Relationship Between Personality Traits and Academic Achievement of School Students

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Abstract — This study explored HEXACO personality traits and the prediction of academic achievement through personality traits and demographic variables. This study also explored gender differences in personality traits and academic achievement. The sample comprised 377 school-going students. HEXACO–PI was used to measure the personality traits of students. Self-reported GPA was collected from the students to measure academic achievement. The results showed significant gender differences in the E trait only. Academic achievement did not differ significantly for gender. Results showed that X and C traits showed a significant correlation with academic achievement. Further, 23.1% of the variation in academic achievement was predicted by the combined effect of personality traits and demographic variables. Further, extraversion and conscientiousness were the significant independent predictors of academic achievement. Thus, personality traits should be considered to improve students' academic achievement.

Keywords— Academic Achievement, Agreeableness, Conscientiousness, Emotionality, Extraversion, Honesty-Humility, Openness, Personality Traits & Students.

1.1 BACKGROUND OF THE STUDY

The basic aspects on which individuals differ are expressed in personality traits (Matthews, Deary & Whiteman, 2003). It is the complex organization of psychophysical systems within the individual that defines his behaviors, actions, and thinking (Allport, 1937). In simpler words, personality refers to a person's distinct patterns of feelings, actions or emotions.

Various theorists have taken varying approaches to personality traits. Personality is physically defined at birth, according to psychologist Allport (1937), and influenced by an individual's environmental history. Eysenck (1952), another psychologist, suggested a personality concept that included biological aspects. He said that people are born with a nervous system that inhibits their capacity to learn and adapt to their surroundings. Cattell (1965) disagreed with Eysenck's claim that personality can be deduced from either two or three dimensions of behavior. He said that in order to get a complete image of an individual, it was important to look at a greater number of characteristics.

The big five personality theory has been prominent among the different approaches to personality traits. The most widely used personality trait model is the big five personality model (Digman, 1990). Openness, conscientiousness, extraversion, agreeableness, and neuroticism are the five distinct personality characteristics that make up the OCEAN system. The Big Five's traits have mostly independent ratings. That is, an individual's performance on one trait has no impact on their performance on the other five main traits. Extraversion, for example, can be exceptionally high and neuroticism can be either high or low. Similarly, a person may be either high or low in agreeableness and conscientiousness.

The HEXACO personality model is a revision of the big five (Ashton & Lee, 2007). This model can be compared to the big five, but it contains some of the features in significantly different variations, and its supporters argue that the big five factor model ignored one very important class of individual differences because of which honesty-humility is applied as a sixth trait of personality in HEXACO (Ashton & Lee, 2007). In a study by Rowatt, Petrini, & Shen (2011), honesty–humility seemed to be a significant personality trait in forecasting work success in care giving positions. The honesty–humility domain tests an individual's propensity to mislead others so they could accomplish benefits and abundance or societal position. Emotionality assesses the person's tendency to show empathy and attachment to one's kin. Extraversion assesses the person's confidence and response to social interactions. Agreeableness measures a person's ability to forgive, cooperate, and control their temper toward others. Conscientiousness tests an individual's propensity for being coordinated with their setting and plan, just as their work determination. Openness to experience tests an individual's excitement for craftsmanship or nature, just as their advantage and creative mind.

HEXACO traits can have a wide range of impacts on various aspects of a person's life (Caspi & Shiner, 2005),

and they can also help with academic achievement (Ivcevic & Brackett, 2014). Academic achievement is linked to an individual's HEXACO traits, according to Ivcevic and Brackett (2014). Academic achievement and HEXACO personality traits are linked together (Akomolafe, 2013). Kajonius (2016) discovered a strong negative association between honesty-humility and academic achievement in his research. In fact, emotionality is seen as an effective way for teachers to optimize the results of classroom learning experiences (Seligman, 2018). An early and classic research showed that people who scored higher on extraversion had poorer study patterns, which may have led to their poor university academic performance (Estabrook & Sommer, 1966). Students who rank high on agreeableness are often more friendly and obedient when dealing with social demands (Vedel & Poropat, 2017). Personality traits like conscientiousness have also been found to play an important role in the classroom and elsewhere, since highly conscientious individuals work well, finish their work on schedule, and are less distracted by non-essential activities that take time away from schoolwork (Furnham & Zhang, 2006). The negative relationship with the performance avoidance suggests that when compared to others, people with a high openness to experience are more interested in learning about the worldview and are less likely to pursue goals that discourage the display of incompetence (Chen & Zhang, 2011).

