



AN ANALYSIS ON THE EFFECT OF DEMOGRAPHICS ON PERSONALITY TRAITS OF MANAGEMENT STUDENTS THROUGH CATTELL'S 16 PF

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ABSTRACT

The study focuses on the effect of Demographic Variables such as gender, educational background and work experience on the 16 personality factors of 128 Management students given by Cattell. Personality profiles of students were compared according to Genders (male & female), Educational Background of students (Commerce, Science, Arts, Management and Technology) and whether they were Freshers or with Work Experience. The Findings revealed that on the basis of Gender, significant differences were found in Emotional Stability, Liveliness, Sensitivity, Abstractness, Open-mindedness and Tension. The Fresher category students were significantly distinct from the Experienced category students in traits such as Intellect and open-mindedness. Similarly, in terms of Educational Background only Science and Commerce Students were significantly different for the trait of Open-mindedness.

Key Words: Personality, Cattell's 16PF, Management Students, Demographic Variables.

Introduction

Administering personality tests is universal in the HR practices of recruitment, selection and development (Furnham & Drakeley, 2000). Many researchers have agreed that the overall personality of an individual impacts his preferred working style and performance. Various research studies (Tett, Jackson, & Rothstein, 1991) have noted that performance in academics, choice of career and electives etc. are closely related with personality. Song, Wu & Zhao (2002) examined the relationship between personality and academic achievement of college students.

Differences in education and gender also have an impact on the efficiency of work. (Felder & Deitz, 2002).

Management education is a vast field that includes several specific streams and a wide range of electives. Studying the differences in personality with regard to various demographic factors such as educational background, experience, age and gender can offer various insights about the student's behaviour, approach in decision making and leadership styles.

Objectives of the Study

The objectives of the study are –

- 1) To analyze the Personality Traits of Management Students.
- 2) To assess the effect of demographic variables on the Personality Traits of Management Students.

Literature Review

Personality has been examined from different perspectives, including traits, social-cognitive approaches and goal orientation (Zweig & Webster, 2004). A few psychologists state that personality is determined by parental genes, while others state that personality is affected by environmental, cultural and social factors (Huczynski and Buchanan, 1991).

According to Guilford (1949), personality can be defined as distinguishing, relatively enduring way in which an individual differs from others. Further, Cattell (1946) viewed personality as a complex structure of traits.

Goldberg, Sweeney, Merenda & Hughes (2006) surveyed a sample of 3629 U.S. working professionals in the year 2006 and provided correlation of four demographic variables - gender, age, ethnic / racial status and educational level with the Big Five (Extroversion, Agreeableness, Conscientiousness, Openness to Experience, Emotional Stability) personality traits. Observations revealed that elder persons tend to express themselves as more conscientious than younger ones. People with higher levels of education describe themselves as more intellectual than others.

Gangai, Mahakud & Sharma (2013) conducted a study on 150 management aspirants and compared the results of difference in the career choices made by males and females. Their study involved the use of the 16PF developed by Cattell (1949). Significant differences in the personality traits on the basis of gender were noted.

Ya-di Gu et. al. (2012) in an empirical study on the 16 personality characteristics of college volunteers noted the differences of college student volunteers in the personality traits of extroversion, optimism, cheerfulness, enthusiasm, self-confidence etc. Additionally they found that gender differences in personality traits among volunteers were apparent.

Sevcay Yıldız, Engin Üngüren, Cihan Polat (2009) examined the relationship between the gender and departments with 16 personality traits of employees of a hotel. A significant difference with respect to gender in terms of openness to change was observed. With respect to departments, differences in openness to change, vigilance, privateness and perfectionism were seen.

Nagarjuna and Mamidenna (2008) studied the impact of educational background and gender on the personality traits of 200 students. The study found that on the basis of educational background, there were significant differences in traits of sensitivity and perfectionism. Traits of warmth, sensitivity, vigilance, abstractedness and openness to change were significantly different between males and females.

Scope of the Study

The scope of the study is limited to the Management students of St. Francis Institute of Management and Research.

Research Hypotheses

H1: Gender significantly influences personality traits of students.

H2: Work Experience significantly influences personality traits of students.

H3: Educational Background significantly influences personality traits of students.

Research Methodology

The research design adopted for the study is descriptive in nature. The questionnaire of Cattell's 16 Personality Factors (PFs) was administered to each student along with a socio-demographic sheet to record their details.

