

# [Characteristics of big five personality traits education](https://assignbuster.com/characteristics-of-big-five-personality-traits-education/)

Contents

* Decision, Implications and Future Study:

Keywords: Attitude towards chemical science ; Personality traits ; Chemistry Achievement ; Openness to see ; Conscientiousness ; Motivation ; Achievement Motivation.

Academic accomplishment represents the apprehension of the pupil about different constructs and accomplishments developed in different topics. In most of the states, parents normally desire that their kids show high degree of academic accomplishment which sets a batch of load on kids, instructors, schools and in general the whole instruction system. Therefore the whole instruction system revolves round the academic accomplishment of pupils so, the schools set a batch of clip for assisting pupils to accomplish high classs. Academic accomplishment may be influenced by different factors like intelligence, survey wonts, and attitudes of pupils, socio economic position, motive, chances, and different features of their personality. Academic accomplishment is considered as a nucleus criterion to mensurate pupils ‘ entire potency and capablenesss of larning. Hence academic accomplishment occupies a really critical topographic point in our instruction every bit good as in the acquisition procedure.

AchievementA is the major result ofA instruction, the degree to which a pupil, instructor has accomplished their educational ends. Harmonizing to Crow and Crow ( 1964 ) academic accomplishment is reflected by the extent to which a accomplishment or cognition has been acquired by a individual from the preparation imparted to him. Previous surveies in scientific discipline instruction revealed that pupils at all degrees struggle to larn chemical science, but most of them remain unsuccessful ( Herron, 1975 ; Nakhleh, 1992 ; Sawrey, 1990 ) . Knowledge of the factors that influence academic success has of import deductions for acquisition and instruction. Academic success is strongly influenced by single differences in personality and attitude.

Personality is the basic country of survey for psychologists. Hall and Lindzey ( 1991 ) province that personality may be defined in footings of features or abilities, that are extremely representative of an person and is an of import portion of the overall feeling created on others. Harmonizing to Pervin, and John ( 2005 ) Personality comprises of alone set of features that define an single feelings, manner of thought, and behaviour. Personality is a individual set of comparatively stable features that account forms of behaviour, in assorted state of affairss each person in some ways is different and in some ways is alone. There is much concern about the scientific discipline accomplishment of the pupils in high schools late. Consequently a strong accent is presently placed on bettering the quality of scientific discipline instruction ( Morrel & A ; Lederman, 1998 ) .

A widely used personality theoretical account, McCrae and Costa ‘ s NEO Five Factor Model, or “ Large Five Model ” ( 1990 ) , comprises of Extraversion, Neuroticism, Conscientiousness, Openness to Experience and Agreeableness.

Recent surveies show that Big Five traits measuring is powerful plenty to explicate a moderate per centum of the discrepancy in academic accomplishment ( Blickle, 1996 ; Rolfhus & A ; Ackerman, 1999 ) . The relationship between Extraversion and academic accomplishment shows that Extravert pupils perform better in primary schools where as introverts perform good in secondary schools and university ( Eysenck & A ; Cookson, 1969 ) . Introverts are benefited in written tests, while extroverts have an advantage in unwritten tests ( Chamorro- Premuzic & A ; Furnham, 2003a ; Furnham & A ; Medhurst, 1995 ) .

Table 2. 1: Features of Big Five Personality Traits

Large five traits

Features

Sample Items

Extraversion

Impulsive, Ambitious, Social,

Caring, optimistic, Confident

I learn more through cooperating and discoursing with my schoolmates.

Agreeableness

Friendly, assisting, trusting,

Kind, Cooperative

Kindhearted, Supportive.

I realize that assisting my schoolmates in chemical science benefits me.

Conscientiousness

Hardworking, Motivated,

good organized, duteous,

achievement-oriented

I strive to accomplish excellence in everything I do.

Neurosis

Nervous, Sensitive,

disturbed, confuse, distract

I can non understand the fanciful construct of Chemistry.

Openness to Experience

Open-minded, Inventive,

Curious, Imaginative, Innovative

I am ever willing to accept the new experiences of Chemistry.

Neurosis is the status of fright, jitteriness in nerve-racking conditions i. e. , exams ( Hembree, 1988 ; Siepp, 1991 ) . Neuroticism leads to hapless self-concept ( Wells & A ; Matthews, 1994 ) and low self-estimated intelligence ( Furnham, Chamorro-Premuzic, and Moutafi, under reappraisal ) . Chamorro-Premuzie and Furnham ( 2003 ) found that Neuroticism may impair academic accomplishment or has no important associations with academic accomplishment ( Puklek Levpu [ scaron ] [ caron ] ek & A ; Zupan [ caron ] I [ caron ] 2009a ) . Openness to see is important forecaster of academic accomplishment ( Bratko et al. , 2006 ; Laidra et al. , 2007 ) . Openness to see and amenity are positively related to academic accomplishment ( Lounsbury et al. , 2003 ; Farsides & A ; Woodfield, 2003 ) . Research workers have shown important associations between Conscientiousness and academic accomplishment in school ( Noftle & A ; Robins, 2007 ) because careful, organized, hardworking, and achievement-oriented pupils may anticipate to win in academic scenes.