Apart from personality traits, demographic variables such as age, gender, and socioeconomic status play a significant role in determining an individual's academic achievement. When considering the impact of one's age on academic achievement, the differences in life experiences and maturation of older students result in comparatively better school performance, known as the relative age effect (Navarro, Rubio, & Olivares, 2015). Gender, in addition to age, may play a significant role in determining a student's academic achievement (Marcenaro, Agudo, & Ropero, 2018) discovered that boys are more prone to misbehavior than girls, and that boys' academic results are more sensitive to changes in their family's socioeconomic status, explaining a significant portion of the gender gap in academic achievement. When researchers looked into the link between socioeconomic status and academic achievement, they found that children from low-income families had a higher health risk (Chen & Prehar, 2002), as well as higher rates of anxiety, depression, and conduct disorders at school, all of which resulted in poor academic grades (Wadsworth & Achenbach, 2006).

There are different dimensions of personality traits and their contribution to academic achievement and there is a scarcity of documented research in Nepal. Just a few research findings have looked at personality traits and their relationship with academic achievement but these studies have been conducted using the big five model of personality traits (Poudel, 2017). The HEXACO model added a crucial dimension of personality traits to look at and explore but there, is a scarcity of research that looks at the relationship between personality traits and academic achievement using the HEXACO model of personality traits. There is a need to study that explores the contribution of HEXACO and demographic variables to academic achievement. Therefore, this study tried to explore personality traits, its association with academic achievement and prediction of academic achievement through personality trait and demographic variables.

1.2 RESEARCH PROBLEM

There are only a handful of documented research studies done in Nepal that have explored the field of personality traits. Personality models like big five cover less personality dimension than HEXACO and the added personality dimension in HEXACO has been considered very important by researchers. Even though personality traits have been linked with performance in the occupational setting, no documented studies in Nepal addressed the link of personality traits with academic achievement. Also, studies are scarce which explored the prediction of academic achievement through the combined influence of personality traits and demographic variables like gender and age.

This study thus explores HEXACO personality traits of school-going students and how these traits vary across the sex of the students. The present study also examined the relationship of personality traits with academic achievement. The study also investigated the prediction of academic achievement through HEXACO traits and demographic variables.

1.3 OBJECTIVES

1.3.1 To analyze the differences in HEXACO personality traits among male and female students.

1.3.2 To examine the differences between male and females' academic achievement (GPA).

1.3.3 To examine if HEXACO personality traits and demographic variables predict students' academic achievement.

1.4 HYPOTHESIS

Ho1: There is no significant personality difference between male and female.

Ho2: There is no significant gender difference in academic achievement.

Ho3: There is no significant correlation of HEXACO traits and academic achievement.

Ho4: HEXACO personality traits and demographic variables do not significantly predict academic achievement.

1.5 RATIONALE OF THE STUDY

Personality trait influences an individual's overall behavior. The impact of personality traits on academic achievement is worthy of attention. This study explores the personality traits that students have and also tries understanding how these different personality traits differ among males and females. This study will provide information about the personality traits of students in Nepal. The results can be used for comparison with existing literature from different countries or places.

This study explores the relationship between academic achievement and the personality traits of school students. Understanding the link between one's personality trait and academic achievement will provide an insight for people in the field of education.

This study will contribute in the field of counseling as the results will help a counselor to understand the client through their dominant personality traits and also to deal with them effectively. The research gap shown in this study will provide a direction for future researchers within this field of study.

