The result also showed that the t value of 2.167 which was found significant and showed statistically significant difference in academic self- regulation skills of male and female students.

CHAPTER 5

SUMMARY, FINDINGS, RESULTS DISCUSSION

CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

This study was an attempt to find out the relationship between students personality traits and academic self- regulation skills at college level. This study was having two variable, personality traits; an independent variable and academic self- regulation skills is a dependent variable. Each variable has five constructs. Main objective of the study were: to assess big five personality traits of college level students, to assess academic self- regulation skills of college level students, to determine the relationship between students personality traits and academic self- regulations skills, to compare personality traits and academic self- regulation skills of college level students. Two research questions were made for first two objectives and two hypotheses were made for the last two objectives. Two theories were used as a theoretical framework of the study (big five personality traits) by costa and mccare (1992) and, academic self- regulation skills by Zimmerman (2000).

This was a quantities descriptive correlational study. The population of the study was all the college level students of district Dir lower KP. Data were collected from 9 colleges, which included five male and four female colleges. Simple random sampling technique was used as sampling technique. Two close ended questionnaires were adapted to use as data collection tools/instruments. Mean, independent sample t test and regression statistical test were applied to analyze the data. Mean test was applied for the objectives, the result showed that the level of personality trait conscientiousness and openness to experience is high than agreeableness, extroversion and neuroticism. The result of second objective showed that at college level, students use self- planning anself- monitoring more than the other three skills of academic self- regulation skills. Regression tests were applied to find out relationship between two variables and independent sample t-test were applied to compare personality traits and academic self- regulation skills of male and female students at college level. The result of the finding indicated significant .228** correlation between personality traits and academic self- regulation skills of college level students. On the basis of significant positive correlation value regression test

was done. The result of the objective four showed that t value (4.483) was found significant at .05. So the result showed that there is statistically significant difference between personality traits of male and female students at college level. The result also showed that the t value of 2.167 which was found significant at .05, the null hypothesis was failed to accept and statistically significant in academic self- regulation skills of male and female students. Negative and significant relationship was found between personality trait neuroticism and academic self- regulation skills at college level.

5.2 Findings

5.2.1 Objective No 1

To assess the level of personality traits (openness, conscientiousness, extroversion, agreeableness and neuroticism) in college level students.

Table 4.5 showed the mean score results for personality trait openness. The table showed the mean score value 3.51 for personality trait openness. it was found that majority of the students were having personality trait openness.

Table 4.5 showed mean score value for personality trait conscientiousness. It was found that mean score value 3.91, the mean score value showed that majority of college level students were having personality trait conscientiousness.

Table 4.5 showed mean score value for personality trait extroversion. The mean score was found 3.17. Results showed that majority of college level students were neutral about personality trait extroversion.

Table 4.5 showed mean score value for personality trait agreeableness. The mean score value was found 3.45. Results showed that majority of college level students were neutral about personality trait agreeableness.

Table 4.5 showed mean score value for personality trait neuroticism. The mean score value was found 2.77. Results showed that majority of college level students were neutral about personality trait neuroticism.

The overall mean score for personality traits was found 3.36 in college level students which showed that students at college were neutral about personality traits.

5.2.2 Objective No 2

To assess the level of Academic self- regulation skills (self- planning self- monitoring, self- control, self- evaluation, and self- reaction) in college level students.

Table 4.6 showed the mean score results for academic self- regulation skill self- planning. The table showed the mean score value 4.18 for self- planning. It was found that majority of the college level students were having self- planning skill. Table 4.6 showed the mean score results for academic self- monitoring skill. The table showed the mean score value 4.39 for self- monitoring. It was found that majority of the college level students were having self- monitoring skill. The mean score results for academic self- regulation skill self- control. The table showed the mean score value 3.01 for self- control. It was found that majority of the students were neutral about self- control skill. Table 4.6 showed the mean score results for academic self- regulation skill self- evaluation. The table showed the mean score value 2.89 for self- evaluation. It was found that majority of the students were neutral about self- evaluation skill. Table 4.6 showed the mean score results for academic self- regulation skill self- reaction. The table showed the mean score value 2.98 for skill self- reaction. It was found that majority of the students were neutral about skill self- reaction skill.

The overall mean score for academic self- regulation skills was found 3.52 in college level students which showed that students at college were neutral about academic self- regulation skills.

5.2.3 Objective No 3

To determine the relationship between students personality traits and academic self- regulation skills at college level

Students personality traits and academic self- regulation skills have shown positive and significant correlation as $r=.228^{**}$. It was found those students' personality traits and academic self- regulation skills are positively and significantly correlated with academic self- regulation skills.

It was found that students' personality traits have 5% effect on academic self- regulation skills. However β value showed positive relationship between personality traits and academic self- regulation skills of students.

Objective No 3a

To determine relationship between openness to experience and academic self- regulation skills (self- planning, self- monitoring, self- control, self- evaluation and self- reaction) of college students.

Students openness to experience and academic self- regulation skills have shown positive and significant correlation as $r = .159^{**}$. It was found that students' personality trait openness to experience is positively and significantly correlated with academic self- regulation skills.

It was found that students' personality trait openness to experience has 2% effect of openness to experience on academic self- regulation skills. However β value showed significant positive relationship between the two variables.

Objective No 3b

To determine relationship between conscientiousness and academic self- regulation skills of college students

Students conscientiousness and academic self- regulation skills have shown positive and significant correlation as $r = .190^{**}$. It was found that students' personality trait conscientiousness is positively and significantly correlated with academic self- regulation skills.

It was found that students' personality trait conscientiousness has 3% effect on academic self- regulation skills. However β value showed positive relationship between conscientiousness and academic self- regulation skills of students. This relationship was found statistically significant ($p = .000$).

Objective No 3c

To determine relationship between extroversion and academic self- regulation skills of college students

Students extroversion and academic self- regulation skills have shown positive and significant correlation as $r = .139^{**}$. It was found that students' personality trait extroversion is positively and significantly correlated with academic self- regulation skills.

It was found that students' personality trait extroversion has .01% effect on academic self- regulation skills. However β value showed positive relationship between extroversion and academic self- regulation skills of students. This relationship was found statistically significant ($p=.000$).

Objective No 3d

To determine relationship between agreeableness and academic self- regulation skills of college students

Students agreeableness and academic self- regulation skills have shown positive and significant correlation as $r =.159^{**}$. It was found that students' personality trait agreeableness is positively and significantly correlated with academic self- regulation skills.

It was found that students' personality trait agreeableness denotes 2% effect on academic self- regulation skills. However β value showed positive relationship between agreeableness and academic self- regulation skills of students. This relationship was found statistically significant ($p=.000$).

Objective No 3e

To determine relationship between neuroticism and academic self- regulation skills of college students

Students neuroticism and academic self- regulation skills have shown positive and significant correlation as $r =-.280^{**}$. It was found that students' personality trait neuroticism is negatively and significantly correlated with academic self- regulation skills.

It was found that students' personality trait neuroticism has 8% effect on academic self- regulation skills. However β showed negative relationship between neuroticism and academic self- regulation skills of students. This relationship was found statistically significant ($p=.000$).

5.2.4 Objective No 4a

To compare personality traits of male and female students at college level

The difference was found in the mean score of male and female students regarding personality traits ($t= 4.5$, $p= .000$). Male college level students were having high mean score ($M=171.4$) than female students ($M= 165$).

5.2.5 Objective No 4b

To compare students' academic self- regulation skills of male and female students

The difference was found in the mean score of male and female students regarding personality traits ($t= 2.15$, $p = .031$). Male college level students were having high mean score ($M=102.2$) than female students ($M= 100.5$).

5.3 Discussion

The present study aimed find out the relationship between students' personality traits and academic self- regulation skills at college level. A quantitative correlational designed was followed to carry out the study. The study has two variables; personality trait (independent variable) academic self- regulation skills dependent variable. Population of the study was college level students. The result is parallel to past researches some contradictory studies are also discussed.