Osborne et Al. ( 2003 ) province that attitudes are the feelings, beliefs, and values held about an object, in footings of chemical science may be enthusiasm about chemical science, perceptual experiences of chemical science, and the part of chemical science to society or scientists. Therefore attitude play a critical function in furthering durable acquisition and to find pupils ‘ academic accomplishment. Affectional features are considered as an of import sphere of attitude so in this survey we select seven affectional features that are motive, involvement, assurance, enjoyment, importance, anxiousness and achievement motive.

Table. 2. 2: Features of Affective Domain of Attitude

Scale

Description

Sample Item

Enjoyment

Intriguing, Exciting, Fun, Interesting, Attractive, Capturing

Chemistry lessons are interesting and merriment to analyze.

Anxiety

Worry, Nervous, Fear, Confuse, Uncomfortable

Chemistry normally makes me experience uncomfortable, nervous and baffled.

Importance

Useful, good, Advantageous, Helpful, Aware

Chemistry is utile if the subjects are connected with our day-to-day life.

Interest

Aware, Curious, Like,

I am interested to cognize about the new researches in chemical science.

Motivation

Inspiration, Reinforcement, Stimulation, Encouragement

When I fail in Chemistry class, it encourages me to seek much harder to make good in Chemistry.

Assurance

Success, Sureness, Sef-reliance

I am certain I can larn and can make progress work in Chemistry

Achievement Motivation

Extent to which pupils are motivated to accomplish their ends.

I get good classs in Chemistry than any other topic.

An scrutiny of literature on attitude and chemical science accomplishment reveals conflicting consequences ( Shibley et al. , 2003 ; Turner and Lindsay, 2003 ) . While some claim a low correlativity between attitude and accomplishment, others claim the two are strongly positively correlated. Wei-nburgh ‘ s ( 1995 ) meta-analysis of the research suggests that there is merely a moderate relation between attitude and accomplishment.

Previous researches show the consequence of affectional features of attitude on academic accomplishment. Skaalvik and Rankin ( 1995 ) , Egitimidergisi, ( 2007 ) found that motive is correlated with academic accomplishment. Academic accomplishment is most likely to happen when acquisition is autonomous and pupils are motivated ( Ryan, Connell, & A ; Deci, 1985 ) . Furthermore, research workers have found that motive leads to engagement in academic undertakings, which is related to accomplishment ( DeCharms, 1984 ; Dweck, 1986 ) . Interest is an single sensitivity and a psychological province of head, which is of import for cognitive battle, acquisition, and accomplishment ( Ainley, Hidi, & A ; Berndorff, 2002 ; Pintrich & A ; Schunk, 2002 ) . Krapp attack involvement in two different point of positions, Personal and situational involvement. Personal involvement is topic-specific, persists over clip ( Schiefele 1991 ) . However, situational involvement is aroused as a map of the interestingness of the event or object and it is besides mutable and partly under the control of instructors ( Schraw, Flowerday, & A ; Lehman 2001 ) . Interest is related to pupils ‘ devotedness, ends, and deepness of acquisition ( Hidi & A ; Renninger, 2006 ) . Interests addition when pupils feel competent, so even if pupils are non ab initio interested in a topic or activity, they may develop involvements as they experience success. ( Stipek, 2002 ) . Whitfield ( 1979 ) reported chemical science and natural philosophies as the least gratifying topic. Analysis indicates that there is important average difference between Grade 9 and Grade 10 pupils ‘ attitudes toward chemical science as a school topic on “ enjoyment ” and “ importance ” dimensions ( Can & A ; Boz, 2012 ) . Achievement motive is correlated with academic accomplishment ( Camara, 1986 ) . Persons ‘ academic accomplishment depends non merely on their motive to accomplish but besides on whether they expect to accomplish and whether they fear failure. Students ‘ work hard when they perceive a sensible opportunity to win than when they perceive a end to be out of range ( Atkinson, 1964 ) .

Previous surveies demonstrate that accomplishment in scientific discipline is gender dependant. Male and female pupils ‘ accomplishment in scientific discipline is significantly correlated ( Schibeci and Riley 1986, Weinburgh 1995 ) . Previous research revealed that boys outperform misss in scientific discipline in most states ( Pinchas 1988, Wang & A ; Staver 1995 ) . Gender differences in scientific discipline achievement trial tonss have non typically been big when compared. However, recent surveies on gender differences in scientific discipline accomplishment reported a alteration in form, therefore describing either no gender differences ( Ventura 1992, Calsambis 1995 ) or misss surpassing male childs in scientific discipline ( Young and Fraser 1990, Soyibo 1999 ) . Fraser-Abder ( 1990 ) investigated the effects of gender, school-type ( single-sex or co-ed schools, private denominational or authorities schools ) , parental business, and socioeconomic position on scientific discipline accomplishment in Trinidad. Fraser-Abder found that misss scored significantly higher than male childs on the scientific discipline trial. Zappala ( 2002 ) argue that the type of school a kid attends influences academic accomplishment. Schools harmonizing to Sentamu ( 2003 ) are societal establishments in which groups of persons are brought together to portion educational experiences and such interactions may engender positive or negative influences on scholars. Parents ‘ instruction is positively related to pupils ‘ academic accomplishment. This is supported by Dills ( 2006 ) and Owens ( 1999 ) . Considine and Zappala ( 2002 ) Kwesiga ( 2002 ) reveal that School sector ( public or private ) is linked to academic public presentation of pupils.