1.6 OPERATIONAL DEFINITION

1.6.1 Personality Trait

Personality traits represent the unique pattern of feelings, emotions, and behaviors of individuals. The HEXACO (Ashton & Lee, 2007) personality model is used in the current study where HEXACO-PI (Ashton & Lee, 2016) tool is used to measure personality traits.

1.6.2 Academic Achievement

Academic achievement refers to the knowledge gained or skill developed in a particular subject, usually measured by test scores or by marks assigned by teachers. In the present study, GPA obtained by the students in their recent examination is taken as their academic performance.

1.6.3 Demographic Variables

Demographic variables are independent variables by definition because they cannot be manipulated. Only age and gender are the demographic variables for the present study.

1.7 CONCEPTUAL FRAMEWORK

This study will study the relationship between personality trait as an explanatory variable and academic achievement (GPA) as a response variable. Within personality traits, there are six explanatory personality traits i.e., HEXACO (honesty-humility, emotionality, extraversion, agreeableness, conscientiousness and openness). The demographic variable of the study i.e., age and gender will also be investigated as an explanatory variable and academic achievement (GPA) as a response variable. This framework will contribute in understanding if personality traits have a relationship with academic achievement and also can provide information, if demographic variables can predict or contribute to academic achievement.
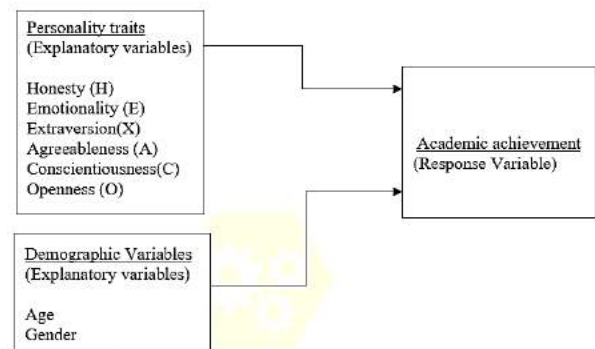

Figure 1: Conceptual framework

2.1 RESEARCH DESIGN

This study adopted correlation and cross-sectional design. Correlation method is used to find the relationship between academic achievement and HEXACO personality traits. It follows cross sectional design as the research has been conducted through age and gender at a single point in time. This research is conducted through survey method.

2.2 UNIVERSE OF THE STUDY

The sample of the study is students from three different schools in Kathmandu. The students were studying in grade 8, 9, 10, 11and 12. Total population of students in all three schools was 628 among which 412 were used as sample involving in this study.

2.3 SAMPLING AND SAMPLE SIZE

Participants of this study were selected through convenience sampling which is a type of non-probability sampling that involves the sample being drawn from that

part of the population that is close to hand. The sample size for unknown population was determined by using Cochran's sample size formula (Cochran, 1963).

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where:

e is the desired level of precision (i.e. the margin of error),
p is the (estimated) proportion of the population i.e. 50%
q is 1 – p,
A 95 % confidence level gives us Z values of 1.96.
Hence,
$((1.96)2 (0.5) (0.5)) / (0.05)2 = 385$

Therefore, a sample of 385 students in our target population should be enough to gives the confidence levels that is required. The minimum number of samples required was calculated as 385, and anticipated non-response percentage of 5 results the final sample size of 405. In total, the sample size was 412 but there were 35 responses that were not found usable as some GPAs were not reported in 4 scale unit and some were missing. After deletion of such data entry, 377 responses were found usable i.e., 8.5 % of the response were deleted and 91.5% response were used for further investigation. In the study 52.5% (198) participants were female and 47.5% (179) participants were male. There were 27 respondents who were 14 years of age, 48 respondents were 15 years of age, 99 respondents were 16 years of age, 88 respondents were 17 years of age, 75 were 18 years of age and 75 were 19 years of age. The highest percentage of respondents were from school at (194), second was school B (120) and remaining from school C (63).