The third feature is openness to new experiences, that is defined by adaptability and ability to adapt to changings and experiences new ideas. Technological advancements and globalization both contribute to students' openness and curiosity. The fourth trait of personality is extroversion, and it is defined by liveliness and action in dealing with economic situations and life difficulties. Neuroticism, which is characterized by depression nervousness, unhappiness, fear, and pressure, is ranked last, likely due to students' capacity to adjust to their surroundings and lessen anxiety through social and personal abilities.

The very first and major objective of the study was to assess the level of personality trait in college level students. Results showed that student have high conscientiousness trait at college level. Result of this study also showed that openness to experience and agreeableness were common personality traits of college level students. Students scored low on personality traits extroversion and neuroticism. Literature shows that openness to new experience, conscientiousness, extroversion, agreeableness and neuroticism is are most common among student (Abood, Aharbi, Mhaidat & Gazo, 2020). While this research studies showed that conscientiousness, agreeableness and openness to

experience are more common in students. The most common personality attribute among the participants was agreeableness, according to the results of the first objective one the big five personality traits. Patience, generosity, pleasant relationships, and work together with others are all characteristics of agreeableness. Proficiency, organisation, dutifulness, and manners characterized conscientiousness in second place. This, according to researchers, is due to cultural factors and Jordanian conventions, as well as the fact that pupils hold to their own moral ideals (Hakimi, Hajezi and Lavasani, 2011). According to Kumarraju, karau, and Schmeck (2009), conscientiousness and openness to experience are to common traits of college students and these traits have positive affect on students' academic achievement. According to Ahmad (2012) students score high on conscientiousness than other personality traits.

Second main objective was to assess the level academic self- regulation skills in college level students. The result of the study showed that college level students were having more self- planned; self- monitor skills but they do not use self- control, self- evaluation and Self- reaction skills. Research finding described that learners are self- regulated they are able to regulate their academic regulation. Research study found that students have positive self- regulation; they plan for their academic goals, self- evaluated, evaluate their weaknesses and strengths. Students use self- planning skill to achieve their goals (Jamiris and Hartati, 2017). Under graduate students are able to manage their academic self- regulation; they are able to regulate their selves. Undergraduate students plan their goals and they manage their behavior to achieve set or desired goals. Result of this study also revealed that undergraduate students have positive self- regulation; they plan their goals, focus on achieving their set goals. Under graduate students perform their academic activities well, they have skills like self- evaluation (evaluate their strengths and weaknesses), self- reaction, self- observation, self- monitoring. The result study also found the undergraduate students use self- regulated strategies an make positive efforts to accomplish their planned goal, and have positive self- efficacy (believe they can do) (Jamiris and Hartati, 2017).

To determine the relationship between students 'personality traits and self- regulation skills was the third objective of the present study. The results reveled that there is a positive relationship between these personality traits and students self- regulation skills. This result is supported by the idea that the learning strategies used by the college students partially derive from by the habitual pattern of behavior rooted by trait theory

(Bidijerano & Dai, 2007). The current study findings support Eilam *et al.* (2009), and Mirhashemi and Goodarzi (2014) studies' outcomes such as personality traits of conscientiousness, openness, and agreeableness significantly influenced students' self-regulated learning. Personality traits and self-regulatory process go hand in hand. Personality traits and self-regulation processes are coordinated with each other (Gramzow, Sedikides, Panter, Sathy, Harris & Insko, 2007). The current study findings support Mahama *et al.* (2022), personality trait plays significant role in students' engagement in the classroom, self-regulated learning. A person self-regulation takes place in psychological context when they stand on the five principles of personality traits and their constituent (Hoyle, 2010). The study carried out by Babakhani in 2004 that contradicted with this result that the self-regulation is more powerful than personality traits.

The fourth (4a) objective of the current study was to compare personality trait of male and female student. The finding of this objective showed that the male students are high mean score than female students. This result is not consistent with one of the previous studies done by Baba Khani (2014) in which he did not find any significant difference in in personality traits of male and female students.

Result of differences in personality traits among male and female students showed a significant difference. It is supported by the finding of McCrea (2002). But Dunsmore (2005) found distinct results in this regards. The contradictory findings may be results of differences in participants' being studied, their cultural beliefs, role of fender in society and the norms of the society etc. The findings of this study in fact reflect a variation in gender related beliefs. Consequently, the attitude and personality traits of men and women are increasingly getting closer (Hakimi, 2011).

The fourth (4b) objective was to compare academic self-regulation skills of male and female students. The results showed that male students were having high mean score than female students. This is supported by Abdullah (2012) that male students are more self-regulated than female students. But this finding is contradicted to the results of Baba Khani's (2014) study that the self-regulatory skills do not vary on the basis of gender.

Significant differences were found among male and female students with respect to personality traits. Mccrae 2002 supported this finding that personality traits vary on the basis of gender. But. Dunsmore found also support this finding as he found significant

differences in personality traits with respect to gender. The reasons for the differences may be distinction in cultural beliefs, the role and responsibilities that the society assign, participant under study and contradiction in the society. The findings of this study reflect that women are getting closer to men in term of their attitudes and personality trait.

Fourth (4b) objective of the study was to compare academic self- regulation skills of male and female students. The result showed that male students are having mean score than female students. The findings of the study are not consistent with one of the previous studies done by Babakhani (2014) found no significant difference between male and female students regarding self- regulation. According to Abdullah (2012) boys were better at self- regulated learning than girls students.

The statistically significant difference of male and female students was a major finding of Duckworth and Seligman (2006). Duckworth and Seligman (2006) found that girls were having high in self- regulation than male while the current study found different results. This difference may be due to difference in culture or locality. Zimmerman (2014) revealed that gender was not a significant predictor of students' self- regulation which contradicts with the present study. Another study revealed that females were more open to experience than males, but male students were found to be more conscientious than female students (Parveen, 2007).

5.4 Conclusions

Result of objective one concluded that college level students were having different personality traits but among five personality traits college levels students scored high on personality trait conscientiousness. Result of objective two concluded that college level students were having different academic self- regulation skills, from the mean score result it is concluded that college level students were using these skills, they scored high in self- planning and self- monitoring while they were neutral about self- control, self- evaluation and self- reaction. Result of objective three concluded that positive and significant relationship was found between students' personality traits and academic self- regulation skills at college level. Result of objective no three (a) concluded that positive and significant relationship was found between personality trait openness to experience and academic self- regulation skills at college level.

Result of objective no three (b) concluded that positive and significant relationship was found between personality trait conscientiousness and academic self-

regulation skills at college level. Result of objective no three (c) concluded that positive and significant relationship was found between personality trait extroversion and academic self- regulation skills at college level. Result of objective no three (d) concluded that positive and significant relationship was found between personality trait agreeableness and academic self- regulation skills at college level. Result of objective no three (e) concluded that negative and significant relationship was found between personality trait neuroticism and academic self- regulation skills at college level.

It is concluded that male and female students were having difference regarding personality traits. Result of objective four showed that there is significant difference in personality traits and academic self- regulation skills of male and female students, male students use academic self- regulation skills more than female students.

5.5 Recommendations

5.5.1 Objective Based Recommendations

1. College administration may develop inductive programs like exhibitions, funfairs, debates, sports, educational trips, etc to help students for improvement of their extroversion and openness to experience.
2. Self- control, self- evaluation and Self- reaction skills can be enhanced through organizing the counseling sessions within the colleges and classrooms for academic achievements.
3. Curriculum may be more social and academic activity embedded to enhance student's personality traits and academic self- regulation skills as these two variables have significant correlation.
4. Female students may be provided the opportunities for exposure to social world in order to enrich their personality traits through sports, social work, study and excursion trips etc.
5. Activity embedded lesson plans, collaborative learning and activity based teaching may be followed in order to enhance students self-regulation skills especially of female students at college level.
6. On the basis of findings it is recommended that one psychologist may be hired for the counseling of college level students in order to guide them regarding personality traits and academic self-regulation skills.

5.5.2 Recommendations for Future Researchers

1. Current study has determined the relationship between students' personality traits and academic self-regulation skills at college level. Future research may conduct study on relationship of personality traits with other academic variables.
2. Future researcher may also check the effect of personality traits on academic performance of students at university level.
- 3 Further studies may also be carried out on relationship between students' academic self-regulation skills and academic performance.

