



Assessment Of Personality Factors And Its Impact On College Students: A Case Study Approach

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Abstract

Gordon Allports view of Personality as the active, vital and vigorous arrangement of characteristics of individual means that personality traits can change depending upon the situation and conditions. Traits or factors as they may be termed as are the psychophysical systems within the individual are indicators of the characteristic behavior and thought processes. 16 PF (Personality Factors) was used to prepare the personality factors profile of young adults. The study was planned to tab the given objectives: (1) To describe and predict the personality characteristics of young adults (2) To find out and assess the relative strength of personality factors of young adults and (3) To provide recommendations and suggestions to the young adults on the basis of their performance on 16 PF (Personality Factors) Questionnaire. It was concluded on the basis of the results obtained that there exists a relative strength among factors. Factors do have a relationship with each other which contributes to the total personality of a person and help the psychologists get a more precise and factual view of the individual. The results obtained indicate that 16 PF (Personality Factors) Questionnaire has its importance in career counseling, clinical counseling, diagnosis and prognosis.

Key words: 16 PF (Personality Factors) Questionnaire, Trait Profile, Young adults, Sten/Standard score, Relative Strength

Introduction

Gordon Allport has been credited with the proposal that personality is determined by characteristics, traits or personal disposition that we as individuals possess. Based on his adjectives, Raymond Cattell developed 16 PF Scale in 1949. This scale provides a way to assess an individual's personality using a structured approach. Cattell was interested in studying different personality traits or factors with a goal to explore and scrutinize universal aspects of personality. It can be seen that while individuals are different from each other in ways that mostly be predictable, however the differences that can satisfactorily be described by prominently observed trait constructs. These prominent traits such as neuroticism, conscientiousness, agreeableness, openness, extraversion, and core self-evaluations can also change methodically due to the change in demand of the situations faced by them and resulting response changes the individual as a person over time. Cattell was more serious while dealing with personality as he was of the view that clinical psychologists mostly surmised the importance of rather targeted their attention on the patterns of traits which were negative in nature so as to act as a clinical syndromes (or types). In order to have a comprehensive description and measurement of personality, a psychologist whether clinical or not must keep traits as a center for investigating personality. Cattell's efforts could be seen in a large number of researches conducted to assess and portray the traits both positive and negative. He accepted the Allport's assumption of individual traits vs.

common traits, although he comforted with the term unique traits to better understand behaviours and characteristics to help in future prediction of the behavior and its nature. Cattell in 1950 defined Personality as the base to forecast how a person will behave in a given situation, whether alone or dealing with others. He developed this personality test called 16PF Test after over several decades of empirical research based on comprehensive factor analysis by Raymond B. Cattell, Maurice Tatsuoka and Herbert Eber. The 16PF is a personality test providing a measure and understanding of personality. The test is widely used by clinical psychologists, and other mental health professionals, as a means of clinical instrument in the diagnosis of mental disorders. The test further provides help with prognosis of psychiatric disorders and preparing therapy plan. The test has been credited with its profound utility in providing knowledge relevant for giving direction to advice, guide and counsel patients or clients having mental problems or simple adjustment problems. Apart from its utility in clinical and counseling setup, the details of data collected and its results are associated with understanding to what extent the person is oriented with present condition or insight, level of self-confidence, thinking style, moral and ethical attributes, adaptableness, modifiability, ability to empathize, assessment of interpersonal relations, attachment level, expression of basic needs, acceptance and respect towards authority and coping strategies adopted. The instrument can provide an average-range measuring the existence of anxiety, adjustment issues, emotional problems and problems in behavior. Clinical psychologists have been using 16PF results to plan the best intervention strategy, for forming therapeutic collaboration and in assessing the skills required for to fit the best profession to achieve success in future.

Sixteen PF initially comprised of sixteen primary factors scales and five global factors scales that were developed through factor analysis.