Cattell's 16 PF Test gives a score of high to low of sixteen personality traits of an individual that provide a variety of information concerning individual disposition, also making it ideal for personal development within an occupational setting (Conn & Rieke, 1994). The traits evaluated are as follows:

Descriptors of Low Range	Primary Factor	Descriptors of High Range
Impersonal, cool, reserved, detached	Warmth	outgoing, attentive to others, easy-going
Concrete thinking, lower mental capacity, unable to handle abstract problems	Intellect/ Reasoning	Abstract-thinking, higher mental capacity, fast learner
Reactive emotionally, changeable, easily upset	Emotional Stability	Emotionally stable, adaptive, mature,
Cooperative, avoids conflict, submissive, humble, obedient, docile, accommodating	Dominance / Aggressiveness	forceful, assertive, aggressive, competitive, stubborn, bossy
Serious, prudent, introspective, silent	Liveliness	animated, spontaneous, enthusiastic
Expedient, nonconforming, self-indulgent	Dutifulness	dutiful, conforming, moralistic, staid
Shy, timid, hesitant, intimidated	Social Boldness / Assertiveness	venturesome, thick skinned, uninhibited
Utilitarian, unsentimental, self-reliant	Sensitivity	sentimental, tender minded, intuitive
Trusting, unsuspecting, unconditional	Vigilance	suspicious, skeptical, distrustful
Practical, steady, conventional	Abstractedness	Imaginative, absent minded, impractical
Forthright, genuine, naive, unpretentious	Introversion	discreet, shrewd, astute, diplomatic
Self-Assured, complacent, free of guilt	Anxiety	self doubting, insecure, self blaming
Traditional, conservative	Open-mindedness	Experimental, liberal, analytical, flexible
Group-oriented, a joiner and follower dependent	Independence	resourceful, individualistic, self-sufficient
Tolerates disorder, undisciplined, lax, self-conflict, impulsive	Perfectionism	organized, compulsive, self-disciplined, socially precise, self-sentimental
Relaxed, placid, torpid, patient, composed	Tension	Energetic, impatient, driven, frustrated,

Sampling Technique

The sampling technique used for the study was Convenience Sampling.

Sample Description

A total of 128 Management students with and without work experience were chosen as a sample for the study. Among them, the number of male students were 61 (n1=61) and the number of female students were 67 (n2=67). The age of the students ranged from 20 to 26 years. Education background of the students varied from various courses available and thus was grouped as Arts, Science, and Commerce, Management and Technology streams.

Analysis and Interpretation

The descriptive statistics of Personality Traits of the sample is shown in Table 1.

Table 1: Descriptive Statistics of Personality Traits of the Sample

Indicators	Mean	Median	Mode	Standard Deviation	Minimum	Maximum
Warmth	0.642	0.660	0.700	0.138	0.220	0.900
Intellect	0.599	0.620	0.460	0.140	0.220	0.900
Emotional Stability	0.539	0.540	0.620	0.166	0.140	0.900
Aggressiveness	0.572	0.580	0.580	0.134	0.260	0.860
Liveliness	0.572	0.580	0.500	0.145	0.220	0.900
Dutifulness	0.730	0.740	0.740	0.104	0.420	0.900
Social Assertiveness	0.597	0.620	0.620	0.167	0.100	0.900
Sensitivity	0.538	0.540	0.580	0.173	0.140	0.900
Paranoia	0.502	0.500	0.460	0.123	0.180	0.820
Abstractness	0.532	0.540	0.580	0.166	0.180	0.900
Introversion	0.563	0.540	0.500	0.156	0.180	0.900
Anxiety	0.523	0.540	0.540	0.152	0.180	0.860
Open-mindedness	0.491	0.460	0.460	0.119	0.220	0.900
Independence	0.484	0.460	0.460	0.140	0.220	0.900
Perfectionism	0.649	0.660	0.700	0.111	0.380	0.900
Tension	0.456	0.460	0.460	0.120	0.180	0.740

Table 1 has indicated that 50% of the sample has shown higher levels in all traits, except for open-mindedness, Independence, Perfectionism and Tension. The score reflected by mode for Intellect, Paranoia, Open-mindedness, Independence and tension most often are less than 0.5. Whereas, most frequent score represented by mode for Warmth, Emotional Stability,

Aggressiveness, Liveliness, Dutifulness, Social Assertiveness, Sensitivity, Abstractness, Introversion, Anxiety and Perfectionism are greater than 0.5. The overall personality test scores ranged from 0.10 to 0.9.