Table No 5.1

Alignment of objective, finding, conclusion and recommendation

S/No	Objective	Finding	Conclusion	Recommendation
1	To assess the level of big five personality traits (conscientiousness, Agreeableness, extraversion openness to experience, and neuroticism) of college level students	Mean score of personality trait conscientious, agreeableness and openness were high than extroversion and neuroticism.	College level students having different personality traits but among five personality traits college students scored high on personality trait conscientiousness.	College administration may develop inductive programs to help students improve their level of personality traits extroversion and openness to experience (exhibition, funfair, debates, sports, educational trips, etc.). One psychologist may be hired for the counseling of college level students.

-
- 2 To assess the level of academic self-regulation skills (Self-planning, Self-monitoring, Self-control, self-evaluation and Self-reaction) of college level students. Mean score values of academic self-regulation skill; Self-planning, Self-monitoring and Self-reaction were high than Self-control, self-evaluation, and Self-reaction skill. It is concluded that college level students are using these skills, they score high in Self-planning and Self-monitoring while they were neutral about Self-control, Self-evaluation and Self-reaction. College administration may organize psychologist sessions for enhancing students' Self-control, self-evaluation and Self-reaction skills.
- 3 To identify relationship between students' personality traits and academic self-regulation skills of college students. Students personality traits and academic self-regulation skills have shown positive and significant correlation as $r=.228^{**}$. Positive and relationship was found between students' personality traits and academic self-regulation skills at college level. Curriculum may be more social and academic activity embedded to enhance student's personality traits and academic self-regulation skills as these two variables have significant correlation.
- 4 To compare personality traits and academic self-regulation skills of male and female. The mean score of male and female Male students are more open to experience, Colleg e administration may organize
-

and female students at college level.	students regarding personality traits ($t= 4.5$, $p= .000$).	conscientious, extroversion and agreeable than female students.	different social activities such as sports, exhibitions etc. for female students so that female students also have more exposure to social world in order to enhance their personality traits.
4b To compare academic self- regulation skills of male and female students at college level.	The mean score of male and female students regarding personality traits ($t= 2.15$, $p = .031$).	Male students use academic self- regulation skills more than female students.	College administration may organize different academic activities such as setting their schedules, making plans, creative environment, for female students in order to enhance their personality traits and academic self- regulation skills.

5.7 Limitation of the Study

Throughout the research process the researcher had face some research restriction which are as follow:

1. Due to Pandemic the researcher collected data from second year students only because of late enrollment of first year students in pandemic.

2. Due to time constrain the researcher only collected data from public sector colleges. Broader sample may be taken for the generalization of the study. The sample was only taken from public colleges only.

REFERENCES

- Abood, M. H., Alharbi, B. H., Mhaidat, F., & Gazo, A. M. (2020). The Relationship between Personality Traits, Academic Self-Efficacy and Academic Adaptation among University Students in Jordan. *International Journal of Higher Education*, 9(3), 120-128.
- Ahmad, S. (2012). Relationship of academic SE to self-regulated learning, SI, test anxiety and academic achievement. *International journal of education*, 4(1), 12.
- Akhtar, J. H., & Mahmood, N. (2013). Development and Validation of an Academic Self Regulation Scale for University Students. *Journal of Behavioural Sciences*, 23(2).
- Allport, G. W. (1937). *Personality: A psychological interpretation*.
- Allport, G. W. (1974). The Psychology of Participation. *Psychological Review*, 52, 117-132.
- Arshad, M., Zaidi, S. M. I. H., & Mahmood, K. (2015). Self-Esteem & Academic Performance among University Students. *Journal of Education and Practice*, 6(1), 156-162.
- Azevedo, R., Moos, D. C., Greene, J. A., Winters, F. I., & Cromley, J. G. (2008). Why is externally-facilitated regulated learning more effective than self-regulated learning with hypermedia?. *Educational Technology Research and Development*, 56(1), 45-72.
- Bandura, A. (2001). Social cognitive theory of mass communication. *Media psychology*, 3(3), 265-299.
- Babakhani, N. (2014). The relationship between the big-five model of personality, self-regulated learning strategies and academic performance of Islamic Azad University students. *Procedia-Social and Behavioral Sciences*, 116, 3542-3547.
- Bail, F. T., Zhang, S., & Tachiyama, G. T. (2008). Effects of a self-regulated learning course on the academic performance and graduation rate of college students in an academic support program. *Journal of college reading and learning*, 39(1), 54-73.
- Barrick, M. R., Parks, L., & Mount, M. K. (2005). Self-monitoring as a moderator of the relationships between personality traits and performance. *Personnel psychology*, 58(3), 745-767.

- Baumeister, R. F., & Newman, L. S. (1994). Self-regulation of cognitive inference and decision processes. *Personality and Social Psychology Bulletin*, 20(1), 3-19.
- Bell, B. S. (2017). Strategies for supporting self-regulation during self-directed learning in the workplace. *Autonomous learning in the workplace*, 117-134.
- Bidjerano, T., & Dai, D. Y. (2007). The relationship between the big-five model of personality and self-regulated learning strategies. *Learning and individual differences*, 17(1), 69-81.
- Brauer, C., Grady, F., Matthews, K., & Wilhite, S. (1997). The Effects of Problem-Solving on Academic Achievement in Elementary Education.
- Broadbent, J., & Poon, W. L. (2015). Self-regulated learning strategies & academic achievement in online higher education learning environments: A systematic review. *The Internet and Higher Education*, 27, 1-13.
- Busato, V. V., Prins, F. J., Elshout, J. J., & Hamaker, C. (2000). Intellectual ability, learning style, achievement motivation and academic success of psychology students in higher education. *Personality and Individual Differences* 29, 1057-1068.
- B. Eilam, M. Zeidner, and I. Aharon. (2009). Student conscientiousness, self-regulated learning, and science achievement: an explorative field study,” *Psychology in the Schools*, vol. 46, no. 5, pp. 420–432.
- Cattell, R. B., Eber, H. W., & Tatsuoka, N. M. (1970). Handbook for the 16 Personality Factor Questionnaire (16PF). *Champaign: Institute for Personality and Ability Testing*.
- Chan, Y. T. (1996). *The Relationships Between Demographic Data, Personality Traits and Intrinsic Motivations, Extrinsic Motivations - An Empirical Study of the Employees of Data Communication Institute*. Master Thesis, Department of Management Science, National Chiao Tung University, Hsinchu.
- Cherry K. (2020). The big five personality traits. *very well mind*, retrieved from [What Are the Big 5 Personality Traits? \(verywellmind.com\)](https://www.verywellmind.com/what-are-the-big-5-personality-traits-2786272).
- Cherry, P. D. (2020). Personality Traits and Financial Risks Among Older Americans: *Living Too Long, Dying Too Early, and Living Too Sick* (Doctoral dissertation).