Objectives:

1. To describe and predict the personality characteristics of young adults by using 16 PF (Personality Factors) Questionnaire
2. To find out and assess the relative strength of personality factors of young adults
3. To provide recommendations and suggestions to the young adults on the basis of their performance on 16 PF (Personality Factors) Questionnaire

Review of Related Literature:

Keeping with the utility and excessive popularity of the 16 PF Questionnaire, a lot of studies have been conducted in the area of measure of normal personality by psychologists, as a clinical instrument in the area of diagnosis of psychiatric disorders, and utility of test for prognosis and therapy planning by mental health professionals. Some of the selected research studies are given below:

Aitken, J., Richard, S., & Biderman, G.M. (2020) inferred that in his sample, participants were more variable in personality when they obtain higher score in intelligence. On the contrary the participants' low in intelligence was found to resemble each other in terms of personality characteristics. The sample of the study consisted of large number of participants working as managers were tested extensively on personality with 20 scales and a battery to measure intelligence factor. It was found that the high scoring intelligence group was not significantly different on personality factors.

Cattell, H.E.P. (2001) has advocated that 16PF Questionnaire is an over arching and extensively used tool to understanding of standard, adult personality. The test was developed to encompass the very basic ingredients to define the concept of personality composition in general population.

Goldberg, Lewis R. (1993) has propounded that the Big-Five factor personality has been increasingly recognized by psychologists researching in the area of personality. Big five factor theory has greatly impacted the analytic approach towards people reflecting different characteristics and behaviour. The base of the categorization can be found in the foresight of L. L. Thurstone, assumptions and the **cognizance** of Sir Francis Galton, the legacy of Raymond B. Cattell being most influential. Many attempts have been made by the critics of this model, ironically, the overall attraction and suitability of the apotheosis is indebted to those

who tried to replace it but in vain. Now, the model has its implications in fields of job assessment and recruitment, being the latest development.

Eva M Doherty, Emmeline Nugent (2011) concluded that conscientiousness is a personality trait which significantly predicted level of performance study sample. The sample consisted of medicine students. It was established that there was significant relationship between personality and performance becoming very important as sample advanced in practical and learning process. Sociability traits (i.e. extravert and self-esteem and more) were found to be an important factor in enhancing the performance of trainees in medicine.

Noller, P., Law, H., & Comrey, A. L. (1987) Cattell 16 Personality Factor Questionnaire (16 PF), the Comrey Personality Scales (CPS), and the Eysenck Personality Inventory (EPI) was administered to the selected samples controlling the demographic details of social class age and sex. Factor analyses of three scales were done in the similar manner producing a cluster of traits found in studies using ratings by others. After analyzing scales traits similar to 5 powerful traits of personality were derived.

Methodology

The sample consisted of young adults with age ranging from 18 to 25 years. Both male and female young adults were chosen arbitrarily with a specific purpose to assess personality. Idiographic approach was used in the study where each individual was focused and assessed comprehensively in order to learn about their unique personality. Sixteen Personality factor Questionnaire test was chosen by the researcher to meet the objectives.

Description of 16 PF

The Sixteen Personality factor Questionnaire is a self report multiple choice Personality Questionnaire originally constructed in 1949 by Raymond Cattell. On the basis of the factor-analytic research he concluded that a set of 16 traits would give an overview of personality characteristics. This Questionnaire could be applied on males and females aged 16 years and above. There are six forms in the test but for the present study only form A was used. There are 187 items in Form A. There are 16 primary factors and 4 second order Factors.

Reliability and Validity of the Test

As far as reliability of 16PF is concerned moderate to good reliability rating have been reported. The test has internal consistency reliabilities on average of 0.76 for the primary scales and a range of 0.68 to 0.87 for all 16 scales. The test-reliabilities over a 2 week period showed scores of 0.69-0.87 for all scales and a 2-month interval showed scores ranging from 0.56-0.79 is a good reliability score (mentioned in 16PF Fifth Edition Technical Manual by Conn & Rieke, 1994).

Construct validity of 16PF has supported by Studies conducted in this area (Conn & Rieke, 1994). It has been translated into many different languages – Italian, French, Japanese, and German. The test has been proved valid in application in areas of providing help to clients through therapy and counselling, skills and professional enhancement, personality evaluation and appraisal and clinically related issues (Schuerger & Watterson, 1998). The 16PF is a standardized psychological tool having lots of publications based on researches and is highly efficient and frequently recommended tool.