2.5 DATA COLLECTION TOOLS

For measuring personality traits, the HEXACO–PI (Lee & Ashton, 2016) was used. It has six scales of personality traits and each contain 10 items which is divided into 6 subscales. All 60 items were translated in Nepali language as the representative samples were Nepali. Different languages use different grammatical structures for the same situations and in order to perfect the grammatical structure in Nepali without changing the core meaning on the statement, the translation was done with the help from an expert. HEXACO-PI is scored on a 5- degree Likert-type scale, ranging from 1(completely disagree) to 5 (completely agree). The scoring for each subscale is done by summing up the values indicated by the responses where some

statements (30R,12R, 60R,42R .24R, 48R, 53R ,35R, 41R, 59R, 28R, 52R ,10R,46R, 9R, 15R, 57R ,21R, 26R, 32R,14R, 20R, 44R, 56R,1R, 31R, 49R, 19R, 55R) were calculated in reverse values. Higher score in each subscale indicates dominant personality trait in each dimension. Percentile norms were calculated in order to divide the score range into low, average and medium scale. The preferable age groups on which HEXACO-PI can be implemented are from 14-60 (Ashton & Lee, 2016).

Reliability coefficient of the original tool were 0.80, 0.84, 0.83, 0.84, 0.84 and 0.81 for H, E, X, A, C and O, respectively (Lee & Ashton, 2007). In the current study internal consistency of H, E, X, A, C, O as measured by coefficient alpha were 0.76, 0.80, 0.80, 0.77, 0.76 and 0.78, respectively. Demographic data collection sheet was used to gather demographic information i.e., age and gender. For academic achievement, GPA was self-reported by the respondents.

2.6 DATA COLLECTION PROCEDURE

The HEXACO-PI (Lee & Ashton, 2016) was translated in Nepali with the help of professionals in the field of Nepali language to avoid grammatical error and also to maintain the core meaning of each English statement given in HEXACO-PI. The scale had 60 statements which were presented to the respondents in both Nepali and English languages in order to minimize misinterpretation. After the approval from the supervisor on the frame work of procedure, the data collection was started. Considering the COVID-19 pandemic and the emergency lockdown the first portion of data (194 responses) were collected on Google form. Google form was created online and was distributed to the students of school A which were filled inside the school's computer lab. After the lockdown was over other two schools i.e., school B (120 respondents) and school C (63 respondents) were approached. This time the printed forms of HEXACO–PI (Lee & Ashton, 2016) was used and distributed to the students. A printed letter for informed consent was given to the principals of each school in order to take the consent from the authorities and emails were sent to the participant's parents through the school administration who were minors. There was no time limit. The data collection took place from 12-02-2020 to 1-03-2021.

2.7 DATA ANALYSIS TECHNIQUE

Data was entered in Microsoft Excel and exported to Statistical Package for Social Science (SPSS) for analysis. Data was analyzed using SPSS as per the objectives of the study. Frequency and percentage of the GPA, age, gender and six personality traits of

HEXACO-PI subscales were computed. Besides frequency distribution, a t-test was carried out to explore the difference in GPA with respect to demographic variable (gender and age) and six personality dimensions of HEXACO. Pearson correlation matrix was computed to check the correlation between academic achievement (GPA) and six personality dimensions i.e., honesty-humility(H), emotionality(E), extraversion(X), agreeableness(A), conscientiousness(C) and openness to experience(O). Multiple linear regressions were carried out to examine the variation in academic achievement predicted by combine effect of personality traits and demographic variables. Linear regression was done to check if personality traits and demographic variables can significantly predict academic achievement.

2.8 ETHICAL CONSIDERATION

The participants were told that they had every right to refuse to participate, walk out in the middle of the scale's administration. As the study also involves participants that minors, email was sent to the parents and guardians for informed consent and the subject matters of any individual will not be disclosed. Participants were not given any advice on the topic.

2.9 LIMITATIONS

Closed-ended questions in research would generated new ideas that the respondent would not have otherwise thought of. Where errors or labeling the inaccurate result are possible, misinterpretation of a response go unnoticed. This encourages respondents to respond to complex issues in a simplistic manner. Due to the specificity of the question-and-answer choices, they might give an indistinct detail. As the study is conducted in students of Kathmandu so the results will not be able to generalize to whole population. Findings of the research that is done in specific area cannot be generalized to all students of Nepal due to differences in demographic factors.