- Commissiong, M. A. (2020). *Student Engagement, Self-Regulation, Satisfaction, and Success in Online Learning Environments* (Doctoral Dissertation, Walden University).
- Corno, L. (2001). Self-regulation in the classroom: A perspective on assessment and intervention. *Applied Psychology, 54*(2), 199-231.
- Costa, P. T., Jr., & McCrae, R. R. (1992). Normal personality assessment in clinical practice: The NEO Personality Inventory. *Psychological Assessment, 4*(1), 5-13. doi:10.1037/1040-3590.4.1.5.
- Costa, P. T., Jr., & McCrae, R. R. (1992a). Four ways five factors are basic. *Personality and Individual Differences, 13*, 653– 665.
- Eysenck, H. J. (1991). Dimensions of personality: 16, 5 or 3? *Criteria for a taxonomic paradigm. Personality and Individual Differences 12*, 773-790.
- Deary, I. J. (2009). The trait approach to personality. *The Cambridge handbook of personality psychology, 1*, 89-109.
- De Raad, B., 2000. The Big Five Personality Factors: The Psycholexical Approach to Personality. *Hogrefe & Huber Publishers*, Göttingen.
- De Raad, B., Barelds, D.P.H., 2008. A new taxonomy of Dutch personality traits base on a comprehensive and unrestricted list of descriptors. *Journal of Personality and Social Psychology 94*, 347–364.
- De Young, C. G., Quilty, L. C., & Peterson, J. B. (2007). Between facets and domains: 10 aspects of the Big Five. *Journal of Personality and Social Psychology, 93*(5), 880-896. doi:10.1037/0022-3514.93.5.880
- Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology, 41*, 417– 440.
- Dinsmore, D. L., Alexander, P. A., & Loughlin, S. M. (2008). Focusing the conceptual lens on metacognition, self-regulation, and self-regulated learning. *Educational psychology review, 20*(4), 391-409.
- Dörrenbächer, L., & Perels, F. (2016). Self-regulated learning profiles in college students: Their relationship to achievement, personality, and the effectiveness of an

- intervention to foster self-regulated learning. *Learning and Individual Differences*, 51, 229-24.
- Eysenck, H. J. (1983). Psychophysiology and personality: Extraversion, neuroticism and psychoticism. In *Individual differences and psychopathology* (pp. 13-30). Academic Press.
- Forgas, J. P., Baumeister, R. F., & Tice, D. M. (2009). The psychology of self-regulation: An introductory review. *Psychology of self-regulation: Cognitive, affective, and motivational processes*, 11, 1-17.
- Galla, B. M., Shulman, E. P., Plummer, B. D., Gardner, M., Hutt, S. J., Goyer, J. P., ... & Duckworth, A. L. (2019). Why high school grades are better predictors of on-time college graduation than are admissions test scores: The roles of self-regulation and cognitive ability. *American Educational Research Journal*, 56(6), 2077-2115.
- Geddes, D. (2009). How Am I Doing? Exploring On-Line Gradebook Monitoring as a Self-Regulated Learning Practice That Impacts Academic Achievement. *Academy of Management learning & education*, 8(4), 494-510.
- Ghyasi, M., Yazdani, M., & Farsani, M. A. (2013). The relationship between personality types and self-regulated learning strategies of language learners. *International Journal of Applied Linguistics and English Literature*, 2(4), 74-82.
- Gibbs, J. C., & Taylor, J. D. (2016). Comparing student self-assessment to individualized instructor feedback. *Active Learning in Higher Education*, 17(2), 111-123.
- Goldberg, L.R. (1990). An alternative “description of personality”. The Big-Five factor structure. *Journal of Personality and Social Psychology*, 59(6), 1216-1229. doi:10.1037/0022-3514.59.6.1216.
- Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment*, 4(1), 26-42. doi:10.1037//1040-3590.4.1.26
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, 48, 26–34.
- Goldberg, L. R., & Rosolack, T. K. (1994). The Big Five factor structure as an integrative framework: An empirical comparison with Eysenck’s PEN model. *The developing structure of temperament and personality from infancy to adulthood*, 7-35.

- Goleman, D. (1998). Bringing emotional intelligence to the workplace. *New Brunswick, NJ: Consortium for Research on Emotional Intelligence in Organizations, Rutgers University*, I-34.
- Gray, J. A. (1970). The psychophysiological basis of introversion-extraversion. *Behaviour research and therapy*, 8(3), 249-266.
- Grehan, P. M., Flanagan, R., & Malgady, R. (2011). Successful graduate students: The roles of personality traits and emotional intelligence. *Psychology in the Schools*, 48(4), 317-331.
- Hakimi, S., Hejazi, E., & Lavasani, M. G. (2011). The relationships between personality traits and students' academic achievement. *Procedia-Social and Behavioral Sciences*, 29, 836-845.
- Hattie, J. A., & Donoghue, G. M. (2016). Learning strategies: A synthesis and conceptual model. *Science of Learning*, 1(1), 1-13.
- Havill, V.L. (Eds.), Parental Descriptions of Child Personality: Developmental Antecedents of the Big Five? Erlbaum, Mahwah, NJ, pp. 1–9.
- Hazrati-Viari, A., Rad, A. T., & Torabi, S. S. (2012). The effect of personality traits on academic performance: The mediating role of academic motivation. *Procedia-Social and Behavioral Sciences*, 32, 367-371.
- Hirschfeld, R. R., Jordon, M. H., Thomas, C. H., & Field, H. S. (2008). Observed leadership potential of personnel in a team setting: Big Five traits and proximal factors as predictors. *International Journal of Selection and Assessment*, 16(4), 385-402. doi:10.1111/j.1468-2389.2008.00443.xdoi:10.1002/pits.20556
- Hofmann, D. A., & Jones, L. M. (2005). Leadership, collective personality, and performance. *Journal of Applied Psychology*, 90(3), 509-522. doi:10.1037/0021-9010.90.3.509
- Hoyle, R. H. (2006). Personality and self-regulation: Trait and information-processing perspectives. *Journal of Personality*, 74(6), 1507-1526.
- Hoyle, R. H. (2010). A handbook of Personality and self-regulation: *Wiley-Blackwell publishing ltd.*

- Huxham, M. (2007). Fast and effective feedback: are model answers the answer?. *Assessment & Evaluation in Higher Education*, 32(6), 601-611.
- Jamaris, M., & Hartati, S. (2017). The Role of the Undergraduate Students' Self-regulation s and its Influence to their Academic Achievements. *Int J Multidiscip. Curr. Res*, 5.
- Jensen-Campbell, L. A., & Graziano, W. (2001). Agreeableness as a moderator of interpersonal conflicts. *Journal of Personality*, 69(2), 323-362. doi:10.1111/1467-6494.00148.
- Jouhari, Z., Haghani, F., & Changiz, T. (2015). Factors affecting self-regulated learning in medical students: a qualitative study. *Medical education online*, 20(1), 28694.
- John, O.P., 1990. The "Big Five" factor taxonomy: dimensions of personality in the natural language and in questionnaires. In: Pervin, L.A. (Ed.), *Handbook of Personality: Theory and Research*. *The Guilford University Press*, New York, pp. 66–100.
- John, O. P., Robins, R. W., & Pervin, L. A. (2008). *Handbook of personality psychology: Theory and research* (3rd ed.). New York, NY: Guilford Press
- Johnson, J. L., & Hill, W. R. (2009). Personality traits and military leadership. *Individual Differences Research*, 7(1), 1-13. Retrieved from <http://www.idr-journal.com>
- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 102–138). New York: Guilford Press.
- J. L. Brusio, (2019). *An Examination of Personality Traits as a Predictor of the Use of Self-Regulated Learning Strategies* Unpublished PhD Dissertation in STEM and Professional Studies, Old Dominion University, Norfolk, VA, USA,.
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues.
- Judge, T. A., & Ilies, R. (2002). Relationship of personality to performance motivation: A meta- analytic review. *Journal of Applied Psychology*, 87(4), 797-807. doi:10.1037//0021.

- Kirch, A., Schnitzius, M., Mess, F., & Spengler, S. (2019). Who are our students? Understanding students' personality for refined and targeted Physical Education. A scoping review. *Frontiers in sports and active living*, 1, 31.
- Kohnstamm, G. A., & Halverson Jr, C. F. (1998). Analyzing parental free descriptions of child personality. In *Parental descriptions of child personality* (pp. 11-30). Psychology Press.
- Komarraju, M., Karau, S. J., & Schmeck, R. R. (2009). Role of the Big Five personality traits in predicting college students' academic motivation and achievement. *Learning and individual differences*, 19(1), 47-52.
- Larsen, R. J., Buss, D. M., Wismeijer, A., & Song, J. (2005). Personality psychology: Domains of knowledge about human nature.
- Lau, K. S. (2013). Big five personality traits, pathological personality traits, and psychological dysregulation: Predicting aggression and antisocial behaviors in detained adolescents.
- L. Dorrenbacher and F. Perels, (, 2016). "Self-regulated learning " profiles in college students: their relationship to achievement, personality, and the effectiveness of an intervention to foster self-regulated learning," *Learning and Individual Differences*, vol. 51, pp. 229–241.
- Mahama, I., Dramanu, B. Y., Eshun, P., Nandzo, A., Baidoo-Anu, D., & Amponsah, M. A. (2022). Personality Traits as Predictors of Self-Regulated Learning and Academic Engagement among College Students in Ghana: A Dimensional Multivariate Approach. *Education Research International*.
- Matthews, G., Zeidner, M., & Roberts, R. D. (2006). Models of Personality and Affect for Education: A Review and Synthesis.
- Miele, D. B., & Scholer, A. A. (2018). The role of metamotivational monitoring in motivation regulation. *Educational Psychologist*, 53(1), 1-21.
- McCrae, R. R & Costa Jr, P. T., (1992). Four ways five factors are basic. *Personality and individual differences*, 13(6), 653-665.
- McCrae, R. R., & Costa Jr, P. T. (1997). Personality trait structure as a human universal. *American psychologist*, 52(5), 509.