Parents who scaffold larning experiences and supply support to their kids when needed early in kids ‘ s lives may fix their kids for school entry and supply footing for them to profit from educational activities ( Pianta & A ; Egeland, 1994 ; Pianta et al. , 1990 ; Pianta et al. , 1997 ) . Parents ain behaviour every bit good as joint household activities have been shown to act upon kids ‘ s academic motive and behaviour ( Chen, Lee & A ; Stevenson, 1996 ; De Garmo, Forgatch & A ; Martinez, 1999 ; Grolnick & A ; Slowiaczek, 1994 ; Heiss, 1996 ) . Authoritative parenting, has positive effects on how pupils approach the demands they face in school ( Bradley et al. , 2000 ; Gutman & A ; Eccles, 1999 ) .

Interest and attitude of scholars towards the topic plays a decisive function for the success of the scholar. Students choose class by their involvement are believed to be extremely motivated to larn than pupils placed in a section without their involvement. High motive is a factor which can take pupils to a better accomplishment. Surveies done by different writers disclosed that motivated pupils perform better academically than unmotivated 1s ( Bank and Finlapson, 1980 ; Broussard and Garrison, 2004 ; Sandra, 2002 ) .

Attitude towards Chemistry and personality traits vary over clip and consequence academic accomplishment of pupils in different ways. Previous surveies show that attitudes and personality towards Chemistry accomplishment are cultural dependant. Culture varies between and within states. Therefore, it is sensible to presume big figure of fluctuations in pupils achievement in chemical science reported from different parts of the universe. Gender function varies in different civilizations ; it is hence likely that chemical science accomplishment is gender dependant. Chemistry accomplishment is one of the major involvements of pedagogues. Although being non really frequent affectional features are studied together with personality and accomplishment in chemical science instruction. However surveies based on Affective Characteristics and Achievement or on Personality and Achievement is found individually but combine survey of all these three factors is non found in chemical science instruction. Prior research has established that both personality traits and attitude are associated with academic accomplishment. However, non much is known about the joint influence of personality traits and attitude on scholars ‘ Chemistry academic accomplishment. In the current survey, researcher sought to make full in this spread in the literature by straight analyzing the relationship between personality, attitude and academic accomplishment.

Three major research inquiries were investigated: ( 1 ) what is the relationship between secondary school scientific discipline pupils ‘ Big 5 personality traits and affectional features of attitude on their Chemistry academic accomplishment? ( 2 ) How demographic factors ( age, gender, household type, school sector, pick of class and educational degrees of parents ) influence Chemistry academic accomplishment of secondary school scientific discipline pupils. ( 3 ) Are the Affective Characteristics of Attitude depends on each other?

To look into the purpose of this survey, the first measure was to develop a valid and dependable questionnaire for mensurating pupils ‘ personality trait and attitudes toward chemical science accomplishment. Rather than interpreting an attitude and personality questionnaire among those available in literature, we constructed a new questionnaire, in order to be more relevant to the course of study and conditions applied in the Pakistan schools. The questionnaire was prepared on the footing of Likert graduated table type. It was prepared by maintaining in position different facets of the job.

All participants completed a 37-statement investigator-developed questionnaire. The Questionnaire includes six demographic variables every bit good as two factors ( Personality & A ; Attitude ) . Six demographic variables are included that elicits respondents ‘ background information.

All participants were asked to rate each point utilizing a five-point graduated table where a ‘ 5 ‘ represented ‘ strongly agree ‘ and a ‘ 1 ‘ represented ‘ strongly disagree. ‘ The evaluations for all statement on each graduated table are summed, and a higher mark indicates more obvious trait features. All points were written in a ‘ structured alternate format ‘ design to cut down the inclination to give socially desirable responses ( Harter, 1982 ) . The pilot testing was done on a sample of 50 pupils. The dependability of the research instrument was 0. 84 and degree of trouble of questionnaire was moderate.

The writers obtained mandate from school decision makers to carry on the survey. Through single meeting communications were provided to the school counsellors ( or schoolroom instructors ) to explicate the intent of this survey and the research instrument. Students were recruited through voluntary engagement. There were 780 pupils who participate in this survey. The research workers administered the Questionnaire to accepting pupils either during categories. Before administrating the study, the intent of the survey and the processs to finish the Questionnaire were explained to the pupils. Students ‘ apprehension of the study was verified and inquiries about the study were answered.

Quantitative analysis was performed with the aid of SPSS ( Statistical Package for Social Sciences ) . Mean and one manner ANOVA was applied on the informations to look into questionnaire

in footings of personality traits and attitudes toward chemical science.