Administration of the Test

Each participant was made to be seated comfortably and the researcher established a good rapport with the subject before starting the test. The instructions were read out in verbatim for the subject. Though there was no time limit for the test, the subject was reminded not to delay instead give answers and move ahead. It took for most subjects around 30 to 50 minutes to complete. It was made sure that the subject had answered all the questions. Ethical considerations were followed and Informed consent was taken from the subject prior to the test conduction and was made clear that the responses taken will be used for educational purposes only. Hence the names of the subjects are not mentioned.

Scoring of the Test

The scoring was done with the help a set of scoring keys by hand. Hand scoring was done by using scoring key with least effort following the norms of scoring given in manual. The answers sheet consisted of blocks to be tick by pencil and later on evaluated. The tool consists of two separate scoring keys, first covering factors such as A,C,F,H,L,N,Q1 and Q3, second covering; B,E,G,I,M,O,Q2 and Q4. Raw scores were converted in sten scores with the help of manual. The sten scale has a range from 1 to 10-points, also referred standard-ten scale having mean of 5.5 and a standard deviation of 2. According to the norms participants score less than 4 are labeled as low and sten scores more than 7 are labeled as high. The sten scales are divided on extreme poles, meaning that each pole of the continuum depicts a discrete and opposite personality adjective. For analysis, scores above 7 was interpreted as reflecting a positive traits of personality characteristic whereas scores below 4 to reflect a personality characteristic which was negative.

Results and Interpretation

Result section deals with a detailed evaluation of each individual sample's 16pf profile depicted through tables and narrative interpretation. Out of several personality profile prepared, five personality profiles have been selected by the researcher to be discussed in the present study.

Subject: 1: Behavioural Observation: Subject was a 24 years old post graduate female student. The subject was enthusiastic about the test and the response to the questions seems to be genuine. During interaction she told that she was free in expressing her opinions and wishes and could easily assure her social presence. From her facial expression, it was seen that the subject was very much keen to know about further procedure and her overall results.

Table 1: Raw Score and Sten Score (Standard Score) of the Subject

S. No	Factors	Raw score	Sten/Standard Score	Interpretation
1.	(A) Warmth	9	4	Average
2.	(B) Reasoning	8	6	Average
3.	(C) Emotional stability	7	3	Low
4.	(E) Dominance	17	9	High
5.	(F) Liveliness	18	8	High
6.	(G) Rule-consciousness	11	4	Average
7.	(H) Social boldness	17	7	Average
8.	(I) Sensitivity	10	4	Average
9.	(L) Vigilance	13	9	High
10.	(M) Abstractedness	13	6	Average
11.	(N) Privatness	6	2	Low
12.	(O) Apprehension	10	5	Average
13.	(Q1) Openness to change	9	6	Average
14.	(Q2) Self-reliance	5	4	Average
15.	(Q3) Perfectionism	10	5	Average
16.	(Q4) Tension	13	5	Average

The findings of the above table depicts that the subject scored high on Dominance (9) indicating that the subject was assertive, forceful and competent as is supported by her personal information quoted that she was free in expressing her opinions and wishes and could easily assure her social presence. Vigilance, high, (9) about herself is a positive characteristic but being suspicious about others is relatively negative and tends to be attentive towards other's motives and intentions and High on Liveliness (8), indicates that she is carefree, enthusiastic and energetic. Low score on personality factors like emotional stability (3) indicates that she

may be easily affected by feelings and was emotionally less stable and may have a sense of lack of control on one's life challenges. Low score on privateness (2) indicates the subject was open, self revealing and transparent in dealing with others which is compatible with her other traits like dominance and liveliness. On 11 of the personality factors was marked average.

Suggestions and Recommendations: Being low on emotional stability, the subject was suggested to enhance her ability to cope with stress, resist disturbing impulses through cognitive behavior therapy, and adapt to changes through mindfulness. It helps in exploration and identification of all aspects of the external world and the inner world. Simple mindful and relaxation exercises such as breath control or sensory relaxation can bring peace within an individual and behave in a more acceptable manner. Self awareness is another method to calm the storm within. Looking within and realizing what one feels and naming the motions would be a great step toward emotional regulation. The sample with score high on emotional stability was stress-resistant calm and composed. Being generally confident the young adult was recommended to not disheartened by setbacks rather put effort to go ahead.