Table 2: Descriptive Statistics of Personality Traits of the Sample by Gender

Indicators	Mean		Median		Mode		Standard Deviation		Minimum		Maximum	
	F	M	F	M	F	M	F	M	F	M	F	M
Warmth	0.64	0.64	0.66	0.66	0.70	0.66	0.14	0.13	0.22	0.26	0.90	0.90
Intellect	0.60	0.62	0.62	0.62	0.46	0.74	0.14	0.13	0.22	0.38	0.90	0.82
Emotional Stability	0.54	0.59	0.54	0.58	0.62	0.58	0.17	0.16	0.14	0.14	0.90	0.90
Aggressiveness	0.57	0.58	0.58	0.58	0.58	0.58	0.13	0.12	0.26	0.30	0.86	0.86
Liveliness	0.57	0.60	0.58	0.62	0.50	0.62	0.14	0.13	0.22	0.26	0.90	0.90
Dutifulness	0.73	0.71	0.74	0.70	0.74	0.70	0.10	0.10	0.42	0.54	0.90	0.90
Social Assertiveness	0.60	0.58	0.62	0.58	0.62	0.70	0.17	0.15	0.10	0.10	0.90	0.82
Sensitivity	0.54	0.49	0.54	0.50	0.58	0.42	0.17	0.15	0.14	0.18	0.90	0.90
Paranoia	0.50	0.51	0.50	0.50	0.46	0.46	0.12	0.12	0.18	0.18	0.82	0.74
Abstractness	0.53	0.57	0.54	0.58	0.58	0.58	0.17	0.15	0.18	0.18	0.90	0.86
Introversion	0.56	0.56	0.54	0.54	0.50	0.54	0.16	0.15	0.18	0.30	0.90	0.90
Anxiety	0.52	0.52	0.54	0.50	0.54	0.66	0.15	0.14	0.18	0.26	0.86	0.86
Open-mindedness	0.49	0.52	0.46	0.50	0.46	0.46	0.12	0.13	0.22	0.26	0.90	0.90
Independence	0.48	0.50	0.46	0.46	0.46	0.54	0.14	0.15	0.22	0.22	0.90	0.90
Perfectionism	0.65	0.63	0.66	0.62	0.70	0.62	0.11	0.10	0.38	0.38	0.90	0.86
Tension	0.46	0.43	0.46	0.42	0.46	0.46	0.12	0.10	0.18	0.18	0.74	0.66

Note: F–Female, M–Male

Table 2 shows that the average values of all personality traits of males and females are similar except for Warmth, Introversion and Anxiety. Average values for traits such as Dutifulness,

Social Assertiveness, Sensitivity, Perfectionism and tension were higher in females than males. Moreover, higher average scores for traits such as Intellect, Emotional Stability, Aggressiveness, Liveliness, Paranoia, Abstractness, Open-mindedness and Independence were observed for males than females.

50% of the both female and male students showed higher levels of Warmth, Intellect, Emotional Stability, Aggressiveness, Liveliness, and Dutifulness, Social Assertiveness, Sensitivity, Paranoia, Abstractness, Introversion, Anxiety and Perfectionism. In terms of Open-mindedness,

50% of females confirmed lower levels than males. For Independence and Tension, 50% of both females and males depicted lower levels.

The most frequent score denoted by mode of female students for traits of Warmth, Emotional Stability, Dutifulness, Sensitivity and Perfectionism were found to be greater than male students. In contrast, the most frequent traits of Intellect, Liveliness, Social Assertiveness, Introversion and Independence as reflected by mode score were higher in male students as compared to female students. The most frequent score for aggressiveness, paranoia, open-mindedness and tension were noted to be the same.

Minimum score of female students was lower than that of male students for all traits except Emotional Stability, Social Assertiveness, Paranoia, Abstractness, Independence, Perfectionism and Tension wherein the values were found equal. Similarly, maximum value of female students was higher than that of male students for all traits except Warmth, Emotional Stability, Aggressiveness, Liveliness, Dutifulness, Sensitivity, Introversion and Anxiety where the values were found equal.

While comparing Table 1 and Table 2, certain striking observations were drawn. There was a vast difference in the most frequent score denoted by mode for females and males for the traits of Intellect, Anxiety, Independence and Perfectionism. Here, female students were found to be very much lower than male students in levels of Intellect, Anxiety, Independence but notably higher in level of Perfectionism. The minimum score of the samples grouped by gender also showed considerable differences for traits like Intellect, Dutifulness, Introversion and Anxiety, where

males scores were considerably higher. In traits such as Paranoia and Tension, maximum score for the Female students was way higher than male students.