Figure 1 illustrates a important consequence of Gender and Family Type on pupils Chemistry Achievement. Figure indicates that Male pupils have the average value 3. 66 and are high winners in chemical science as comparison to female pupils holding average value 3. 60, while pupils belongs to “ Nuclear Family ” have the average value 3. 65 and are high winners in chemical science as comparison to pupils who belongs to “ Joint household ” system holding average value 3. 62.

Figure 1: Average values of “ Class ” , “ Gender ” and “ Family Type ” on the footing of secondary school pupils “ Chemistry Achievement ” .

Figure 2 shows a important consequence of School Sector on pupils Chemistry Achievement. Figure indicates that the “ Private school ” show highest average value 4. 14 of “ Chemistry Achievement ” while the “ Government School ” show lowest average value 2. 78 of Chemistry Achievement and “ Semi-Government School ” show moderate mean value 3. 98 of Chemistry Achievement.

Figure 2 shows Mean values of “ School Sector ” on the footing secondary school pupils “ Chemistry Achievement ” .

## Consequence of Father Qualification on pupils ‘ Chemistry Achievement

Figure 3 indicates that the pupils whose “ Father making ” is “ Masters ” show highest average value 4. 17 of “ Chemistry Achievement ” and the pupils whose male parents are “ Uneducated ” show lowest average value 2. 34 of Chemistry Achievement as comparison to the pupils whose male parent makings is “ Matric ” , “ Intermediate ” , “ Graduation ” and “ Masters ” . Figure 3 illustrates a positive important consequence of Father Qualification on secondary school pupils Chemistry Achievement.

Figure 3 shows Mean values “ Father Qualification ” based on secondary school pupils “ Chemistry Achievement ” .

Figure 4 indicates that the pupils whose female parent making is “ Masters ” show highest average value 4. 21 of “ Chemistry Achievement ” and the pupils whose female parents are “ Uneducated ” show lowest average value 2. 37 of Chemistry Achievement as comparison to the pupils whose female parent makings are “ Matric ” , “ Intermediate ” , “ Graduation ” and “ Masters ” . Figure 4 illustrates a positive important consequence of Mother Qualification on secondary school pupils Chemistry Achievement.

Figure 4 shows Mean values of “ Mother Qualification ” on the footing of Secondary School pupils “ Chemistry Achievement ” .

Figure 5 illustrates a important consequence of Choice of Course on Students Chemistry Achievement. Figure indicates that the pupils who choose chemical science for “ Better Academic Accomplishment ” show highest average value 3. 93 of “ Chemistry Achievement ” and the pupils who choose chemical science “ Out of Interest ” show lowest average value 3. 36 of “ Chemistry Achievement ” .

Figure 5 shows Mean values of “ Choice of Course ” based on secondary school pupils “ Chemistry Achievement ” .

Sum of Squares

( df )

Mean Square

F-values

( p-values )

Post hoc

( p-values )

## 51 % -60 % Vs. 61 % -70 %

## 51 % -60 % Vs. 71 % -80 %

## 91 % -100 % Vs. 50 % & A ; below 50 %

## 91 % -100 % Vs. 51 % -60 %

## 91 % -100 % Vs. 61 % -70 %

## 91 % -100 % Vs. 71 % -80 %

Extraversion

Between group

2. 445

( 5 )

0. 489

1. 136

( 0. 340 )

Within group

333. 101

( 774 )

0. 430

Agreeableness

Between group

5. 249

( 5 )

1. 050

2. 196

( 0. 053 )

Within group

369. 982

( 774 )

0. 478

Conscientiousness

Between group

8. 395

5

1. 679

4. 180

( 0. 001 )

-0. 2453

( 0. 015 )

-0. 2992

( 0. 001 )

Within group

310. 866

( 774 )

0. 402

Neurosis

Between group

4. 343

( 5 )

0. 869

1. 485

( 0. 192 )

Within group

452. 680

( 774 )

0. 585

Openness to Experience

Between group

10. 273

( 5 )

2. 055

3. 661

( 0. 003 )

-0. 55686

( 0. 009 )

-0. 34645

( 0. 048 )

-0. 31730

( 0. 042 )

-0. 38241

( 0. 005 )

Within group

434. 327

( 774 )

0. 561

-0. 15460

( 0. 017 )

Personality

Between group

2. 616

( 5 )

0. 523

3. 044

( 0. 010 )

Within group

133. 024

( 774 )

0. 172

## Table 3: One manner ANOVA and Tukey station hoc for multiple comparings of “ Chemistry Achievement ” on secondary school pupils ‘ “ Personality trait ”

## Consequence of Personality Traits on Students ‘ Chemistry Achievement

Table 3 indicates that there is no important consequence of secondary school pupil ‘ s Personality trait “ Extraversion ” , “ Agreeableness ” , “ Neurosis ” on “ Chemistry Achievement ” .