Subject: 2: Behavioural Observation: The subject was a 20 years old male graduate. During the course of testing the subject seemed to be affected by feelings. At times he became restless but he had the ability to control his emotions. He was neatly dressed and followed the instructions with little difficulty.

Table 2: Raw Score and Sten Score (Standard Score) of the Subject

S. No	Factors	Raw score	Sten/Standard Score	Interpretation
1.	(A) Warmth	13	6	Average
2.	(B) Reasoning	8	5	Average
3.	(C) Emotional stability	5	1	Low
4.	(E) Dominance	11	5	Average
5.	(F) Liveliness	12	3	Low
6.	(G)Rule-consciousness	12	6	Average
7.	(H) Social boldness	12	5	Average
8.	(I) Sensitivity	13	5	Average
9.	(L) Vigilance	7	2	Low
10.	(M) Abstractedness	14	6	Average
11.	(N) Privateness	8	5	Average
12.	(O) Apprehension	18	9	High
13.	(Q1)Openness to change	6	4	Average
14.	(Q2) Self-reliance	9	5	Average
15.	(Q3) Perfectionism	6	2	Low
16.	(Q4) Tension	16	6	Average

The above table shows the personality factors of the subject scored on 16 personality factors questionnaire score obtained and sten score. It depicts that the subject scored high on Apprehension (9) indicating that the subject may be worried, guilt prone, self doubting, insecure and self blaming when dealing with challenges. It has been demonstrated that the subject with extremely high Factor O scores may experience poor self presentation being so inadequate in their expression that it is apparently visible to people. They are forced to exhibit their insecurities in such a way that they are not confident about their judgment and can be demotivated with little effort. There is inhibition in social interaction and situations due to the fear of being rejected by the group giving rise to intense guilt and isolation. They are easily held accountable by others, due to their lack of confidence and inability to control situations they take the blame without any opposition. May be this is the reason the subject scored low on liveliness which indicates usually serious and withdrawn behavior, mostly introspective, keeping aloof from others and less emotionally expressive (2), emotional stability indicates self esteem issues, Frequent emotional breakdown and mood fluctuation may result in unstable relationship and (1) Perfectionism indicates that the subject may focus on big picture thinking rather

than detailed oriented, may be careless in performance and tends to make mistakes. (2). this is how the relative strength of personality factors is determined.

Suggestions and Recommendations: The low score on emotional stability was indicative of being more distant and cold. The subject was suggested to share his feelings and thoughts with his close friends or family. The subject was further given assurance that practice to learn to overcome with unsettling thoughts and feelings of sadness or moodiness shall make him more supportive and comforting for others. Low score on emotional stability may be a reason for high score on apprehension. The subject may be advised to go for psychotherapy especially systematic desensitization or exposure therapy to prevent the subject's apprehension in developing anxiety disorders. The positive side is that they are deliberate in their actions and make decisions only after careful consideration to all aspects. The subject anticipates difficulties and avoids risks. The subject may have the ability to intensely concentrate for long periods of time. The steady and consistent nature makes them reliable and dependable. Their mature, responsible nature is highly appreciable.

Subject 3: Behavioural Observation: The subject was a 23years old female graduate. The subject was very keenly reading and responding to the questions. At the point of 108th question due to fatigue and mental exhaustion for the length of the questionnaire consisting of 187 questions the subject got stuck. With few motivating questions the subject again started performing the test.

Table 3: Raw Score and Sten Score (Standard Score) of the Subject

S. No	Factors	Raw score	Sten/Standard Score	Interpretation
1.	(A) Warmth	13	7	Average
2.	(B) Reasoning	8	5	Average
3.	(C) Emotional stability	19	7	Average
4.	(E) Dominance	22	10	High
5.	(F) Liveliness	16	5	Average
6.	(G) Rule-consciousness	15	7	Average
7.	(H) Social boldness	21	8	High
8.	(I) Sensitivity	12	7	Average
9.	(L) Vigilance	11	7	Average
10.	(M) Abstractedness	11	5	Average
11.	(N) Privatness	9	6	Average
12.	(O) Apprehension	8	5	Average
13.	(Q1) Openness to change	12	7	Average
14.	(Q2) Self-reliance	12	7	Average
15.	(Q3) Perfectionism	12	6	Average
16.	(Q4) Tension	13	6	Average