- McCrae, R. R., & Costa Jr, P. T. (2008). The five-factor theory of personality.
- McLellan, C. K., & Jackson, D. L. (2017). Personality, self-regulated learning, and academic entitlement. *Social Psychology of Education, 20*(1), 159-178.
- Morosanova, V. I. (2013). Self-regulation and personality. *Procedia-Social and Behavioral Sciences, 86*, 452-457.
- Muhammad, A. S., & Abu Bakar, N. (2015, September). Relationship of self-regulated learning and academic achievement among universiti sultan zainalabidin (UNISZA) undergraduate students. In *International Conference on Empowering Islamic Civilization in the 21st Century* (pp. 6-7).
- Mushonga, S. M., & Torrance, C. G. (2008). Assessing the relationship between followership and the big five factor model of personality. *Review of Business Research, 8*(6), 185-193.
- Muraven, M., Baumeister, R. F., & Tice, D. M. (1999). Longitudinal improvement of self-regulation through practice: Building self-control strength through repeated exercise. *The Journal of social psychology, 139*(4), 446-457.
- M. Ghyasi, M. Yazdani, and M. A. Farsani, (2013). The relationship between personality types and self-regulated learning strategies of language learners, *International Journal of Applied Linguistics & English Literature*, vol. 2, no. 4, pp. 74–82.
- M. Mirhashemi and H. Goodarzi, (2014.)Self-regulated learning strategies: the role of personal factors (motivational beliefs and Personality), *Journal of Educational and Management Studies*, vol. 4, no. 1, pp. 152–161.
- M. Weimer, “What it means to be a self-regulated learner,” *Practice*, vol. 41, no. 2, pp. 64–70,
- Norman, W.T. (1963). Toward an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings. *Journal of Abnormal and Social Psychology, 66*(6), 574-583. doi:10.1037/h004029.
- N. Sangeetha. (2020). V. Kannan, and A. Savarimuthu, Personality as a predictor for student engagement, *Journal of Advanced Science and Technology*, vol. 29, no. 6, pp. 3412–3420,.

- O. Ongore, (2014). A study of relationship between personality traits and job engagement, *Procedia-Social and Behavioural Sciences*, vol. 141, pp. 1315–1319.
- Overacker, S. R., Kalis, C. E., & Coppola, F. (2018). College students' personality traits in relation to career readiness.
- Panadero, E., & Alonso Tapia, J. (2014). How do students self-regulate?: review of Zimmerman's cyclical model of self-regulated learning. *Anales de psicología*.
- Parveen, A. (2007). Effect of home environment on personality and academic achievement of students of grade 12 in Rawalpindi division. *National University of Modern Languages, Islamabad*.
- Patrick, C. L. (2011). Student evaluations of teachings: Effects of the Big Five personality traits, grades and the validity hypothesis. *Assessment and Evaluations in Higher Education*, 36(2), 239-249. doi:10.1080/02602930903308258.
- Panadero, E. (2017). A review of self-regulated learning: Six models and four directions for research. *Frontiers in psychology*, 422.
- Passakos, C.G., De Raad, B., 2009. Ancient personality: trait attributions to characters in Homer's Iliad. *Ancient Narrative* 7, 75–95.
- Paunonen, S. V., & Jackson, D. N. (2000). What is beyond the Big Five? Plenty! *Journal of Personality*, 68(5), 821-835. doi:10.1111/1467-6494.001179010.87.4.797.
- Peabody, D., & Goldberg, L. R. (1989). Some determinants of factor structure from personality-trait descriptors. *Journal of Personality and Social Psychology*, 57(3), 552-567. doi:10.1037/0022-3514.57.3.552.
- Perels, F., Dignath, C., & Schmitz, B. (2009). Is it possible to improve mathematical achievement by means of self-regulation strategies? Evaluation of an intervention in regular math classes. *European Journal of Psychology of Education*, 24(1), 17-31.
- Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 114-158). New York, NY: The Guilford Press.
- Pintrich, P. R. (1995). Understanding self-regulated learning. *New directions for teaching and learning*, 1995(63), 3-12.
- Pintrich, P. R. (2000). Educational psychology at the millennium: A look back and a look forward. *Educational psychologist*, 35(4), 221-226.


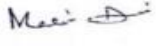
- Pintrich, P. R. (2002). The role of metacognitive knowledge in learning, teaching, and assessing. *Theory into practice*, 41(4), 219-225.
- Pintrich, P. R., & Zusho, A. (2007). Student motivation and self-regulated learning in the college classroom. In *Higher education: Handbook of theory and research* (pp. 55-128). Springer, Dordrecht.
- Ramdass, D., & Zimmerman, B. J. (2011). Developing self-regulation skills: The important role of homework. *Journal of advanced academics*, 22(2), 194-218.
- Renn, R. W., Allen, D. G., & Huning, T. M. (2011). Empirical examination of the individual personality-based theory of self-management failure. *Journal of Organizational Behavior*, 32(1), 25-43. doi:10.1002/job.667.
- Robbins, S. P. (2001). *Organizational behavior* (9th ed.). New Jersey: Prentice-Hall.
- Roll, I., Alevan, V., McLaren, B. M., & Koedinger, K. R. (2011). Improving students' help-seeking skills using metacognitive feedback in an intelligent tutoring system. *Learning and instruction*, 21(2), 267-280.
- Roll, I., & Winne, P. H. (2015). Understanding, evaluating, and supporting self-regulated learning using learning analytics. *Journal of Learning Analytics*, 2(1), 7-12.
- Ruch, W., Wagner, L., & Heintz, S. (2018). Humor, the PEN model of personality, and subjective well-being: Support for differential relationships with eight comic styles.
- Saucier, G. (1994). Mini-markers: A brief version of Goldberg's unipolar Big-Five markers. *Journal of Personality Assessment*, 63, 506-516.
- Schunk, D. H., & Zimmerman, B. J. (2012). Self-regulation and learning. *Handbook of Psychology, Second Edition*, 7.
- Sriram, R., Glanzer, P. L., & Allen, C. C. (2018). What contributes to self-control and grit?: The key factors in college students. *Journal of College Student Development*, 59(3), 259-273.

