

Role of Neo Five Factor Model of Personality in Management Education: An Empirical Study

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The present study compares the personality profiles of male and female students of the full time management programme of a management institute. It also examines the differences in personality profiles of the male students of the full time and part time management programmes. Significant differences were found between the male and female students of the full time management programmes. Female students have a significantly higher score in four factors, namely, negative emotionality, openness to experience, agreeableness and conscientiousness. The full time male students were low in negative emotionality. The part time male students were higher in conscientiousness as compared to the full time male students.

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It is often argued that, besides cognitive abilities, a blend of personality characteristics is necessary for people to be successful in education and eventually in their jobs or careers (Smithikrai 2007). Recent research has demonstrated that personality assessment contributes unique information to the prediction of job performance, over and above that offered by methods such as cognitive ability testing and managerial assessment centres (Goffin, Rothstein & Johnson 1996). Progress has been made in recent years in understanding the structure and the concepts of personality (Dunn, Barrick & Ones 1995). In principle, personality measurement should sample elements or aspects of an individual's behaviour that are diagnostic of importance characteristics of people in general. These diagnostic behaviour samples should on the one hand, allow us to compare different people against the same standard and, on the other hand, allow us to interpret what a person has done and predict what he or she will do in other

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important non-test situations. Both processes –comparisons among people and interpretations of individual cases –are important tasks in industrial and organizational psychology (Hogan 1991).

With the introduction and general acceptance of the five-factor model (FFM), also known as the ‘Big Five’ (Goldberg 1990) in the early 1990s, research examining the link between personality and work behaviour has been intensified. The FFM dimensions have been replicated in an impressive series of studies across countries and cultures and have remained fairly stable over time (McCrae & Costa 1997, McCrae, Terracciano & 78 Members of the Personality Profiles of Cultures Project 2005, Salgado 1997, and Tett, Jackson, and Rothstein 1991). These studies show that the most relevant personality factors which predict job performance are Conscientiousness and Emotional stability. The five-factor model of personality is obtaining construct validation, recognition, and practical consideration across a broad domain of fields, including clinical psychology, industrial-organizational psychology, and health psychology (Widiger & Trull 1997).

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Although the FFM has been researched in many areas of individual-organizational psychology, most notably with respect to job performance (Barrick,

Mount & Judge 2001), the relationship of the FFM to management education is much less studied, especially in Asian countries. And, moreover, no study of such nature was done on a sample set comprising Indians. Management education encompasses a broad range of philosophies, and issues concerned with helping tomorrow’s manager’s to be more effective in their jobs. Indian management education has undergone a paradigm shift. There have been fundamental and irreversible changes in the economy, outlook of business and industry, government policies and in the mindset of the Indians in general. Thus the objective of the present study is to compare the personality profiles of males and female students of the full time management programme. It also examines the differences in personality traits of the male students of full time and part time management programme. This study can be a guiding tool in the hands of management education institutes where it can be used to effectively make tomorrow’s leaders understand the virtues of their core behavioural style.

Personality Overview & Recent Developments

A person’s personality (that is a set of psychological traits) is a relatively stable precursor of behaviour; it underlines an enduring style of thinking, feeling and acting (Hogan 1991, Mc Crae & Costa 1997). Recent years have witnessed a rebirth in the utility of personality testing in work settings. This resurgence is largely due to the emergence of a preferred taxonomy in personality clas-

sification. As discussed by Mount and Barrick (1995), “it appears that many personality psychologists have reached a consensus that five personality constructs, referred to as the big five, are necessary and sufficient to describe the basic dimensions of normal personality”. Interest has also increased due to research documenting empirical linkages between the “big five personality constructs and measures of individual performance and success in work organizations in both North America (Barrick & Mount 1991, Hough et al 1990, Tett et al 1991) and Europe” (Salgado 1997).

At the same time it is extremely relevant in today’s scenario to link personality and its implications to success in work. Management education is one of the most prominent and accurate places to understand the vocabulary of individual differences. In today’s scenario, it is difficult to think of learning without looking at the relationship between the personality type, user interface and actual performance in the work place. It is therefore of significant interest to profile the type preference in a management institute with due respect to the differences in terms of experience and gender (Tyagi & Bansal 2005).

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For the present research work NEO-FFI instrument has been chosen. This instrument has gained widespread accep-

tance in the academic-psychology community. It also offers human resource practitioners a broadly applicable and practical tool. NEO –FFI has been used for: team building ,employee selection, job analysis, training design, customer service, management and leadership development, coaching and counselling, career development and conflict management to name a few. (Howard & Howard 1995). The NEO-FFI instrument has been chosen for the present study, which will ultimately help the management students in not only knowing and exploring the self but will at the same time, also help them in making wise and meaningful career choices in life.