The above table shows the personality factors of the subject scored on 16 personality factors questionnaire score obtained and sten score. The subject scored high on two dimensions namely Dominance (8) and Social Boldness (10). Sten score on dominance was highest on PF profile and represents that the subject is assertive, stubborn, competitive, forceful, bossy and dominating. People high on dominance can take leadership position. Keeping close to this trait is social boldness which is an inclination to initiate social gathering and quickly establish familial relationships. High score on social boldness represents that the subject's ability to initiate plans, activities, good in conversation and seeks opportunity to connect with others. As stated by the subject she was an extrovert and had many friends and was very active on social media.

On rest of the factors the subject scored average. Dimensions of the test are without any doubt applicable in organizing and presenting an overall complete profile of the personality including merits and demerits of the subject under observation. Strength is depicted in developing rapport and empathy, aiding individuals develop greater self-awareness. Such behavior helps the psychologist to identify appropriate problems in

adjustment, deciding on applicable psychological interventions, and preparing future prospects for overall development (Karson et al., 1997).

Suggestions and Recommendations: Being 23 years old student, the subject's personality traits are appropriate and encouraging. A little attention has to be paid to dominant personality factor. A brief discussion with the subject to sensitize her regarding the impact of her behavior was conducted. With little counseling or talk therapy the dominant personality factor can be molded in an acceptable and positive manner. The subject has leadership qualities provided the subject should encourage teamwork and treat others with respect. High score on social boldness reflects that the subject may be confident in expressing, bold, voluble, adventurous, and fearless in dealing with others.

Subject: 4: Behavioural Observation: The subject was a 23 years old female graduate belonging to nuclear urban family. Her economic background was middle class, serviceman. She was neatly dressed and was very calm and comfortable while performing the test. She was focused attentive while listening to the instructions, still at points she took time in understanding the instructions and followed it with hesitation.

Table 4: Raw Score and Sten Score (Standard Score) of the Subject

S. No	Factors	Raw score	Sten/Standard Score	Interpretation
1.	(A) Warmth	12	6	Average
2.	(B) Reasoning	03	1	Low
3.	(C) Emotional stability	13	4	Average
4.	(E) Dominance	15	7	Average
5.	(F) Liveliness	14	4	Average
6.	(G) Rule-consciousness	12	6	Average
7.	(H) Social boldness	13	5	Average
8.	(I) Sensitivity	15	6	Average
9.	(L) Vigilance	09	6	Average
10.	(M) Abstractedness	09	3	Low
11.	(N) Privatness	12	8	High
12.	(O) Apprehension	11	6	Average
13.	(Q1) Openness to change	10	7	Average
14.	(Q2) Self-reliance	10	6	Average
15.	(Q3) Perfectionism	10	5	Average
16.	(Q4) Tension	18	7	Average

The above table shows the personality factors of the subject scored on 16 personality factors questionnaire score obtained and sten score. As can be seen from the above table, the subject scored highest on Privatness (8) factor which is indicative of the subject being skeptical and wary of others, tends to keep her secrets within herself. The subject may not reveal information and prefer to deal with issues on her own. She was low on Reasoning (1) and Abstractedness (3). Reasoning is a supreme trait which involves the use of quantitative measures to arrive at conclusion accordingly. Lower scores on Reasoning indicate that the subject may face difficulty in solving more complex items due to extra effort in reasoning. She may experience difficulty when faced with new challenges when there is no background experience to draw from. Low score on Abstractedness indicates the characteristic of the subject to operate in the present cognitive functioning in a practical way taking consideration on day to day affairs. The subject may showcase excellent memories and may notice the smallest details and deal with concrete and observable realities, depicting presence of mind. The subject's performance on rest of the personality factors was average.