- Sitzmann, T., Bell, B. S., Kraiger, K., & Kanar, A. M. (2009). A multilevel analysis of the effect of prompting self-regulation in technology-delivered instruction. *Personnel Psychology*, *62*(4), 697-734.
- Smith, M. A., & Canger, J. M. (2004). Effects of supervisor “Big Five” personality on subordinate attitudes. *Journal of Business and Psychology*, *18*(4), 465-481. doi:10.1023/B:JOBU.0000028447.00089.12.
- Smithikrai, C. (2008). Moderating effect of situational strength on the relationship between personality traits and counterproductive work behavior. *Asian Journal of Social Psychology*, *11*(4), 253-263. doi:10.1111/j.1467-839X.2008.00265.x.
- Stangor, C., & Walinga, J. (2014). *Introduction to psychology*. BCcampus.
- Taylor, M. D., Whiteman, M. C., Fowkes, G. R., Lee, A. J., Allerhand, M., & Deary, I. J. (2009). Five Factor Model personality traits and all-cause mortality in the Edinburgh Artery Study cohort. *Psychosomatic Medicine*, *71*(6), 631-641.
- T. Bidjerano and D. Y. Dai, “e relationship between the bigfive model of personality and self-regulated learning strategies,” *Learning and Individual Differences*, vol. 17, no. 1, pp. 69–81, 2007.
- Van Lieshout, C. F. M. (2000). Lifespan personality development: Self-organising goaloriented agents and development outcome. *International Journal of Behavioral Development*, *24*(3), 276-288. doi:10.1080/01650250050118259
- Winne, P. H., & Hadwin, A. F. (1998). Studying as self-regulated learning. In D. J. Hacker, J. Dunlosky, & A. C. Graesser (Eds.), *Metacognition in educational theory and practice* (pp. 277–304). Mahwah, NJ: Erlbaum Associates.
- Wolters, C. A. & Brady, A. C. (2020). College students' regulation of cognition, motivation, behavior, and context: Distinct or overlapping processes?. *Learning and Individual Differences*, *80*, 101872.
- Wyland, C. L., & Forgas, J. P. (2007). On bad mood and white bears: The effects of mood state on ability to suppress unwanted thoughts. *Cognition and Emotion*, *21*(7), 1513-1524.
- Yan, Z., & Brown, G. T. (2017). A cyclical self-assessment process: Towards a model of how students engage in self-assessment. *Assessment & Evaluation in Higher Education*, *42*(8), 1247-1262.

- Zeidner, M., Boekaerts, M., & Pintrich, P. R. (2000). Self-regulation: Directions and challenges for future research. In *Handbook of self-regulation* (pp. 749-768). Academic Press.
- Zhao, H., & Seibert, S. E. (2006). The Big Five personality dimensions and entrepreneurial status: A meta-analytic review. *Journal of Applied Psychology*, 91(2), 257-271. doi:10.1037/0021-9010.91.2.259.
- Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of educational psychology*, 81(3), 329.
- Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American educational research journal*, 45(1), 166-183.
- Zimmerman, B. J., & Kitsantas, A. (2014). Comparing students' self-discipline and self-regulation measures and their prediction of academic achievement. *Contemporary Educational Psychology*, 39(2), 145-155.

APPENDECIES

APPENDIX A

		NATIONAL UNIVERSITY OF MODERN LANGUAGES FACULTY OF SOCIAL SCIENCES DEPARTMENT OF EDUCATION
M.L.1-3/Edu/2021		Dated: 09-3-2021
To: Nida Rehman, 1788-M.Phil/Edu/F19		
Subject: APPROVAL OF M.Phil THESIS TOPIC AND SUPERVISOR		
1. Reference to Letter No, M.L.1-3/Edu/2021/, dated 16-02-2021, the Higher Authority has approved the topic and supervisor on the recommendation of Faculty Board of Studies vide its meeting held on 11 th February 2021.		
a. Supervisor's Name & Designation		
Dr. Farkhanda Tabassum, Assistant Professor, Department of Education NUML, Islamabad.		
b. Topic of Thesis		
Relationship of Students' Personality Traits' and Self-Regulation Skills at College Level		
2. You may carry out research on the given topic under the guidance of your Supervisor and submit the thesis for further evaluation within the stipulated time. It is inform you that your thesis should be submit within described period by 31 July 2022 positively for further necessary action please.		
3. As per policy of NUML, all MPhil/PhD thesis are to be run on turnitin by QEC of NUML before being sent for evaluation. The university shall not take any responsibility for high similarity resulting due to thesis run from own sources.		
4. Thesis are to be prepared strictly on NUML's format that can be had from (Coordinator, Department of Education)		
Telephone No:	051-9265100-110 Ext: 2094	
E-mail:	ftabassum@numl.edu.pk	
	 Dr. Mariam Din A/Head, Department of Education	
Distribution: Ms. Nida Rehman (M.Phil Scholar)		
Dr. Farkhanda Tabassum (Thesis Supervisor)		

APPENDIX B

Big Five Factor Scale

Please provide all the demographic information and answer all the questions as best you can on a scale from 1 to 5, with 1 being Strongly Disagree, 2 Disagree, 3 Neutral, 4 Agree and 5 Strongly Agree.

Demographic Information

1. Gender:

 Male 1

 Female 2

a) b)

2. Locality

a) Urban 1

Rural 2

3. Program Arts:

a) Pre Medical 1

b) Pre Engineering 2

Computer science 3

4. Age

a) 15-17

b) 18-20

18-20

More

5. College Name _____

Personality Traits (openness, conscientiousness, extroversion, agreeableness, neuroticism)							
S/n	Code	Openness: adventurous, courageous, intellectual, creative and innovative, welcome new and novel ideas and innovations	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
			1	2	3	4	5
1	O1	I am quick to understand things.	SD	D	N	A	SA
2	O2	I have difficulty in understanding abstract ideas.	SD	D	N	A	SA
3	O3	I like to solve complex problems.	SD	D	N	A	SA
4	O4	I avoid difficult reading materials.	SD	D	N	A	SA
5	O5	I have a rich vocabulary.	SD	D	N	A	SA
6	O6	I can formulate ideas clearly.	SD	D	N	A	SA
7	O7	I get deeply engage in co-curricular activities.	SD	D	N	A	SA
8	O8	I need a creative outlet.	SD	D	N	A	SA
9	O9	I seldom get lost in thoughts.	SD	D	N	A	SA
10	O10	I seldom say No.	SD	D	N	A	SA
Conscientiousness: dutiful, organize, determined and strive for goal orientation.							
11	C1	I carry out my plans.	SD	D	N	A	SA

12	C2	I find it difficult to get down to work.	SD	D	N	A	SA
13	C3	I mess things up.	SD	D	N	A	SA
14	C4	I finish what I start.	SD	D	N	A	SA
15	C5	I get things done quickly.	SD	D	N	A	SA
16	C6	I always know what I am doing.	SD	D	N	A	SA
17	C7	I like to follow orders.	SD	D	N	A	SA
18	C8	I follow my set schedule.	SD	D	N	A	SA
19	C9	I want everything to be “just right”.	SD	D	N	A	SA
20	C10	I carry out my plans.	SD	D	N	A	SA
Extraversion: sociability, cheerful, excitability, assertiveness, high amounts of emotional expressiveness, outgoing and talkative.							
21	E1	I make friends easily.	SD	D	N	A	SA
22	E2	I am hard to get to know.	SD	D	N	A	SA
23	E3	I keep others at distance.	SD	D	N	A	SA
24	E4	I am not a very enthusiastic person.	SD	D	N	A	SA
25	E5	I like to do a lot of fun.	SD	D	N	A	SA
26	E6	I show my feelings when I am happy.	SD	D	N	A	SA
27	E7	I lack talent for influencing people.	SD	D	N	A	SA
28	E8	I know how to captivate people.	SD	D	N	A	SA
29	E9	I wait for others to lead the way.	SD	D	N	A	SA

30	E10	I hold back my opinion.	SD	D	N	A	SA
Agreeableness: Trust, kindness, liability, pity altruism, affections, cooperation, and other pro social behaviors							
31	A1	I am not interested in other people's problems.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
32	A2	I feel others' emotions.	SD	D	N	A	SA
33	A3	I sympathize with others.	SD	D	N	A	SA
34	A4	I have no time for others.	SD	D	N	A	SA
35	A5	I take an interest in others life	SD	D	N	A	SA
36	A6	I like to do things for others.	SD	D	N	A	SA
37	A7	I respect authority.	SD	D	N	A	SA
38	A8	I avoid imposing my will on others.	SD	D	N	A	SA
39	A9	I rarely put people under pressure.	SD	D	N	A	SA
40	A10	I take advantage of others.	SD	D	N	A	SA
Neuroticism: stressor to negative emotions, including anxiety, fear, sadness, guilt and shame.							
41	N1	I get angry easily.	SD	D	N	A	SA
42	N2	I am a person whose moods go up and down easily.	SD	D	N	A	SA
43	N3	I change my mood a lot.	SD	D	N	A	SA
44	N4	I keep my emotions under control.	SD	D	N	A	SA
45	N5	I seldom feel unwell.	SD	D	N	A	SA

46	N6	I am filled with doubts about things.	SD	D	N	A	SA
47	N7	I feel threatened easily.	SD	D	N	A	SA
48	N8	I rarely feel depressed.	SD	D	N	A	SA
49	N9	I am easily discouraged.	SD	D	N	A	SA
50	N10	I become overwhelmed by events.	SD	D	N	A	SA

Thank you for your participation

STAY BLESSED

Academic Self-Regulation Skills Scale

Please provide all the questions as best you can on a scale from 1 to 5, with 1 being Strongly Disagree, 2 Disagree, 3 Neutral, 4 Agree and 5 Strongly Agree.