NEO-FFI

The NEO-FFI dimensions are negative emotionality, extraversion, openness to experience, agreeableness, and conscientiousness. Each of the Big Five dimensions is like a bucket that holds a set of traits that tend to occur together. The definitions of the five super factors represent an attempt to describe the common element among the traits, or sub factors, within each “bucket”. The most commonly accepted buckets of traits are those developed by Costa and McCrae (1992). Negative emotionality concerns the degree to which the individual is insecure, anxious, depressed, and emotional versus the degree to which the individual is calm, self confident and cool. Extraversion concerns the extent to which the individual is gregarious, assertive and sociable versus the extent to which the individual is reserved, timid and quiet. Openness to experience defines

individuals who are creative, curious, and cultured versus those who are practical with narrow interests. Agreeableness concerns the degree to which individuals are cooperative, warm and agreeable versus the degree to which they are cold, disagreeable and antagonistic. Conscientiousness measures the extent to which individuals are hard working, organized, dependable, and preserving versus the degree to which they are lazy, disorganized and unreliable

Literature Review

While a good amount of information related to NEO-FFI in the context of team building, career guidance, conflict resolution and leadership development is available, there is considerably less research work available, which investigates the relationship between the NEO-FFI and post graduate management students. Educators of management institutes are faced with the sensitive task of preparing students for the rapidly changing demands of the 21st century. Understanding one's own personality as well as the personality of others better, can make a significant difference in one's performance and advancement. Much of one's success depends on how well he or she is able to understand and act on the personality dynamics in one's workplace (Howard & Howard 2001).

Relations between personality traits and job performance are also of potential interest to personnel psychologists responsible for selecting or placing employees. Longitudinal research in history has demonstrated that personality characteristics

are important indicators of career performance. Since different features of personality will be relevant to different types of jobs; the personnel psychologist must determine the optimal configuration of traits for each position (Costa & McCrae 1992). Two of the NEO PI-R (instrument with 240 items) domains – Openness and Conscientiousness – promise to be of particular interest in the area of educational psychology. Openness is moderately related to measures of intelligence and somewhat more strongly related to measures of divergent thinking, an ability generally thought to contribute to creativity (McCrae 1987). Important questions for educational research focus on whether students gifted with openness are more likely to avail themselves of, and profit by, educational enrichment opportunities; whether their unconventionality is a source of misunderstanding and frustration in traditional classrooms; and whether Openness itself can be increased by education, as the concept of the liberal education has traditionally assumed (Costa & McCrae 1992). Conscientious students on the other hand, are well organized, purposeful and persistent, and there is some evidence to suggest that these traits lead to higher academic achievement (Digman & Takemoto Chock 1981). Conscientious people consider themselves, and are rated by others as being, more intelligent (McCrae & Costa 1987), and scores on this domain scale may be a useful supplement, as predictors of academic and later –life success. Barrick and Mount (1991) found that conscientiousness, viewed as a broad construct was positively related to performance across all job criteria and across all occupational groups (Moon 2001).

Although recent research has provided grounds for optimism, a close examination of the findings from the quantitative reviews reveals some discrepancies in the results. For example, Barrick and Mount (1991) found that conscientiousness was the only FFM trait to display non-zero correlations with job performance across different occupational groups and criterion types. In contrast, Tett, Rothstein and Jackson (1991) found that only emotional stability displayed non-zero correlations with performance and two other Big Five traits – agreeableness and openness – displayed higher correlations with performance than conscientiousness. More recently, Salgado (1997) and Anderson and Viswesvaran (1998) found that two traits from the five-factor model – emotional stability and conscientiousness – displayed non-zero correlations with job performance.

In India, management education students come from various educational backgrounds like Engineering, Commerce, Science and Art. Predicting the success of any particular domain is an uphill task. The present study is done in the field of Management, in a Management Institute with full time residential students and part time management students. Full time management students are residential students who tend to complete their post graduation study in two years whereas part time management students are those who work during day time, and attend classes in the evening. Hence for part time students the total duration of completing the course is three years. The present study aims to compare the Personality profiles of male and

female students of Full time Management Programme. It also examines the differences in personality profiles of male students of the full time and part time management programme.