Table 3: Results of T-Test for Association between Gender and Personality Factors

Indicators		F	Sig.	t	Sig. (2-Tailed)
Warmth	Equal variances assumed	2.091	0.151	0.351	0.726
	Equal variances not assumed			0.353	0.725
Intellect	Equal variances assumed	1.842	0.177	-1.704	0.091
	Equal variances not assumed			-1.717	0.088
Emotional Stability	Equal variances assumed	0.708	0.402	-3.114	0.002*
	Equal variances not assumed			-3.122	0.002*
Aggressiveness	Equal variances assumed	1.775	0.185	-0.466	0.642
	Equal variances not assumed			-0.469	0.640
Liveliness	Equal variances assumed	1.595	0.209	-2.267	0.025*
	Equal variances not assumed			-2.283	0.024*
Dutifulness	Equal variances assumed	0.964	0.328	1.692	0.093
	Equal variances not assumed			1.703	0.091
Social Assertiveness	Equal variances assumed	2.206	0.140	1.062	0.290
	Equal variances not assumed			1.070	0.287
Sensitivity	Equal variances assumed	1.627	0.204	2.825	0.005*
	Equal variances not assumed			2.848	0.005*
Paranoia	Equal variances assumed	0.047	0.828	-0.570	0.570
	Equal variances not assumed			-0.571	0.569
Abstractness	Equal variances assumed	0.423	0.517	-2.188	0.031*
	Equal variances not assumed			-2.201	0.030*
Introversion	Equal variances assumed	0.613	0.435	0.374	0.709
	Equal variances not assumed			0.376	0.708
Anxiety	Equal variances assumed	0.586	0.446	-0.010	0.992
	Equal variances not assumed			-0.010	0.992
Open-mindedness	Equal variances assumed	1.241	0.267	-2.373	0.019*
	Equal variances not assumed			-2.356	0.020*
Independence	Equal variances assumed	1.676	0.198	-1.055	0.293
	Equal variances not assumed			-1.048	0.297
Perfectionism	Equal variances assumed	1.401	0.239	1.855	0.066
	Equal variances not assumed			1.865	0.064
Tension	Equal variances assumed	3.584	0.061	2.593	0.011*
	Equal variances not assumed			2.625	0.010*

Note: * indicates significance at 5% level, F-Female and M-Male

An Independent Samples T-Test was conducted to check for association between gender and personality traits. The results showed significant differences for traits such as Emotional Stability, Liveliness, Sensitivity, Abstractness, Open-mindedness and Tension (See Table 3).

Significant difference between male and female students for Emotional Stability was observed (Table 3). It was noted that the average score of male students was higher than that of Female students (See Table 2). Emotional Stability refers to the individual's ability to adapt to situations of stress and how easily an individual can get upset. Thus it can be indicated that female students are more affected by emotional feelings than the male students and could be more vulnerable in stressful situations.

The trait of Liveliness showed significant difference among males and females (See Table 3) and that male average score was higher than that of female students (See Table 2). Liveliness indicates whether the individual is more likely to be cheerful or expressive as opposed to impassive or serious. The results described that female students are more serious and introvert as compared to male students who are more cheerful and expressive than female students.

The trait of Sensitivity also showed significant differences in gender (See Table 3) with average score of female students being higher than that of the average score of male students (See Table 2). Sensitivity indicates the whether the individual is compassionate and sympathetic to others. It shows whether an individual's behaviour is in terms of his emotions or objective thinking. Here female students showed higher level of sensitivity than male students. Females tend to be more sensitive towards events and their surroundings, in dealing with people and understanding them. Sensitive people are said to have good relationships and communication with others.

Abstractness confirmed a significant difference in terms of gender (See Table 3) where Male students had a higher average score than female students (See Table 2). Abstractness deals with what the individual has to do with practicality versus creativity, or a literal detail orientation versus an imaginative big picture orientation. The results illustrated that Male students are more creative, imaginative, and insightful whereas, female students showed more inclination towards practical decision making and relying more on at the moment results and outcomes.

Open-mindedness also exhibited a significant difference (See Table 3) with the male average score way higher than that of females (See Table 2). This trait portrays a person's orientation to change, novelty, and innovation. Results stated that females scored lower than males. Thus females here are more attuned to resisting change do not seek change as much as males.

Tension is a trait that speaks about patience or impatience in response to environmental delays, stresses, and demands. Tension had a significant difference among genders (See Table 3) with female having higher average score (See Table 2). This showed that female students are more driven to completing tasks, want to be constantly busy and are always on the go. They are frustrated by delays that push them to being irritable and impatient. Male students scored lower than female students that explained they are more patient and relaxed.