Table 3 besides reveals that there is important consequence of secondary school pupil ‘ s Personality trait “ Conscientiousness ” on “ Chemistry Achievement ” . From the Tukey Post Hoc Test of Multiple Comparisons reveals that the pupils who got Markss 61 % -70 % and 71 % -80 % show more “ Conscientiousness ” that the pupils who got 51 % -60 % Markss.

Table 3 besides specifies that there is important consequence of secondary school pupil ‘ s Personality trait “ Openness to Experience ” on “ Chemistry Achievement ” . Tukey Post Hoc Test of Multiple Comparisons reveals that the pupils who got Markss 50 % & A ; below 50 % , 51 % -60 % , 61 % -70 % and 71 % -80 % show more “ Openness to Experience ” than the pupils who got 91 % -100 % Markss.

Table 3 besides illustrates that there is important consequence of secondary school pupil ‘ s “ Personality ” on “ Chemistry Achievement ” . Tukey Post Hoc Test of Multiple Comparisons reveals that the pupils who got Markss 71 % -80 % show more “ Personality ” than the pupils who got Markss 51 % -60 % .

Sum of Squares

( df )

Mean Square

F-values

( p-values )

Post hoc

( p-values )

## 81 % -90 % Vs. 51 % -60 %

## 81 % -90 % Vs. 61 % -70 %

## 91 % -100 % Vs. 50 % & A ; below 50 %

## 91 % -100 % Vs. 61 % -70 %

## 91 % -100 % Vs. 71 % -80 %

Interest

Between group

3. 199

( 5 )

0. 640

0. 857 ( 0. 510 )

Within group

577. 815 ( 774 )

0. 747

Motivation

Between group

12. 250 ( 5 )

2. 450

3. 923 ( 0. 002 )

-0. 61783

( 0. 005 )

-0. 33498

( 0. 042 )

-0. 36734

( 0. 015 )

Within group

483. 388 ( 774 )

0. 625

Enjoyment

Between group

5. 923

( 5 )

1. 185

1. 197 ( 0. 309 )

## –

Within group

766. 010 ( 774 )

0. 990

Assurance

Between group

4. 141 ( 5 )

0. 828

1. 790 ( 0. 112 )

Within group

358. 069 ( 774 )

0. 463

Importance

Between group

2. 379 ( 5 )

0. 476

0. 832 ( 0. 527 )

## –

## )

Within group

442. 382 ( 774 )

0. 572

Anxiety

Between group

5. 907 ( 5 )

1. 181

1. 419

( 0. 215 )

Within group

644. 330 ( 774 )

0. 832

Achievement Motivation

Between group

12. 150 ( 5 )

2. 430

3. 637

( 0. 003 )

0. 36081

( 0. 015 )

0. 28473

( 0. 033 )

Within group

517. 194 ( 774 )

0. 668

Attitude

Between group

1. 168 ( 5 )

0. 234

0. 671

( 0. 646 )

Within group

269. 496 ( 774 )

0. 348

## Table 4: One manner ANOVA and Tukey station hoc for multiple comparings of “ Chemistry Achievement ” on secondary school pupils ‘ “ Affective Characteristics of Attitude ”

## Consequence of Attitude on Students ‘ Chemistry Achievement

Table 4 besides indicates that there is no important consequence of secondary school pupil ‘ s “ Interest ” , “ Enjoyment ” , “ Assurance ” , “ Importance ” , and “ Anxiety ” of Chemistry lessons.

Table 4 indicates that there is important consequence of secondary school pupil ‘ s “ Motivation ” towards Chemistry on “ Chemistry Achievement ” . Tukey Post Hoc Test of Multiple Comparisons it is apparent that the pupils who got Markss 91-100 % show more “ Motivation ” as comparison to pupils who got 50 % & A ; below 50 % , 61 % -70 % and 71 % -80 % Markss.

Table 4 illustrates that there is important consequence of secondary school pupil ‘ s “ Achievement Motivation ” towards Chemistry on “ Chemistry Achievement ” . Tukey Post Hoc Test of Multiple Comparisons revealed that there is important consequence of secondary school pupil ‘ s “ Achievement Motivation ” on “ Chemistry Achievement ” . The pupils who got Markss 81 % -90 % show more “ Achievement Motivation ” than the pupils who got 51 % -60 % and 61 % -70 % Markss. Table indicates that there is no important consequence of secondary school pupil ‘ s “ Attitude ” towards Chemistry on “ Chemistry Achievement ” .

## Inter-relationship between different sub-factors of affectional attitude

Variable

r- value

Sig.