Sample

This study was conducted on the post graduate students of a premier Business Management Institute of Northern India. Out of 229 students there were 138 full time male students, 48 part time male students and 34 full time female students. There were only 9 female students present in the part time PGDBM course. The selection process of the students in this Management Institute is the same across the entire programme, that is they have to clear the written test followed by the Group Discussion and Personal Interview. Educational backgrounds of students were very diverse; ranging from Engineering to as varied as art and commerce. The average age of the total management students was 24 years. For the full time male students the average age was 23 years, for the part time male students it was 27 years and for the full time female students it was 23 years.

Instrument

The Neo-Five Factor Inventory (NEO-FFI) developed by Costa and McCrae (1985) was used in the present study. This inventory is a short form of the Neo-Personality Inventory. A 60 item version of Form S of NEO-FFI was administered on the 229 students. Each of the five factors was measured using 12 items for a total of 60 items. McCrae

and Costa (1989) have verified the existence of five independent personality factors with coefficient alphas of .70 or higher for the items measuring each of the factors. It provides a comprehensive assessment of the major dimensions of personality and a broad sample of more specific traits. It is a useful tool in almost any research on personality correlates.

Procedure

NEO-FFI was conducted on the management students as a part of their Organizational Behaviour Course. And the profile of each student obtained with the help of this instrument was shared and discussed through personal counselling, which was also one of the main objectives of this course. Organizational Behaviour subject is taught in the 1st semester of the 1st year of the PGDBM (Post Graduate Diploma in Management) Programme, for both the full time and part time students.

Results

The first and foremost aim of this study was to identify the significant differences in the personality profiles of male and female students of the Full time Management Programme. The result presented in Table 1 shows mean values for male and female

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full time management students. Mean score of NE (Negative emotionality) indicate that full time female students have higher (M=21.79) scores than full time male students (M=17.78) on this dimension, and this was statistically significant (t = -2.81). This result indicates that female management students feel the effect of even a little workplace stress more readily than most people and often serve as the ‘conscience’ of those around them. In tough times female students may need plenty of time to vent their frustrations, before they are ready to tackle the next job challenge. Mean score of O (Openness to Experience) indicates that females have higher scores (M=32.41) than full time male students (M=27.92) on this dimension, and this was statistically significant (t= -4.99). This trait in-

Table 1: Differences in Mean values of Full Time Male & Female Management Students

Total	Males F/T	Females F/T	Value of	FFI test
T Mean	Mean	Mean	T	Variable
18.92	17.78	21.79	-2.81	NE
28.49	27.92	32.41	-4.99	O
29.32	28.53	31.50	-3.24	A
34.16	32.83	35.15	-2.17	C

NE-Negative Emotionality; O-Openness to Experience; A-Agreeableness; C-Conscientiousness
 Values of t (Student’s t) less than -1.96 or greater than 1.96 have been shown

Females are more agreeable in nature and they are more cooperative rather than competitive.

indicates that females are more open to experience, and are willing to entertain novel ideas and unconventional values, but they need to guard themselves against getting bored easily. Females are generally assumed to be helpful, conflict averse and a team player. This was proven true with the mean score of A (Agreeableness) trait of this study which indicates that females (M= 31.50) have a higher

score than full time male management students (M= 28.53) on this dimension, and this was statistically significant (t=-3.24) too. This trait indicates that females are more agreeable in nature and they are more cooperative rather than competitive. At the same time they should be wary of situations in which they are responsible to someone with whom they don't share the same values, because they will find it difficult to stand up to that person when they need to. Conscientiousness is that trait of personality which is linked with job success in many research studies. It is that trait of personality which is associated with disci-

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pline, ambition, and focus. Mean score of C (Conscientiousness) trait indicates that female management students (M=35.15) have a higher score than full time male students (M=32.83) on this dimension and this was statistically significant (t= -2.17). This trait suggests that female students are better focused, scrupulous, purposeful and punctual by nature. They are also strong willed and determined by nature.

Table 2: Differences in Mean Values of Full Time & Part Time Management Male Students

Total	Male F/T	Male P/T	Value of		
T Mean	Mean	Mean	t	Var	NEO-FFI
34.16	32.83	37.23	-4.18	Conscientiousness	

Values of t (student's t) less than -1.96 or greater than 1.96 have been shown

From the above table it is apparent that Conscientiousness trait was distinctively higher in part time management students than in full time management students. Part time management students are those who work in the day time and study in the evening. Hence they need to be really focused in their approach, to carry on with their responsibility in the workplace and also at the same to successfully pursue their studies. Table 2 shows mean values for males and females full time management students. Mean score of Conscientiousness indicates that part time management students have a higher score (M=37.13) than full time male students (M=32.83) on this dimension, and this was statistically significant (t = -4.81). This result indicates that part time management students are more focused and organized in their approach.