Table 4: Descriptive Statistics Personality Traits of Freshers and Experienced Group Students

Indicators	Mean		Median		Mode		Standard Deviation		Minimum		Maximum	
	F	E	F	E	F	E	F	E	F	E	F	E
Warmth	0.64	0.64	0.66	0.66	0.62	0.70	0.13	0.17	0.34	0.22	0.90	0.90
Intellect	0.58	0.67	0.58	0.70	0.46	0.74	0.14	0.12	0.22	0.42	0.90	0.86
Emotional Stability	0.55	0.50	0.56	0.46	0.62	0.46	0.16	0.18	0.26	0.14	0.86	0.90
Aggressiveness	0.57	0.58	0.58	0.54	0.58	0.66	0.13	0.15	0.26	0.34	0.86	0.86
Liveliness	0.57	0.59	0.58	0.62	0.62	0.50	0.15	0.14	0.22	0.30	0.90	0.82
Dutifulness	0.74	0.70	0.74	0.70	0.74	0.70	0.10	0.11	0.54	0.42	0.90	0.86
Social Assertiveness	0.59	0.62	0.60	0.62	0.62	0.70	0.17	0.17	0.10	0.26	0.90	0.90
Sensitivity	0.54	0.53	0.54	0.58	0.66	0.58	0.18	0.17	0.14	0.22	0.90	0.78
Paranoia	0.49	0.53	0.46	0.54	0.46	0.50	0.12	0.13	0.18	0.18	0.82	0.74
Abstractness	0.52	0.57	0.50	0.58	0.58	0.62	0.17	0.15	0.18	0.18	0.90	0.90
Introversion	0.56	0.57	0.54	0.58	0.54	0.66	0.16	0.15	0.18	0.30	0.90	0.86
Anxiety	0.52	0.53	0.54	0.58	0.54	0.66	0.15	0.17	0.18	0.18	0.86	0.82
Open-mindedness	0.47	0.55	0.46	0.58	0.46	0.58	0.11	0.13	0.22	0.34	0.78	0.90
Independence	0.47	0.52	0.46	0.50	0.54	0.50	0.13	0.16	0.22	0.22	0.82	0.90
Perfectionism	0.65	0.65	0.66	0.66	0.70	0.82	0.11	0.13	0.42	0.38	0.90	0.82
Tension	0.45	0.48	0.46	0.46	0.46	0.46	0.13	0.08	0.18	0.30	0.74	0.66

From Table 4, it was observed that average scores of Dutifulness and Sensitivity trait were higher for Freshers than Experienced. Average scores of traits were higher for the Experienced Category of Students than Fresher Category, except for traits of Dutifulness and Sensitivity.

50% of the both Fresher and Experienced students displayed higher levels of Warmth, Intellect, Aggressiveness, Liveliness, Dutifulness, Social Assertiveness, Sensitivity, Abstractness, Introversion, Anxiety and Perfectionism. In terms of Paranoia, Open-mindedness and Independence, 50% of Fresher students confirmed lower level than experienced students. However, for Emotional Stability 50% of Fresher students depicted higher level than

experienced students. For Tension, 50% of both Fresher and Experienced students showed lower levels.

The most frequent score depicted by mode of Fresher students for traits of Emotional Stability, Liveliness, Dutifulness, Sensitivity and Independence were found to be greater than that of Experienced students in the similar traits. In contrast, in traits of Warmth, Intellect, Liveliness, Aggressiveness, Social Assertiveness, Paranoia, Abstractness, Introversion, Anxiety, Open-mindedness, Perfectionism and Tension the majority of values denoted by mode of experienced students was noted to be more than that of the Fresher students.

The minimum score of the Fresher Category was higher than that of Experienced Students in traits of Warmth, Emotional Stability, Dutifulness and Perfectionism, equal for traits like Paranoia, Abstractness, Anxiety and Independence and lower than Experienced Students in the case of traits like Intellect, Liveliness, Social Assertiveness, Sensitivity, Introversion, Open-mindedness and Tension. Maximum score of Fresher students was lower than that of Experienced category students for traits of Emotional Stability, Open-mindedness and Independence and Equal for traits Warmth, Social Assertiveness and Abstractness and higher than Experienced students for traits Intellect, Liveliness, Dutifulness, Sensitivity, Introversion and Perfectionism.

On comparing Table 2 and Table 4, Striking observations were noted in the most frequent score represented by mode for traits of Intellect, Emotional Stability, Aggressiveness and Perfectionism of Experienced Students and the trait of Liveliness with the Fresher Students with the entire sample for similar traits were found (break up the various aspects into separate sentences). The minimum score of Fresher Students for the traits of Warmth and Dutifulness, and Experienced students in the traits of Intellect, Aggressiveness, Social Assertiveness, Sensitivity, Introversion and Open-mindedness were greater than the minimum score of the entire sample. Similarly, the maximum scores for the trait of Sensitivity of the Fresher category is greater than the Experienced Students group.