Enjoyment and Interest

0. 765

0. 000

Interest and Motivation

0. 694

0. 000

Interest and Assurance

0. 623

0. 000

Interest and Importance

0. 574

0. 574

Interest and Anxiety

0. 031

0. 389

Interest and Achievement Motivation

0. 666

0. 000

Motivation and Enjoyment

0. 566

0. 000

Motivation and Assurance

0. 824

0. 000

Motivation and Importance

0. 476

0. 000

Motivation and Anxiety

0. 014

0. 687

Motivation and Achievement Motivation

0. 464

0. 000

Assurance and Importance

0. 500

0. 000

Assurance and Anxiety

0. 009

0. 793

Assurance and Achievement Motivation

0. 445

0. 000

Importance and Anxiety

0. 008

0. 834

Importance and Achievement Motivation

0. 407

0. 000

Anxiety and Achievement Motivation

0. 196

0. 000

Table 1 shows that r-ratio ( 0. 765 ) So, there is strong positive relationship between secondary school pupil ‘ s “ Interest ” in chemical science and pupil ‘ s “ Enjoyment ” in larning chemical science lessons. r-ratio ( 0. 694 ) indicates strong positive relationship between secondary school pupil ‘ s “ Interest ” in chemical science and pupil ‘ s “ Motivation ” in larning chemical science lessons. r-ratio ( 0. 623 ) illustrate the strong positive relationship between secondary school pupil ‘ s “ Interest ” in chemical science and pupil ‘ s “ Assurance ” in larning chemical science lessons. r-ratio ( 0. 574 ) is non important at pa‰¤0. 05 degree of significance and there is no important relationship between secondary school pupil ‘ s “ Interest ” in chemical science and they do non cognize the “ Importance ” of chemical science lessons. r-ratio ( 0. 031 ) is non important at pa‰¤0. 05 degree of significance so, there is no important relationship between secondary school pupils “ Interest ” in chemical science and their “ Anxiety ” about chemical science lessons. r-ratio ( 0. 666 ) illustrate the strong positive relationship between secondary school pupil ‘ s “ Interest ” in chemical science and pupil ‘ s “ Achievement Motivation ” about chemical science lessons.

Table 1 besides shows that r-ratio ( 0. 566 ) shows the moderate positive relationship between secondary school pupil ‘ s “ Motivation ” about chemical science and pupil ‘ s “ Enjoyment ” of chemical science lessons. r-ratio ( 0. 824 ) represents strong positive relationship between secondary school pupil ‘ s “ Motivation ” about chemical science and pupil ‘ s and “ Assurance ” about chemical science lessons. r-ratio ( 0. 476 ) shows the intermediate positive relationship between secondary school pupil ‘ s “ Motivation ” about chemical science and “ Importance ” of chemical science lessons. r-ratio ( 0. 014 ) is non important at pa‰¤0. 05 degree of significance So, it is apparent that there is no important relationship between secondary school pupils “ Motivation ” about chemical science and pupil ‘ s and “ Anxiety ” about chemical science lessons. r-ratio ( 0. 464 ) is important at pa‰¤0. 05 degree of significance. So, it is apparent that there is moderate positive relationship between secondary school pupil ‘ s “ Motivation ” about chemical science and pupil ‘ s “ Achievement Motivation ” of chemical science.

Table 1 represents that r-ratio ( 0. 500 ) indicates the moderate positive relationship between secondary school pupil ‘ s “ Assurance ” about chemical science and pupil ‘ s “ Importance ” of chemical science. r-ratio ( 0. 009 ) is non important at pa‰¤0. 05 degree of significance so, it is apparent that there is no important relationship between secondary school pupil ‘ s “ Assurance ” about Chemistry and pupil ‘ s “ Anxiety ” about Chemistry. r-ratio ( 0. 445 ) illustrate the weak positive relationship between secondary school pupil ‘ s “ Assurance ” about chemical science and “ Achievement Motivation ” of chemical science. r-ratio ( 0. 008 ) is non important at pa‰¤0. 05 degree of significance so, it is apparent that there is no important relationship between secondary school pupils “ Importance ” about chemical science and “ Anxiety ” about chemical science. r-ratio ( 0. 407 ) represents moderate positive relationship between secondary school pupil ‘ s “ Importance ” about chemical science and “ Achievement Motivation ” of chemical science. r-ratio ( 0. 196 ) shows the hebdomad positive relationship between secondary school pupils “ Anxiety ” about chemical science and “ Achievement motive ” of chemical science.

## Discussion

The present survey determines the relation between personality traits, affectional features of attitude and chemical science academic accomplishment. The survey besides look into how some pupil related variables such as Gender, School Sector, Family Type, Mother Qualification, Father Qualification and Choice of Course affect chemical science accomplishment of secondary school pupils.

Knowledge of the factors act uponing academic accomplishment enables pedagogues to develop just academic course of study, those that can counterbalance for known failings that a pupil might transport into the schoolroom, and those that can foster a pupil ‘ s strengths. Although ability or intelligence has been a natural pick for the anticipation of academic accomplishment, recent research has shown that personality traits have much to offer. In this survey, the pupils who got 71-80 % marks show more personality traits. So we can state that personality traits, specifically the Big Five factors, have been strongly implicated in pupils ‘ academic success. These consequences are consistent with the findings of Oliver and Mooradian ( 2003 ) they concluded that academic success is strongly influenced by single differences in personality and accomplishment.

Personality is an of import factor to explicate how people perceive the universe ; and it encourages people to take challenges to corroborate their cognition ; it changes penchants and maintains penchants in visible radiation of new information. The present survey indicated few variables that are influential in finding the chemical science accomplishment of secondary school pupils.