3.1 DEMOGRAPHIC INFORMATION OF PARTICIPANTS

Table No. 1: Demographic Information

Demographic variables			Frequency	Percentage%
Gender	M		179	47.5
	F		198	52.5
Age				7.2
	14yrs		27	11.4
	15yrs		48	23.3
	16yrs		99	20.7
	17yrs		88	17.5
	18yrs		75	19.9
	19yrs		75	
Total			377	100

Data source (Field study, 2021)

Result of table 1 shows that 47.5% of participants were male and 52.5% of participants were female. The chosen population is from 14 to 19 years of age. Among them, 7.2% of respondents were 14 years of age, 11.4% respondents were 15 years of age, 23.3% respondents were 16 years of age, 20.7% respondents were 17 years of age, 17.5% were 18 years of age and 19.9% were 19 years of age. The total number of respondents was 377.

3.2 Personality Traits of Participants

Percentile norms were calculated to divide students' results on HEXACO-PI into three ranges i.e., low, average, and high. According to the calculations, scores lower than 34 drops under the low range, whereas scores ranging from 34-37 falls under average, and scores above 37 fall under the high range on the H scale. Scores lower than 32 falls under the low range, whereas scores ranging from 32-36 falls under average, and scores above 36 fall under the high range on the E scale. Scores lower than 32 are dropped under the low range, whereas scores ranging from 32-37 falls under average, and scores above 37 fall under the high range on the X scale. Scores lower than 33 falls under the low range, whereas scores ranging from 33-37 fall under average, and scores above 37 fall under the high range on the A scale. Scores lower than 32 falls under the low range, whereas scores ranging from 32-38 falls under average, and scores above 38 fall under the high range on the C scale. Scores lower than 32 falls under the low range, whereas scores ranging from 32-37 falls under average, and scores above 37 are fall under the high range on the O scale.

Table No. 2: Personality traits of participants on each scale of HEXACO-PI.

HEXACO	Level	Frequency	Percentage%	Total Mean	SD
Honesty(H)	Low	125	33.2	34.92	4.6
	Average	101	26.8		
	High	151	40.1		
Emotionality (E)	Low	120	31.8	33.001	4.8
	Average	109	28.9		
	High	148	39.3		
Extraversion(X)	Low	115	30.5	34.75	5.4
	Average	119	31.6		
	High	143	37.9		
Agreeableness(A)	Low	114	30.2	34.75	5.5
	Average	106	28.1		
	High	157	41.6		
Conscientiousness(C)	Low	121	32.1	34.25	5.8
	Average	125	33.2		
	High	131	34.7		
Openness(O)	Low	111	29.4	33.08	7.1
	Average	126	33.4		
	High	140	37.1		
Total		377	100		

Data source (Field study, 2021)

Table 2 depicts that female have higher mean GPA (M=3.35, SD=0.5) than male (M=3.28, SD=0.59). The mean values depict that on average males have low H (M=34.5, SD=4.7) and females have average H (M=35.5, SD=4.6). In the case of E, females showed average value (M=35, SD=5.0) whereas males showed lower (M=31.0, SD4.6). In the case of X, males (M=34.6, SD=5.1) and females (M=33.5, SD=5.7) both showed an average value. In the case of A, males (M=34.1, SD=5.9) and females (M=34.8, SD=5.0) both showed an average value. The mean values in C depicts that male (M=34.1, SD=5.8) and female (M= 34.0, SD=5.8) both have average level of C. In the case of O, males showed an average mean value (M=34.1, SD=5.8) whereas females showed a low mean value (M=32.06, SD=8.46) in O.