Table 5: Results of T-Test for Association between Work Experience and Personality**Factors**

Indicators		F	Sig.	t	Sig. (2-tailed)
Warmth	Equal variances assumed	1.986	0.491	126	0.624
	Equal variances not assumed		0.420	39.270	0.677
Intellect	Equal variances assumed	1.186	-2.846	126	0.005*
	Equal variances not assumed		-3.083	55.131	0.003*
Emotional Stability	Equal variances assumed	0.392	1.588	126	0.115
	Equal variances not assumed		1.476	43.361	0.147
Aggressiveness	Equal variances assumed	1.292	-0.268	126	0.789
	Equal variances not assumed		-0.250	43.600	0.804
Liveliness	Equal variances assumed	1.194	-0.458	126	0.648
	Equal variances not assumed		-0.484	52.659	0.631
Dutifulness	Equal variances assumed	0.012	2.066	126	0.041*
	Equal variances not assumed		1.994	45.651	0.052
Social Assertiveness	Equal variances assumed	0.010	-0.623	126	0.535
	Equal variances not assumed		-0.623	48.203	0.536
Sensitivity	Equal variances assumed	0.050	0.317	126	0.752
	Equal variances not assumed		0.318	48.279	0.752
Paranoia	Equal variances assumed	0.063	-1.240	126	0.217
	Equal variances not assumed		-1.196	45.595	0.238
Abstractness	Equal variances assumed	0.743	-1.409	126	0.161
	Equal variances not assumed		-1.477	51.935	0.146
Introversion	Equal variances assumed	0.275	0.072	126	0.943
	Equal variances not assumed		0.075	52.187	0.940
Anxiety	Equal variances assumed	1.392	-0.541	126	0.589
	Equal variances not assumed		-0.502	43.212	0.618
Open-mindedness	Equal variances assumed	1.010	-3.110	126	0.002*
	Equal variances not assumed		-2.854	42.664	0.007*
Independence	Equal variances assumed	1.537	-1.790	126	0.076
	Equal variances not assumed		-1.601	41.325	0.117
Perfectionism	Equal variances assumed	3.569	0.042	126	0.966
	Equal variances not assumed		0.038	41.979	0.970
Tension	Equal variances assumed	7.605	-0.983	126	0.327
	Equal variances not assumed		-1.249	77.970	0.216

Note: * indicates significance at 5% level, F – Fresher, E – Experienced

Table 5 presents the significant differences of personality traits among the groups of students who are 'Fresher' that is without Work Experience and the 'Experienced' that have Work Experience ranging from 1 to 2 years. From the Table 5 it can be examined that traits of Intellect, Dutifulness and Open-mindedness had significant differences among the two groups. The trait of

Intellect deals with the problem-solving ability and the way of thinking and reasoning of the individual. High scores denote higher mental alertness in absorbing new information quickly and efficiently. As a result, they are often easily bored by mundane or routine tasks and often have a need for higher intellectual challenges. Whereas low scorers are most comfortable with familiar, well-known tasks in which they can draw heavily on past experience, more time to assimilate and adjust to new information and may prefer practical, experiential learning contexts. Here the ‘Fresher’ group gained mean score lower than that of the ‘Experienced’ group (See Table 5).

Open-mindedness deals with the individual’s orientation and responsiveness to change, novelty and innovation. In this case, the ‘Experienced’ group’s average score was higher than that of the ‘Fresher’ group’s average score (See Table 5). This indicates that the ‘Fresher’ group is more resistant towards change and innovation than the ‘Experienced’ group.

Table 6: Descriptive Statistics Personality Traits of Students by Educational Background