In this survey research worker found that extroversion is negatively related with pupils ‘ academic accomplishment these consequences are consistent with Entwistle ( 1972 ) , Eysenck and Cookson ( 1969 ) , Petrides et al. , ( in imperativeness ) extroversion has been found to alter from positive in primary school to veto in secondary school and university. This alteration has been attributed to the move from the sociable, less competitory, atmosphere of primary school to the instead formal ambiance of secondary school, although others have argued that this alteration is due to the fact that the less able persons become extrovert and vice-versa ( Anthony, 1973 ) . It is nevertheless by and large accepted that introverts have an advantage over extroverts with regard to the ability to consolidate acquisition, every bit good as lower distractibility and better survey wonts ( Entwistle & A ; Entwistle, 1970 ; Sanchez-Marin et al. , 2001 ) . This negative association has been interpreted as proposing that introverts spend more clip perusal, whereas extroverts spend more clip socialization ( Chamorro-Premuzic & A ; Furnham, 2005 ) .

Present survey reveals that neurosis has no important consequence on academic accomplishment these consequence can be compared with Laidra et al. , ( 2007 ) , Puklek Levpu [ scaron ] [ caron ] ek and Zupan [ caron ] I [ caron ] ( 2009a ) reported that Neuroticism frequently shows low negative dealingss or even no important associations with school classs.

Survey reveals that the pupils who achieve 50-80 % marks show more openness to see so we can state openness to see is positively related with chemical science academic accomplishment these consequences are besides apparent in Lounsbury et al. , ( 2003 ) , Farsides revealed that Openness to see is positively related to academic public presentation another survey is besides comparable with our survey Baker and Victor ( 2002 ) , Bratko et al. , ( 2006 ) , Laidra et al. , ( 2007 ) reported that Openness/intellect factor about systematically histories for academic success across class degrees.

Agreeableness has no important relation with chemical science academic accomplishment in our survey these consequences are non consistent with the old surveies of Lounsbury et al. , ( 2003 ) , Farsides and Woodfield ( 2003 ) they concluded that Agreeableness is positively related to academic public presentation

The survey besides shows that the pupils who got 61-80 % marks show more Conscientiousness so we can state that Conscientiousness is positively related with chemical science academic accomplishment these consequences are consistent with old surveies Baker and Victor ( 2002 ) , Bratko et al. , ( 2006 ) , Laidra et al. , ( 2007 ) reported in their survey that Conscientiousness has been most systematically identified as relevant to academic accomplishment in adolescent pupils.

The relationship between attitude and achievement two variables is a cardinal issue for consideration pervading much of the literature. For much of the generalised concern and involvement in attitudes towards school scientific discipline is based on a slightly simplistic impression that ‘ the best milk comes from contented cattles ‘ ( Fraser 1982 ) . However, Gardner ‘ s reappraisal of the research grounds offered small support for any strong relationship between attitude and accomplishment.

An scrutiny of literature on attitude and chemical science accomplishment reveals conflicting consequences ( Fowler, 1980 ; Gutwill, 1998 ; Lindsay, 2001 ; Shibley et al. , 2003 ; Turner & A ; Lindsay, 2003 ) . Present survey reveals no important relationship between Attitude and Chemistry Achievement the consequences can be compared with the survey of Willson ( 1983 ) in his meta-analysis found the relationship between attitudes and accomplishment was non really strong.

This Survey shows that the pupils obtaining Markss from 81-90 % marks show more Achievement Motivation. Consequence shows that accomplishment motive has positive important consequence on Chemistry Academic Achievement. Camara, ( 1986 ) consequences can be straight compared with findings of present survey He concluded that Achievement motive is frequently correlated with existent accomplishment behaviour. Atkinson, ( 1964 ) states that Individuals ‘ accomplishment depend non merely on their motive to win but besides on their outlooks to accomplish.

Rankin ( 1995 ) found that motive is correlated with academic accomplishment we besides found same consequences in our survey. The consequences of this survey shows that the pupils obtaining Markss 91-100 % show more Motivation towards larning chemical science.

Interest, Confidence, Enjoyment, Anxiety, Importance have no direct influence on Chemistry academic accomplishment but they indirectly consequence pupils accomplishment as all the Affective Characteristics of Attitude are interrelated and has important consequence on each other these consequences are non comparable with the old surveies.

The Demographic variables have important consequence on Chemistry Achievement: Male pupils are high winners than female pupils Male pupils are high winners than female pupils the consequence of the survey is consistent with old researches studied that gender differences has important consequence on accomplishment it was found that public presentation of male childs was better than that of misss ( Wang & A ; Staver, 1997 ) .

Students ‘ belongs to atomic household system are found to be high winners as compared to pupils belong to Joint household in this s study the consequences are consistent with Gutman and Eccles, ( 1999 ) find that Nuclear household parents are more important and has positive effects on pupil ‘ accomplishment. Sunanda Raj and Krishnan ( 1980 ) ; Cherian ( 1990 ) concluded a negative and important consequence of household size on academic accomplishment.