Table No.3: T-tests for comparisons between male and female in personality traits

Scales						95% Confidence Interval	
	Mean	SD	T	Sig	df	Lower	Upper
Honesty(H)	35.5 (F) 34.5 (M)	4.6	-0.079	0.93	375	-1.07	0.99
		4.7				-1.06	0.98
Emotionality(E)	35.0 (F)	5.0	4.73	0.0003	375	1.55	3.75
	31.0 (M)	4.6				1.54	3.76
Extraversion(X)	33.5 (F)	5.7	-1.07	0.28	375	-1.75	0.51
	34.6 (M)	5.1				-1.75	0.51
Agreeableness(A)	34.4 (F)	6.1	-1.5	0.13	375	-1.83	0.24
	34.8 (M)	5.0				-1.83	0.24
Conscientiousness(C)	34.1 (F)	5.9	0.59	0.55	375	-0.83	1.56
	34.0 (M)	5.8				-0.84	1.57
Openness (O)	32.0 (F)	8.4	-0.51	0.61	375	-1.50	0.88
	34.1 (M)	5.8				-1.50	0.88
GPA	3.35 (F)	0.5	0.35	0.72	375	-0.09	0.13
	3.28 (M)	0.5				-0.09	0.13

Data source (Field study, 2021)

Data source (Field study, 2021) Results of the t-test indicates there were no significant differences in H, X, A, C, O trait but t (275) = 4.73, p<0.01 indicates significant differences in E trait only;

result is significant at the 0.01 level. Hence, the hypothesis (Ho1) is rejected as there is a significant personality difference between male and female. Results of t-test t (375) = 0.35, p>0.01 also indicated there was no significant gender differences in

academic achievement (GPA) as result is significant at the 0.01 level. Hence, the hypothesis (Ho₂) is accepted as there is no significant gender difference in academic achievement.

3.3 CORRELATION BETWEEN ACADEMIC ACHIEVEMENT AND PERSONALITY TRAITS

Table No.4: Correlation matrix of personality traits and academic achievement

Variables	1	2	3	4	5	6
GPA						
Honesty(H)	.04					
Emotionality(E)	.05	.04				
Extraversion(X)	.34**	-.02	-.03			
Agreeableness(A)	.09	.02	-.03	.09		
Conscientiousness(C)	.26**	.03	.	.26**	.03	
Openness(O)	.07	-.01	.	.08	.07	-.05

Data source (Field study, 2021) ** Correlation is significant at the 0.01 level (2-tailed)

In table 4, Pearson correlation matrix showed significant correlation of X and C traits with academic achievement (r= 0.34, p=<0.01 and r=0.26, p=< 0.01) respectively. As the correlation is significant at 0.01 levels.

The R-value of X denotes a moderate positive relationship with academic achievement and C denotes slower positive relationship with academic achievement. Other HEXACO traits i.e., H, E, A, O did

not show any correlation as correlation below 0.15 is considered weak or non-important. Hence, the hypothesis (Ho3) is rejected as there is a significant correlation of HEXACO traits and academic achievement. In table 4, the correlation matrix showed a significant correlation of extraversion (X) and conscientiousness (C) with academic achievement which is why X and C are the only personality traits that are used for further regression analysis.

3.4 REGRESSION ANALYSIS BETWEEN ACADEMIC ACHIEVEMENT, X AND C TRAITS AND DEMOGRAPHIC VARIABLES

Table No. 5: The results of multiple regression analysis by participants' personality traits and demographic variables.

	Sum of Squares	df	Mean Square	F	Sig	R Square
Regression	23.286	4	5.821	21.268	0.000b	0.231
Residual	101.824	372	0.275			
Total	125.110	376				

Data source (Field study, 2021)

Results in table 5 shows that X and C traits and demographic variables (age and gender) significantly predicted academic achievement (F (4,372) =21.268,

p<0.01). Also, 23.1% of the variation in academic achievement was predicted by the combined effect of personality traits and demographic variables.