Suggestions and recommendations: Since the subject was low on reasoning and abstractedness, it is recommended to her that the task or role of the job she chooses in future may require the continuous repetition of the task which can be remembered easily being simple by nature. The subject can participate in activities that require abstract thinking such as Sudoku, puzzles word search riddles etc. She can also participate in debates which will help her in logical discussion and decision making. She can read books to enhance critical thinking. In order to improve abstract thinking skills the subject was suggested to practice mindfulness

Subject 5: Behavioural Observation: The subject was a 25 years old male post graduate. When the subject started answering the questions he was a bit confused but after clarification his matter was cleared. He was a bit restless at times and took time in answering questions. He took more than 30 minutes to complete the test. All the questions were answered.

Table 5: Raw Score, Sten Score (Standard Score) of the Subject

S. No	Factors	Raw score	Sten/Standard Score	Interpretation
1.	(A) Warmth	8	5	Average
2.	(B) Reasoning	13	10	High
3.	(C) Emotional stability	14	4	Average
4.	(E) Dominance	15	7	Average
5.	(F) Liveliness	9	3	Low
6.	(G)Rule-consciousness	6	2	Low
7.	(H) Social boldness	9	4	Average
8.	(I) Sensitivity	18	10	High
9.	(L) Vigilance	9	6	Average
10.	(M) Abstractedness	12	6	Average
11.	(N) Privatness	10	5	Average
12.	(O) Apprehension	15	8	High
13.	(Q1) Openness to change	9	6	Average
14.	(Q2) Self-reliance	11	7	Average
15.	(Q3) Perfectionism	9	4	Average
16.	(Q4) Tension	19	9	High

The above table shows the personality factors of the subject scored on 16 personality factors questionnaire score obtained and sten score. The subject attained high score on Reasoning (10), Sensitivity (10) Tension (9) Apprehension (8) personality factors. High score in reasoning indicates the subject may be intelligent, enthusiastic in learning expressing smartness at problem solving and abstract thinking. A high score (7 or above) suggests that if a person is given opportunity to solve more complex issues he is capable of conceptualizing the problem with patience and work accordingly. This often indicates intellectual ability. Liveliness (3) Rule-consciousness (2) was low. The profile is a brilliant example of relative strength of personality traits. Low score on rule consciousness indicate that the subject was approach to the rules and to societal expectations and norms is more casual. The values and conventions of such individual are different from mainstream society.

Suggestions and Recommendations: The subject with high Factor O score may be due to reflection of recent life event such as death of loved ones, prolonged illness, loss of job, achievement failure, etc which may be transitory. It is also expected that and the score may be lowered after lapse of sometimes when the individual has successfully acquired emotional stability. Existing researches support that the effect of personality factors on any person's entire personality is appreciable. Due to high score on Tension and

Apprehension personality factor few tips were provided to the subject in order to make the best use of Cognitive Behaviour Therapy.

- Don't pretend to be OK instead accept it
- Ask questions to yourself
- Be open to the therapist for everything you are experiencing
- Make appropriate goals and work positively to achieve it
- Practice lifestyle which is healthy both physically and psychologically
- Strive for surety of strong social support system from society
- Try to minimize anxiety by dealing with stress in your life in problem focused strategy

Conclusion:

- Considering the above attained data, it was found that there exists a relative strength among personality factor on the 16PF Questionnaire. Factors do have a relationship with each other which contributes to the subject's total personality and guide the psychologists in gaining a overall insight in individual's personality.
- As can be seen from the above results and interpretation most of the subjects' personality factors were in Mid-Range or average scores which represents that though individual differences may occur still there is an expected average personality determinants or traits.
- Variations in personality can be a result of the interplay of the personality traits or factors highlighting demand and limitations of précised environment or condition. It is particularly verifiable of the scores at or between stens 4 and 7. Therefore, special attention was paid to the interpretation of average personality factors which was more challenging when providing feedback.
- One of the important conclusions is to understand that there are no entirely rights or wrongs in personality factor stating the importance of individual differences in humans and situations. Each factor has its own identity depending upon the relative existence of the factors in each individual.
- Depending upon the existence of a particular trait executed through 16 PF (Personality Factors) Questionnaire the utility of the scale for career counseling, clinical counseling, diagnosis and prognosis is shared in the present study. To conclude, these personal dispositions may suit some behaviours, jobs or interests area in priority.

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