Students of Private schools achieve more Markss as comparison to semi-government and authorities school. Sentamu ( 2003 ) , Kwesiga ( 2002 ) all argue that the type of school a kid attends influences academic accomplishment.

In the present survey Parental instruction has positive important consequence on pupils chemistry accomplishment. The consequences can be compared with the old surveies conclusion that Educational attainment seems to hold a heritable quality ( Blok & A ; Saris, 2000 ) . Parental instruction is a strong forecaster of kids ‘ s success in the educational system. ( Keith et al. , 1996, Krishnan, 1977 ; Panda & A ; Jena 2000 ; Shumow & A ; Miller, 2001 ; Gill & A ; Reynolds, 1999 ; Singh et al. , 1995 ) The parents who had attained higher degrees of instruction have higher outlooks for their kids ‘ s instruction than parents who have lower degrees of instruction. Educated female parents and male parents tend to watch and put foundations for proper acquisition when immature.

Choice of Course is positively related to pupils ‘ academic accomplishment. The consequences are found to be consistent with old researches which concluded that Choice of Course is strongly related to good Job Opportunities ( PRLog, 2009 ) . Choice of class besides depends on academic achievement pupils ‘ normally choose classs which they can finish successfully and procure good occupations ( Dejenie, 2010 )

## Decision, Implications and Future Study:

This research has sought to supply a reappraisal of the many facets that affect pupils ‘ chemical science accomplishment. The increasing attending to the subject is driven by acknowledgment that excessively many students are alienated by a subject that has increasing significance in modern-day life, both at a personal and a social degree.

The survey can help scientific discipline pedagogues to pay more attending on attitudes toward chemical science and personality traits, which play a important function in finding pupils ‘ chemical science accomplishment. Based on the findings, several pedagogical deductions were provided for chemical science instructors. First, the consequences of this survey indicated that there were statistically important relationships between certain personality traits and chemical science academic accomplishment. Therefore, it is indispensable for instructors to be cognizant of the differences in their pupils and guarantee those content and courses that entreaty to pupils with their personalities. Chemistry instructors should develop assortment of undertakings and attacks to cognizant pupils of their personalities, viz. their failing and strengths.

Teachers must invariably maintain themselves up-to-date with recent developments in the chemical industry and planetary events. To maintain pupils excited about what is go oning in the chemical industry ; instructors may integrate some of the latest technological and industrial developments into their chemical science lessons. By being knowing and updated in planetary events, instructor will besides be better prepared to rede their pupils on calling chances. The chemical science instructors needs to understand that their function is non merely learning to assist pupils to go through tests but they have to fit pupils with the accomplishments to utilize subsequently either as professionals in the chemical industry or as chemical pedagogues. Through their instruction they have to farther enhance pupil ‘ s opportunities to last in the competitory economic and technological universe. This attack will allow the pupil more unfastened to new experiences.

The development of positive attitudes sing chemical science is one of the major duties of chemical science instructors. The findings of this survey offer that the educational aim of developing positive attitudes toward chemical science lesson is non to the full accomplished in Pakistan. Results of this survey revealed secondary school pupils ‘ attitudes toward scientific discipline were non respectable degree. Chemistry needs to be taught with mention to the existent universe. For this intent the pupils should be provided with a scope of experiences such as field trips to different industries. Such learning chances would heighten their consciousness and cognition of chemicals, their apprehension of chemical safety, and the use of chemicals in their day-to-day lives. This learning methodological analysis will assist instructors to develop positive attitude towards larning chemical science in Extrovert pupils.

Further research in attitudes will lend to the account of the persisting job of disaffection from chemical science among immature people. If carefully focused and designed, attitude research could travel one measure further and supply bases on which correct determinations will be taken about facets for schoolroom pattern. This might acquire more immature people taking to analyze chemical science topics, experiencing that chemical science truly does offer them something utile and interesting. Such positive attitudes, cognitive accomplishments, and cognition will assist the hereafter citizens being continuously informed, doing judgements and taking determinations on issues related to chemistry. Project-based attack should be used to heighten pupil ‘ s attitude towards chemical science. Students could be engaged in little undertakings based on the jobs they see in their community or environment. These undertakings help pupils develop a sense of committedness to the community and the state.

Student-teacher interactions and learning attacks can be improved harmonizing to pupil ‘ s personality and attitude this betterment will assist pupil to larn better in the hereafter. For the pupils, the findings besides provide a better apprehension of the pupils ‘ perceptual experiences about chemical science topic. From the instructors ‘ position, the findings could assist chemistry instructors to reflect on the assorted facets of pupil ‘ s personality and attitude that consequence their chemical science accomplishment.

We used self-reported Marks to measure academic accomplishment. Though self-reported Marks has been found to be strongly related with nonsubjective it may include some mistake due to memory restraints or overstated appraisals. Future research workers could perchance obtain pupils ‘ permission to entree existent Marks from school records. Future research could look into the complex nature of academic accomplishment by analyzing other single difference factors ( e. g. intelligence, larning manners, and larning troubles ) every bit good as environmental factors such as socioeconomic position as forecasters of academic accomplishment.