Table No.6: Coefficients of the general regression model: Academic Achievement

Variables	B	Std. Error	β	t	Sig.
(Constant)	1.583	0.687		2.303	0.022
Extraversion(X)	0.037	0.005	0.356	7.418	<.001
Conscientiousness(C)	0.022	0.005	0.229	4.767	<.001
Gender	-0.035	0.053	-0.031	-0.673	0.501
Age	0.009	0.017	0.023	0.500	0.617

Data source (Field study, 2021)

Extraversion (X) has a significant influence (t=7.418, sig= <.001) on GPA as 1 unit of extraversion can influence 0.037 unit of GPA. Similarly, 1 unit of conscientiousness (C) (t=4.767, sig=<.001) can influence 0.022 unit of GPA. Demographic variables i.e., age (t=0.5, sig= 0.617) and gender (t=-0.673, sig=0.5) has no influence on GPA. According to the hypothesis (Ho4) personality traits and demographic variables do not significantly predict academic achievement. The results reflected that among HEXACO personality traits X and C does significantly predict academic achievement whereas demographic variables do not. Hence, the hypothesis (Ho4) is rejected.

4.1. DISCUSSION

This study explored the HEXACO personality traits and sex differences in personality traits and academic achievement. This study also examined the correlation of HEXACO traits with academic achievement and the prediction of academic achievement of students through personality traits and demographic variables. HEXACO personality model is majorly used in organizational settings rather than school settings. It is used to predict an individual's job performance through their personality. Keeping that in mind, a student's academic achievement or performance is comparable to their future job performance because an individual with high academic performance during school period would showcase high job performance in future (Kuncel & Hezlett, 2004).

The finding from the t-test showed that there was a significant sex difference only in emotionality (E) trait. The hypothesis got rejected as there is a significant personality difference between male and female. Sex differences in emotionality have also been reported in studies (Allen & Haccoun, 2016). In a study, Saylik, Raman and Szameitat (2018) concluded that emotion is sensitive to sex differences. Some researchers also agree that women are more emotionally expressive, but not that they experience more emotions than men do (Kring & Gordon, 1998).

In general, women can produce inauthentic smiles than men do, while others have shown the opposite (Brody & Hall, 2008). This can also be because of the cultural stigmas about men to be less verbally articulate in terms of expressing their emotions which exists in Asian countries like Nepal. This debate is significant because emotion can be generated by adopting an action that is associated with a particular emotion, such as smiling and speaking softly (Brody & Hall, 2008).

There were no significant gender differences in academic achievement which is why the hypothesis got accepted. Bhatta and Rai (2020), on the contrary, reported girls had better GPAs in school than boys. Many factors may underlie these discrepancies including the sample of the study, location of the study, the time of the conduction of the research. Several studies have reported that female students outperform their male counterparts (Dayioglu & Turut, 2007; Khwaileh & Zaza, 2010) whereas result of this study reflected no significant gender difference with academic achievement. This somewhere showcases today are modern society in Kathmandu. Indeed, this finding of the examination can mirror an adjustment in the gender orientation-related convictions or beliefs among Nepalese women. They have been endeavoring to acquire a new identity that has a focus on independence in the past years. Along these lines, men and women are drawing progressively nearer to one another in their mentalities, attitudes, character qualities, and conduct models. This is more obvious with regards to students of this research, who are less affected by gender-related banalities. Meaningful differences between the sexes are not always detected.

The results from the correlation matrix reflected that personality traits i.e., extraversion and conscientiousness were the only traits that showed significance and positive correlation with academic achievement. Therefore, the hypothesis got rejected as there is a significant correlation of HEXACO traits and academic achievement. This finding accords with results from Chamorro and Furnham (2003). Conscientious learners are believed to responsibly do their academic tasks and improve their performance (Wagerman & Funder, 2007). Conscientiousness is a good predictor of academic success or performance, and this is one personality trait that speaks volumes about people's integrity, such students will be good academic performers too (Saxena & Mishra, 2014). In a study, conducted by Saylik, Raman and Szameitat (2018) conscientiousness and low extraversion turned out to be related to girls' academic achievement. Extroverted people on the other hand are more likely to be impetuous, impulsive at solving problems, talkative, distracted, and externally-motivated, and thus they are more prone to lower academic achievement (Saxena & Mishra, 2014). The study conducted by Hakimi and Lavasani (2011) found that extraversion was fundamentally and contrarily identified with academic achievement. On the other hand, the result of this study contradicts the findings of researchers who concluded that individuals who have less extraversion were more

successful than their highly extroverted counterparts (Dunsmore, 2006).