Traits	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Mean	A	0.63	0.66	0.50	0.61	0.59	0.81	0.57	0.52	0.44	0.49	0.53	0.47	0.45	0.53	0.60	0.49
	C	0.62	0.58	0.53	0.57	0.56	0.74	0.59	0.54	0.51	0.53	0.57	0.54	0.49	0.48	0.65	0.45
	M	0.67	0.63	0.56	0.60	0.62	0.71	0.62	0.55	0.50	0.55	0.56	0.50	0.51	0.46	0.67	0.46
	S	0.65	0.55	0.53	0.52	0.50	0.73	0.55	0.49	0.55	0.53	0.58	0.52	0.48	0.54	0.61	0.47
	T	0.65	0.56	0.54	0.40	0.48	0.73	0.56	0.46	0.39	0.42	0.56	0.56	0.43	0.57	0.54	0.41
Median	A	0.62	0.68	0.46	0.60	0.58	0.80	0.58	0.56	0.44	0.48	0.56	0.42	0.44	0.54	0.58	0.48
	C	0.64	0.59	0.54	0.56	0.57	0.74	0.62	0.58	0.50	0.54	0.54	0.54	0.48	0.46	0.66	0.46
	M	0.68	0.66	0.58	0.60	0.62	0.70	0.62	0.58	0.50	0.56	0.54	0.48	0.46	0.46	0.70	0.46
	S	0.62	0.54	0.46	0.46	0.54	0.74	0.50	0.46	0.54	0.50	0.54	0.54	0.46	0.54	0.58	0.46
	T	0.66	0.54	0.54	0.38	0.46	0.66	0.58	0.46	0.42	0.38	0.46	0.54	0.38	0.54	0.50	0.42
Mode	A	0.62	-	-	0.70	-	0.74	0.58	-	-	0.42	-	0.30	0.62	0.54	0.50	0.46
	C	0.70	0.46	0.46	0.58	0.66	0.70	0.62	0.58	0.46	0.58	0.54	0.54	0.46	0.54	0.54	0.54
	M	0.70	0.74	0.62	0.66	0.62	0.66	0.62	0.66	0.46	0.42	0.46	0.46	0.46	0.46	0.70	0.46
	S	0.62	0.54	0.46	0.46	0.66	0.74	0.46	0.34	0.54	0.78	0.62	0.66	0.46	0.58	0.54	0.58
	T	-	0.74	-	-	0.42	0.66	-	0.50	-	-	-	-	-	-	0.54	0.50

Standard Deviation	A	0.08	0.13	0.23	0.08	0.15	0.07	0.14	0.20	0.07	0.12	0.14	0.20	0.14	0.13	0.11	0.14
	C	0.14	0.14	0.17	0.14	0.14	0.10	0.15	0.19	0.13	0.18	0.15	0.16	0.12	0.14	0.11	0.13
	M	0.14	0.14	0.16	0.12	0.14	0.12	0.18	0.16	0.12	0.14	0.17	0.14	0.12	0.14	0.10	0.11
	S	0.16	0.12	0.15	0.10	0.16	0.06	0.13	0.16	0.09	0.18	0.14	0.13	0.09	0.11	0.10	0.11
	T	0.17	0.18	0.17	0.16	0.08	0.12	0.30	0.04	0.14	0.18	0.21	0.15	0.12	0.14	0.14	0.07
Minimum	A	0.54	0.46	0.18	0.50	0.38	0.74	0.38	0.26	0.34	0.34	0.30	0.30	0.30	0.34	0.50	0.26
	C	0.22	0.22	0.14	0.30	0.22	0.54	0.26	0.14	0.18	0.18	0.22	0.18	0.22	0.22	0.38	0.18
	M	0.26	0.30	0.26	0.30	0.22	0.42	0.18	0.22	0.26	0.22	0.18	0.18	0.26	0.22	0.46	0.22
	S	0.34	0.38	0.34	0.38	0.22	0.62	0.34	0.30	0.42	0.22	0.42	0.30	0.38	0.38	0.46	0.30
	T	0.46	0.38	0.34	0.26	0.42	0.62	0.10	0.42	0.18	0.18	0.38	0.38	0.30	0.46	0.46	0.30
Maximum	A	0.74	0.82	0.78	0.70	0.82	0.90	0.74	0.78	0.54	0.62	0.70	0.82	0.62	0.74	0.78	0.66
	C	0.90	0.90	0.86	0.86	0.90	0.90	0.90	0.90	0.82	0.90	0.90	0.86	0.78	0.90	0.90	0.70
	M	0.90	0.86	0.90	0.86	0.90	0.90	0.90	0.90	0.74	0.78	0.86	0.74	0.90	0.78	0.86	0.74
	S	0.90	0.74	0.78	0.66	0.66	0.82	0.74	0.74	0.70	0.78	0.82	0.66	0.66	0.70	0.82	0.58
	T	0.90	0.74	0.78	0.66	0.62	0.86	0.90	0.50	0.54	0.62	0.90	0.74	0.58	0.82	0.78	0.46
Note: Educational Background :- A-Arts, C-Commerce, M-Management, S-Science and T-Technology Personality Traits :-1-Warmth, 2-Intellect, 3-Emotional Stability, 4-Aggressiveness, 5-Liveliness, 6-Dutifulness, 7- Social Assertiveness, 8-Sensitivity, 9-Paranoia, 10-Abstractness, 11-Introversion, 12-Anxiety, 13-Open-Mindedness, 14-Independence, 15-Perfectionism and 16-Tension.																	