Self-Regulation Skills (Self-Planning, self-control, Self-monitoring, self-evaluation, self- reaction)							
s/no	Code	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
			1	2	3	4	5
1	SP1	I come five minutes before class time.					
2	SM1	I am aware of assessment criteria used to evaluate my performance.					
3	SC1	I am aware of the methods through which my assessment will be made.					
4	SP2	I set goals for attaining grades in the class.					
5	SP3	I consciously make sure that my class attendance does not go below 80%.					
6	SP4	I can perform well all activities in the class assigned by the teacher.					
7	SE1	I am not satisfied with my performance in the class.					
8	SP5	I keep record of all class notes provided by the teachers.					
9	SP6	I submit my written assignment to my teachers in time.					
10	SC2	I work just to pass this course.					
11	SP7	I work to get first position in the class.					
12	SP8	I compete with high achievers in my class.					
13	SC3	I rely on cramming the learning material.					
14	SP9	I am regular in class because I am aware of class attendance rules to be dropped from a course.					
15	SE2	I am hesitant to take part in class discussion.					
16	SC4	I skip difficult parts of learning material.					
17	SE3	I use highlighting, heading, chunking and other reading techniques in reading books and other materials.					
18	SR1	I study according to my set schedule.					
19	SC5	I like to study in group because that enhances my learning ability.					
20	SR2	I feel hesitant when I am asked to present assigned work in front of the class.					
21	SM2	Use of technical terms in the classroom learning is difficult but helpful in understanding the subject.					
22	SR3	I can search the reading material to prepare assignment given by the teacher.					
23	SR4	I take part in classroom discussion only to get good grades.					
24	SE4	I feel difficult to complete assignment given by the teacher in time.					
25	SE5	Assignment method is very boring.					
26	SE6	Assignment method is very useless.					
27	SR5	My good performance in the class is due to my own efforts.					
28	SM3	My good performance in the class is the result of					

		teacher's motivation.					
29	SM4	My good performance in the class is because of support of my family.					
30	SM5	I know about the promotion rules of college system.					
31	SM6	I am aware of disciplinary rules and regulations of college system.					

Thank you for your Participation

APPENDIX C

The screenshot shows a Gmail interface with a search bar at the top containing 'lena.quilty@camh.ca'. The left sidebar lists folders: Compose, Inbox (2,218), Starred, Snoozed, Sent, Drafts (44), and More. The main content area displays an email from Lena Quilty <Lena.Quilty@camh.ca> to me, dated Mon, 1 Feb 2021, 23:28. The email body contains the following text:

Good afternoon,

Thank you for your email and your interest! I'm so pleased to hear that the Big Five Aspect Scales appears likely to be useful to you in your work. As this measure is in the public domain, I don't believe that you require permission from me to adapt or translate it for your purposes - however, it may be worthwhile to consult with Dr. Colin De Young, the first author of the BFAS seminal manuscript, who has consulted if not collaborated with numerous others doing the same. Perhaps a version that may be useful has already been developed for example! He would be best able to advise you on that, and on the scale usage in general.

Thank you again and all the best in your research,
Lena Quilty

Lena C. Quilty, Ph.D., C.Psych.
Senior Scientist, Campbell Family Mental Health Research Institute
Centre for Addiction and Mental Health
Associate Professor, Department of Psychiatry, University of Toronto
1025 Queen Street West, Suite 6405
Toronto, ON M6J 1H1
tel: 416-535-8501, x34313

At the bottom of the email, there is a footer that reads: "This email has been scanned by the CAMH Email Security System." and a Windows watermark: "Activate Windows Go to Settings to activate Windows".

APPENDIX D

Search: mahsir1@yahoo.com

2,218

Re: Thank you so much sir, I will definitely share findings with you.
Thank you so much

44

Nida Rahman <nidarahman131@gmail.com>
to Nasir

Mon, 8 Feb 2021, 19:17

On Mon, 8 Feb 2021 at 14:27, Nasir Mahmood <mahsir1@yahoo.com> wrote:
Sure. Please share findings when you complete your work
Nasir

Nasir Mahmood, PhD
Professor and Chairman
Department of Science Education
Allama Iqbal Open University
ICT Building, Faculty of Education,
Room 123, Sector H-8, Islamabad-44000 Phone Office: 0092-51-9057268 Mobile: (0092)3218400427
Web-page: <http://www.nasirmehmood.com/>

Activate Windows
Go to Settings to activate Windows.

APPENDIX E**Request letter for Validity****The Relationship of Students' Personality traits and self-regulation skills at college level****Subject: Request for validity Certificate**

Respected Sir/ Madam,

I am conducting a research study on “The Relationship of Students' Personality traits and self-regulation skills at college level” as it is required for my M.Phil. Academic degree. The tool has been adapted by the scholar towards her thesis, Big Five Factor Scale by Lena C Quilty, PhD., C.Psych. The tool has five constructs (openness, conscientiousness, Extroversion, agreeableness and neuroticism). Each construct has ten items.

Kindly check the questionnaire, its content, construction, and provide some valuable suggestions. Kindly certify its validity by filling the certificate attached at the end of the questionnaire.

Nida Rahman

M.Phil (Education)

NUML Islamabad

APPENDIX E

Certificate for Tool Validation

**Relationship of Students' Personality Traits and Self-regulation skills at college level**

By Ms. Nida Rahman

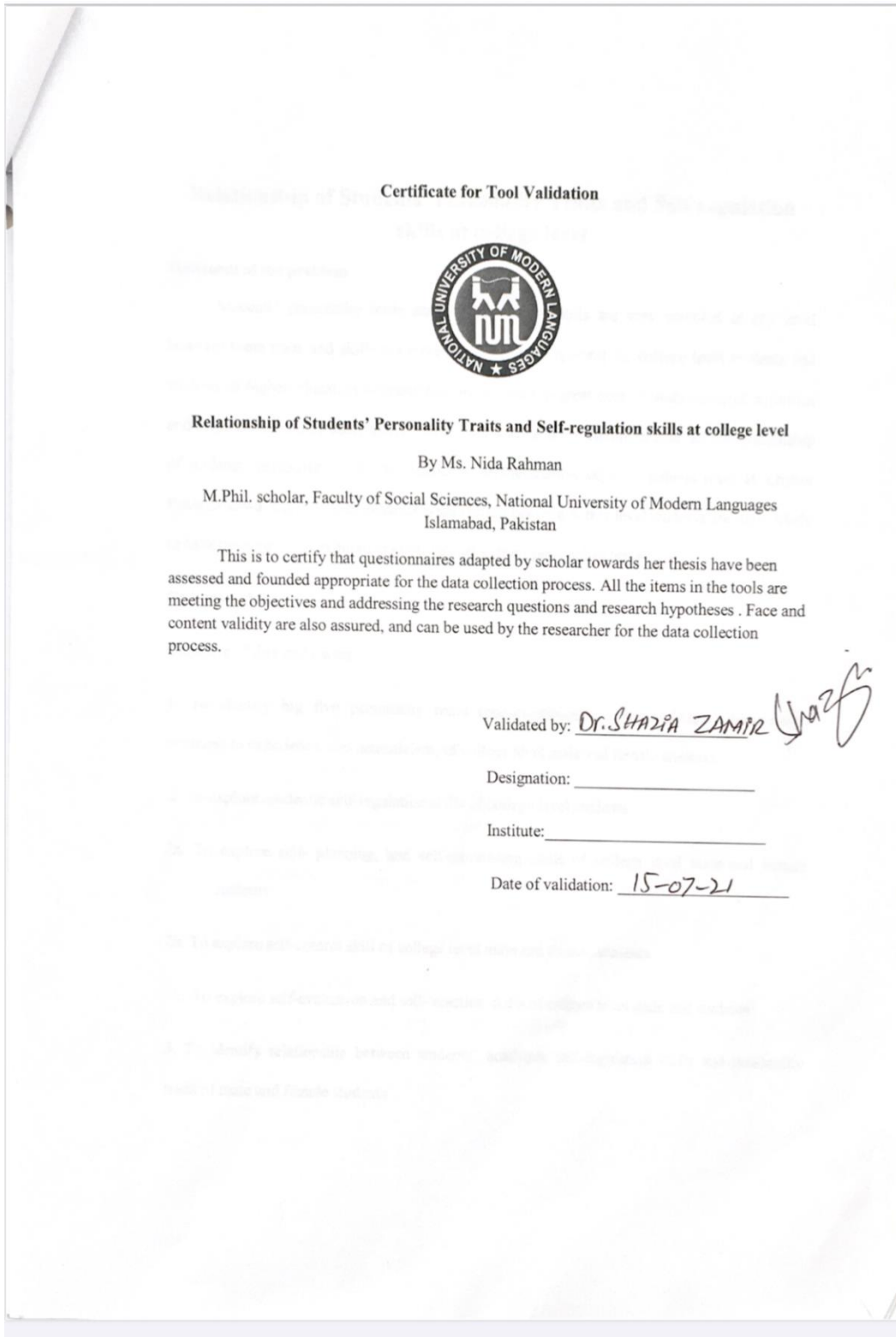
M.Phil. scholar, Faculty of Social Sciences, National University of Modern Languages
Islamabad, Pakistan