Discussion

The primary focus of this study was to better understand the relative importance of various personal characteristics—emotional stability, extraversion, openness to experience, agreeableness and conscientiousness in a management institute. The results from this study attest to the utility of using this measure for various practical considerations i.e. selection, training, team building, conflict resolution and leadership development. From the present study significant differences were found in the personality traits of full time males and females students of a management institute in Negative Emotionality, Agreeableness, Openness to Experience and Conscientiousness. Female management students were found to be on the higher side of Negative Emotionality, which is indicative of more susceptibility towards stress. This can be a warning for female management students who are going to be tomorrow's leaders, to take life little easy. They need to seek out a position or role that is essentially stress free or has only occasional stress. For the full time male management students it is good to know that their ability to perform calmly in high stress situations is a very positive indicator in today's turbulent environment.

In the case of Conscientiousness, several studies provide robust support for its usefulness as a predictor of Job Performance (Barrick & Mount 1991, 1993; Barrick, Mount & Strauss 1993). Female management students were found to be significantly high on Conscientiousness domain in comparison of their male coun-

terparts. The Conscientiousness factor refers to the person pursuing fewer goals in a purposeful way. In general focused people tend to be high achievers.

Agreeableness dimension was found to be significantly higher among female management students. The one situation in which Agreeableness appears to have high predictive validity is in jobs that involve considerable interpersonal interaction, particularly when the interaction involves helping, cooperating and nurturing others. In fact in those settings, Agreeableness may be the single best personality predictor (Barrick, Stewart, Neubert & Mount 1998, Mount et al 1998). Another study by Antonioni (2001) has been found to be useful and relevant. The results of this study suggest some strong relationships between Big Five Personality factors and conflict resolution strategies. Managers who scored high on Extroversion, Agreeableness and Conscientiousness tend to use a win-win collaboration strategy in resolving conflicts with individuals who report directly to them. The results of this study also suggest that individuals with specific personality traits may be more predisposed to use interpersonal conflict resolution strategies that match their traits. In the present research work it was found that females had higher scores on Agreeableness and Conscientiousness than their

Agreeable individual team members will tend to exhibit interpersonal skills such as the ability to resolve conflict and communicate openly.

male counterparts. So the chances of using a win-win collaboration strategy will be more applicable with the males. To summarize, agreeable individual team members will tend to exhibit interpersonal skills such as the ability to resolve conflict and communicate openly.

In organizational settings, people who are high on openness to experience may have both a broader range and depth of experience, and more of an appreciation of the merits of new ways of doing things and the potential for improving and changing the status quo, than individuals who are low on openness to experience. In the present study, as apparent from Table 1, Openness to Experience trait is significantly higher among female management students as compared to full time male management students. Ultimately full time female students will be able to appreciate things that are novel and unique in conjunction with their greater sensitivity. And range of experience may cause them to come up with novel solutions to problems and creative ideas to improve on current functioning.

From Table 2 we can see the significant difference in the Conscientiousness trait. Part time management students were found to be more focused, organized and a better planned in their approach, in comparison to full time male management students. It can be suggestive of role of experience in developing this domain. Part time management students have to work in the day time and attend classes in the evening, which forces them to be systematic and orga-

nized in their approach towards life in general. Conscientiousness appears to be the trait-oriented motivation variable that industrial-organizational psychologists have long searched for, and it should occupy a central role in theories seeking to explain job performance (Barrick, Mount & Judge 2001)

Recommendations & Future Directions

Recent research has clearly demonstrated that personality is a valid predictor of job performance, particularly when the unique personality requirements of the job have been accurately defined. Personality assessment is extremely useful in predicting contextual job performance as opposed to the technical aspects of job performance (contextual performance being described, typically, as the “soft side” of work –interpersonal effectiveness, person-organization fit, etc). Finally, it is necessary to acknowledge that the Five Factor Model, although a current paradigm, in the field of personality, is not unanimously accepted, and some recent criticisms have been made. For example Block (1995) suggested that factor analysis is not an appropriate and sufficient base to decide the theoretical constructs of personality. Such criticism was answered by Costa and Mc Crae (1995) and Goldberg and Saucier (1995), who said that the Big Five has been, reproduced a great number of times, with different factor methods, by different researchers, with different instruments, and in different languages. Consequently the model is not exhaustive, but it manages to support a more comprehensive

explanation of various facets of human personality (Salgado 1997).

The population of the sample size is only 229 in number; however the results can be verified using a larger data set. The present research is being confined to the data collection from one management institute only and hence the results obtained cannot safely be generalized. The data collection with the help of NEO-FFI from a few management institutes may be able to give a wider application to the instrument with the full time and the part time students.

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