From Table 6, it can be seen that the minimum values for the streams of arts for traits of warmth, aggressiveness, dutifulness and perfectionism were considerably higher as compared to other streams. The minimum values of the commerce streams for traits of warmth, intellect, emotional stability, aggressiveness, sensitivity, open-mindedness, perfectionism and tension were the lowest in comparison to the minimum values of other streams.

Table 7: Results of ANOVA for significance between Qualification and Personality Traits

Indicators		F	Sig.
Warmth`	Between Groups	0.768	0.548
	Within Groups		
	Total		
Intellect	Between Groups	2.133	0.081
	Within Groups		
	Total		
Emotional Stability	Between Groups	0.726	0.576
	Within Groups		
	Total		
Aggressiveness	Between Groups	1.390	0.241
	Within Groups		
	Total		
Liveliness	Between Groups	1.919	0.112
	Within Groups		
	Total		
Dutifulness	Between Groups	1.521	0.200
	Within Groups		
	Total		
Social Assertiveness	Between Groups	1.066	0.376
	Within Groups		
	Total		
Sensitivity	Between Groups	1.723	0.149
	Within Groups		
	Total		
Paranoia	Between Groups	0.245	0.912
	Within Groups		
	Total		
Abstractness	Between Groups	1.351	0.255
	Within Groups		
	Total		
Introversion	Between Groups	0.282	0.889
	Within Groups		
	Total		
Anxiety	Between Groups	1.073	0.373
	Within Groups		
	Total		
Open-mindedness	Between Groups	3.497	0.010*
	Within Groups		
	Total		
Independence	Between Groups	1.764	0.140

	Within Groups		
	Total		
Perfectionism	Between Groups	0.516	0.724
	Within Groups		
	Total		
Tension	Between Groups	0.543	0.704
	Within Groups		
	Total		

The ANOVA test was performed to find out the association between the Educational Background of students and their Personality Traits. The test revealed significant association between the Personality trait of only Open-Mindedness with that of the Educational Background / Qualifications of the Students (See Table 7). The individual's orientation and responsiveness towards change, novelty and innovation can be explained through the Open-Mindedness trait.

Table 8: Results of Post-Hoc Tests - Multiple Comparisons for significance between Educational Backgrounds and Personality Traits

Dependent Variable		Sig.	
Open-mindedness	Commerce	Arts	0.168
		Science	0.029*
		Technology	1.000
		Management	0.333
	Arts	Commerce	0.168
		Science	1.000
		Technology	0.482
		Management	0.662
	Science	Commerce	0.029*
		Arts	1.000
		Technology	0.301
		Management	0.342
	Technology	Commerce	1.000
		Arts	0.482
		Science	0.301
		Management	0.917
	Management	Commerce	0.333
		Arts	0.662
		Science	0.342
		Technology	0.917
Note: * indicates significance at 5% level.			

On further examination through the Post-Hoc Tests for Multiple Comparisons it can be noted that (See Table 8) significant differences in Personality Traits according to the Educational Background is present in Open-mindedness between only Commerce and Science stream students. On comparing the means it can be concluded that students from the Science stream are more resistant to change, novelty and innovation as compared to the students of the Commerce stream.

Conclusion

The research findings point out that significant differences in terms of Gender were found for traits like Emotional Stability, Liveliness, Sensitivity, Abstractness, Open-mindedness and Tension. There were no significant differences seen in the traits of Warmth, Intellect, Aggressiveness, Dutifulness, Social Assertiveness, Paranoia, Introversion, Anxiety, Independence, and Perfectionism. This may be because the students surveyed were approximately of the same age, similar economic and ethnic background with most of them from the metropolitan city, who have gone through more or less the same upbringing.

On the basis of Experience, the test revealed that the Freshers and Experienced Distinct differences in the traits of Intellect, Open-mindedness and Dutifulness. This may be because the Experienced students have had some interaction with the industry which brought in them a more practical orientation towards looking at situations and scenarios. According to their Education Background it was observed that Science and Commerce students were significantly distinct with regard to the trait of Open-mindedness Students with the Science Educational Background have practiced scientific methods and carried out practical research throughout their years of education, thus making them look for a logical rationale before accepting diverse views, ideas and change. Thus it is likely that they scored lower in Open-mindedness.

From the Study it can be concluded that Demographic Variables can influence one or more personality traits, though there are no significant differences among the groups or categories. For instance, there was no significant difference among genders revealed for the trait of Social Assertiveness, though there was considerable difference with respect to genders. Demographic variables such as age, gender, educational background and experience can influence human behaviour to certain extent. However, it is intricate and intriguing to understand personality and

its influence on an individual's behaviour, as human behavior may change according to situations encountered or the surroundings or even due to changes in the state of its mind.

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