The correlation of academic achievement with humility-honesty (H), emotionality (E), agreeableness (A), and openness to experience (O) did not show any significance with academic achievement. Being modest or honest might not contribute to academic success. On the contrary Raza & Shah (2017) reflected in their study that agreeableness and openness character attributes make a huge constructive outcome on academic inspiration. Otten (2017) conducted a research where the result showed that students with higher honesty-humility and openness to experience showed more level of confidence in class, resulting in better academic performance. On the other hand, studies also showed that emotionality, and agreeablenesses are also significantly linked to the academic performance of students in the various core courses in computer science (Khan & Sarwar, 2017). The difference in results can be because of the sample size, location, cultural differences and many other factors that would show variation in results.

The multiple regression analysis of academic achievement with E and C traits showed that, they were reliable predictors of academic achievement whereas demographic variables did not. The hypothesis stated that HEXACO personality traits and demographic variables do not significantly predict academic achievement but the result showed that E and C traits do predict academic achievement but demographic variables do not, which is why the hypothesis got rejected. These findings confirm that it was consistent with many other researches considering conscientiousness and extraversion as the most reliable predictor of academic performance (Wagerman & Funder, 2007). Demographic variables weren't the predictors of academic achievement and this finding is consistent with results from McCrae (2002) as he concluded that age, gender, and socioeconomic status could not predict students' academic achievement. Bhatta and Rai (2020) on the contrary reported gender as a significant individual predictor of academic achievement.

Some literature has shown that grades in high school are a reliable predictor of academic success for young adults, but not for mature-age university students (Power, Robertson & Baker, 1987). In this regard, the relative importance of predictors of academic performance may change across the lifespan, and factors that may be applicable in young adulthood might not show relevance in older adults.

The conceptual framework of this study provided an understanding if personality traits have a relationship with academic achievement and also provided information, if demographic variables can predict or contribute to academic achievement. Looking at the results of this study it can be concluded that there is a relationship between certain personality traits and academic achievement. Particular personality traits showed significant relation with academic achievement but strength is also an important factor. While considering the strength of correlation and beta values in regression, it can be concluded that extraversion (X) showed a stronger positive relationship with academic achievement while conscientiousness (C) showed a lower positive relationship with academic achievement. The demographic variable of the study i.e., age and gender were investigated as an independent variable with academic achievement which showed no relationship with each other.

This study has several limitations. This study only included students from three private schools in Kathmandu. Thus, the results might not reflect students from other private or government schools. This is not an experimental study and findings regression should be interpreted cautiously. GPA was the single measure of academic achievement in this study. Regardless of these limitations, this study can provide an insight into the relationship between academic achievement and the personality traits of students. This study can also be baseline information for schools' authorities and stakeholder of education, in possible personality traits that can influence academic achievement.

4.2 CONCLUSION

The results showed that there is a relationship between few particular personality traits and academic achievement. Regarding differences between male and female students, emotionality (E) showed the most significant difference. There was no significant difference in academic achievement among male and female. HEXACO traits X and C had a positive correlation with academic achievement. X and C personality traits were reliable predictors of academic achievement whereas demographic variables were not. Thus, personality traits should be considered to improve students' academic achievement.

4.3 RECOMMENDATION

The overall findings suggest that there is an influence of few particular personality traits i.e., C and X in an individual's academic achievement. Accordingly, it's deserving of attention regarding attempt to organize this characteristic during starting periods of school. The

findings of this study can likewise point out the need of advising educational program developers, counselors, and researchers about the personality traits of learners and to help them consider such influences. This can be more adaptable while doing research and dealing with students.

Since this study only considered age and sex as demographic variables, more exploration can be done regarding different socio-economic and other environmental factors that can influence one's academic achievement. The results might vary according to the sampling location and the quality of schools in Kathmandu. For example, government schools and private schools might have shown differences in results. Therefore, more exploration can be done by future researchers in this field of study.

APPENDICE

Acknowledgements

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