This is to certify that questionnaires adapted by scholar towards her thesis have been assessed and found appropriate for the data collection process. All the items in the tools are meeting the objectives and addressing the research questions and research hypotheses. Face and content validity are also assured and can be used by the researcher for the data collection process.

Validated by: Dr. Aeghae AliDesignation: Assist. prof.Institute: univ. of Malakand

Date of validation: _____

APPENDIX E



APPENDIX E

Certificate for Tool Validation



Relationship of Students' Personality Traits and Self-regulation skills at college level

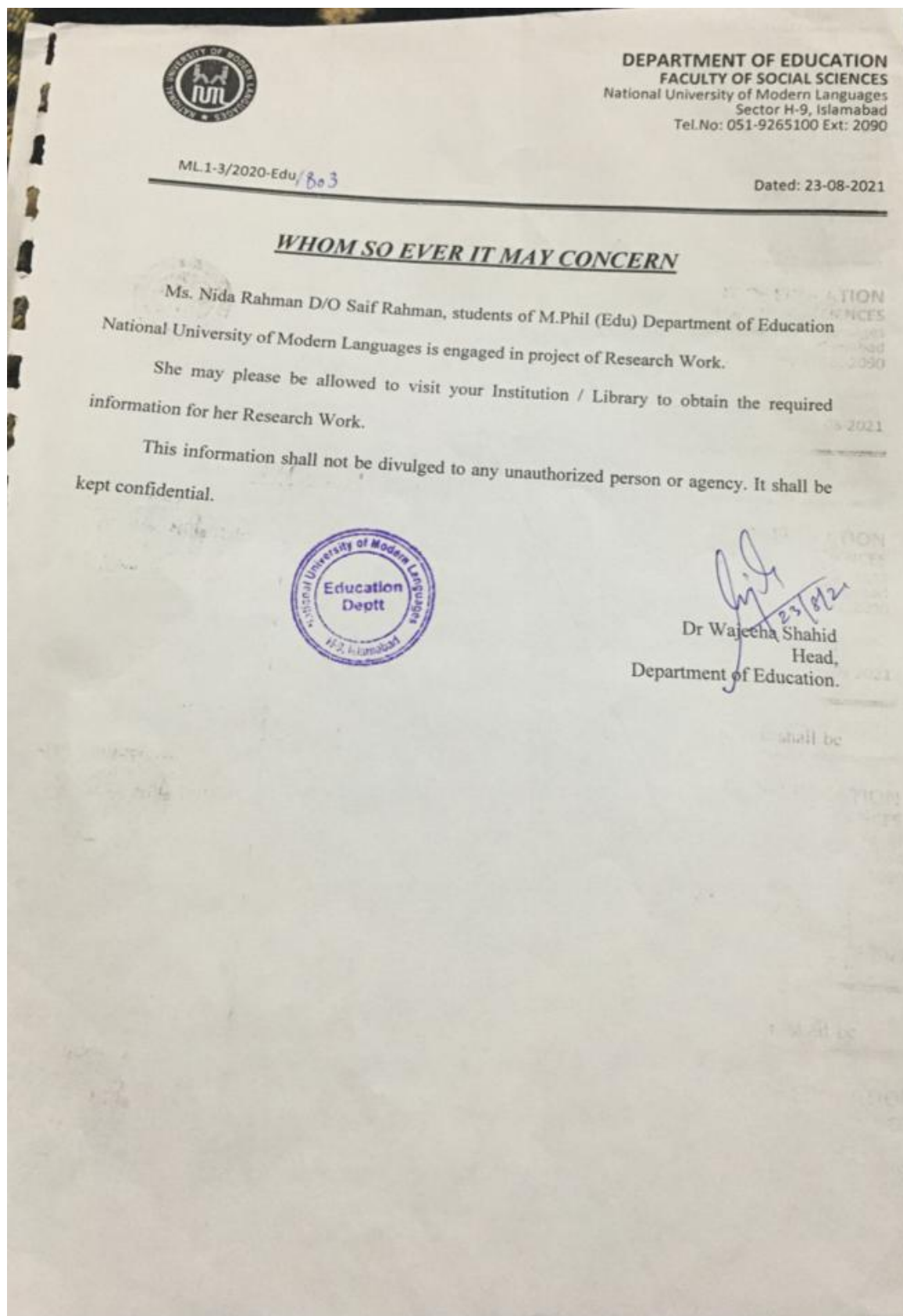
By Ms. Nida Rahman

M.Phil. scholar, Faculty of Social Sciences, National University of Modern Languages
Islamabad, Pakistan

This is to certify that questionnaires adapted by scholar towards her thesis have been assessed and found appropriate for the data collection process. All the items in the tools are meeting the objectives and addressing the research questions and research hypotheses. Face and content validity are also assured and can be used by the researcher for the data collection process.

Validated by: Dr. Iqbal Ahmad
 Designation: Assistant Professor
 Institute: Dept. of Education, University of Malakand
 Date of validation: 08-09-21
 Mob: 0346-9099945

APPENDIX F



APPENDIX G



National University of Modern Languages
 Quality Enhancement Cell
 Sector H-9, P.O. Shaigan, Islamabad, Pakistan
 Tel: +92-51-9265100 Ext 2246/2247
 Web: www.numl.edu.pk

Dated: April 20, 2022

Faculty of Social Sciences

Subject: Turnitin Similarity Index Report of MPhil Thesis of Ms Nida Rehman (Education)

1st Attempt

This is to state that MPhil thesis of Ms Nida Rehman has been run through Turnitin Software on April 20, 2022. Paper ID is 1815114266 and similarity index is 06%. This is within the limit prescribed by the Higher Education Commission.

The subject similarity index report is attached for further processing, please.

Dean, FSS

HOD Education

Dr Saira to disseminate.
G.S.
22/4/22



(Dr. Khushbakht Hina)
 Director
 Quality Enhancement Cell

APPENDIX H

Certificate of Proof Reading



CERTIFICATE OF PROOF READING

Relationship of Students' Personality Traits and Academic Self-Regulation Skills At College Level

By

Nida Rahman

National University of Modern Languages

It is certified that the research work with the title "Relationship of students' personality traits and academic self-regulation skills at college level" conducted by Nida Rahman has been checked and proofread for the language and grammatical mistakes.

Name Dr. Iqbal Amin Khan
 Designation Lecturer
 Institute Department of Education, University of Malakand
 Signature [Handwritten Signature]

