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TEAMWORK RELATED PERSONALITY VARIABLES OF MANAGEMENT STUDENTS

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Abstract

Teamwork is a sophisticated, systematic, and organized model of human interaction based on mutual trust, skills, and cooperation of the members. In the present study, personality traits of members in different work teams would be subjected to factor analysis (principal component analysis with varimax rotation and confirmatory factor analysis using SPSS LISREL VIII) to locate the existence of these five traits in consonance with the Big Five Model. The results would indicate personality variables that go with the emotionally positive and negative traits, which would help to prepare guidelines for composition and training of work teams.

Keywords: Teamwork, Personality traits, Big Five Model.

1.   INTRODUCTION

Teamwork is a sophisticated, systematic, and organized model of human interaction based on mutual trust, skills, and cooperation of the members . It reqires optimum positive synergy, distributed accountability, and complementary skills among the members that result in maximum performance. However, it has been consistently reported in the research literature that any group of persons cannot constitute a team. It has to be some personality characteristics of the members that go together to form a team. In the present study, in consonance with the Five-Factor Model (FFM), an attempt would be made to identify extreme personality traits, which are compatible or not-compatible to teamwork. The five-factor model of personality traits is comprised of four emotionally stable traits- Agreeableness, Extraversion, Conscientiousness, and Openness (Costa & McCrae, 1992). A fifth trait, Neuroticism (N) covers several aspects of emotionality.

2.   REVIEW OF LITERATURE

In one of the study the characteristics of a multidisciplinary student team project were briefly examined. The results indicate that emotional stability is negatively correlated to how a person feels about a work role. And groups with a higher average agreeableness score tended to report less conflict (Rhee, Parent, Basu, 2013).Batool, Qureshi, Hijazi (2012) found that there is a positive relationship among team personality , constructive controversy and the overall performance of the team.If the controversy is structured for the benefit of all, it significantly improves performance because it explores the different dimensions of creativity and improvements in the organization which leads to ultimate goal of the organization (Alam, 2009).Similarly, it has been studied that constructive controversy will reduce the negative impact of individuality among the students who otherwise will be ineffective for any team (Bhattacharyya ,2010).Most researchers (Bernstein, Radosevich, Clesca, Masco, Lynn 2008) agree that Individuals who possess higher levels of agreeableness and lower levels of conscientiousness were associated with higher levels of making decisions based on emotions. Individuals with higher levels of each of the Big Five traits were associated with individuals who made more rational and open-minded decisions.

2.1 Need of the Study

A very few trait based research has been done on teamwork.None of the teamwork based research has taken the present tool of this research which is designed to measure all aspects of managerial personality. So the present study is going to bridge this gap in the researches done.Individual Personality could cause disruptions when assigned to work in groups, teams or assigned to a leadership role. In some respect, the results of the present study are likely to address this problem.

3.   METHODOLOGY

3.1 Research Question
What is the best composition of individuals for work teams to ensure high-quality innovative outcomes?

3.2 Aim
To examine the team - work related personality traits of high performance team and low performance team in Management students

3.3 Objective
To find out the different factorial structure in the Personality variables of high and low performance team

3.4 Variables
*3.4.1*Personality traits

*3.4.2*Team work performance –
  – High level performance team
  – Low level performance team

3.5 Research Design
Post-hoc Research Design

3.6 Sample Size
240 (120 high performers and 120 low performers)

3.7 Sampling Technique

Purposive sampling

3.8 The Instruments

The Management Personality Inventory (MPI)

3.9 Statistical analysis

Descriptive statistic and factor analysis

4.   RESULTS AND DISCUSION

The results were analyzed using SPSS package for statistical analysis.

Table-1:Principal Components Analysis with Varimax Rotation of Seventeen Variables for Low performance Team

Variables	Factors					h^2
	I	II	III	IV	V	
Fearlessness	.69	.32	.26	.37	.13	.80
Flexibility	.54	.24	.19	.15	.05	.41
Independence	.36	.48	.15	.22	.15	.45
PFD	.61	.14	.32	.16	.24	.68
CIS	.28	.29	.47	.21	.17	.51
Dominance	.19	.27	.58	.06	.16	.52
Goal setting	.24	.31	.22	.18	.22	.34
ETL	.46	.18	.12	.12	.22	.32
Competitiveness	.27	.28	.52	.15	.17	.47
CE	.13	.21	.45	.18	.21	.39
Engagement	.22	.22	.09	.48	.15	.36
PIP	.25	.15	.13	.43	.63	.40
SO	.25	18	.39	.59	.14	.62
Flow	.19	.19	.07	.36	.13	.32
Internality	.21	.56	.07	.14	.21	.43
Persistence	.16	.43	.17	.14	.24	.36
Self Control	.13	.58	.23	.11	.18	.52
% of Variance	12.00	10.54	9.35	7.10	5.09	

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Table-2: Principal Components Analysis with Varimax Rotation of Seventeen Variables for High performance Team

| Variables	Factors					h^2
	I	II	III	IV	V	
Fearlessness	.81	.14	.22	.47	.08	.95
Flexibility	.67	.27	.21	.23	.12	.63
Independence	.59	.41	.22	.10	.29	.66
PFD	.65	.23	.53	.13	.44	.97
CIS	.57	.26	.52	.28	.15	.76
Dominance	.12	.27	.69	.09	.34	.70
Goal setting	.28	.45	.32	.06	.52	.66
ETL	.61	.29	.24	.17	.21	.59
Competitiveness	.25	.26	.75	.25	.26	.82
CE	.28	.14	.56	.25	.22	.52
Engagement	.19	.18	.17	.74	.25	.71
PIP	.15	.25	.17	.53	.63	.79
SO	.27	.19	.57	.63	.26	.90
Flow	.23	.62	.15	.36	.33	.70
Internality	.14	.78	.22	.14	.19	.73
Persistence	.22	.76	.26	.27	.26	.83
Self Control	.18	.54	.19	.27	.58	.77
% of Variance	18.18	16.59	16.24	12.15	11.51	
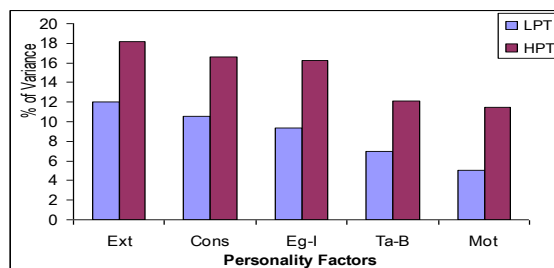
Figure 3. Percentage of Variances Accounted for by different Factors for the Low and High Performance Teams

Five factors are extracted for each of the teams. For the low performance team, significant factor loadings on the 1st factor are obtained on fearlessness (.69), flexibility (.54), independence (.36), preference for difficult task (.61) and eagerness to learn (.46). On the other hand, for the high performance team, significant factor loadings are obtained on the same five traits along with confidence in success. The factor loadings are fearlessness (.81), flexibility (.67), independence (.59), preference for difficult task (.65), eagerness to learn (.61), and confidence in success (.57). All these traits represent the characteristics of 'extraversion' for which the 1st factor is named as extraversion factor in both the teams.

The percentage of variance accounted for by the 1st factor for the low- and high performance teams are respectively 12.00 and 18.18. It clearly indicates that extraversion as a personality construct is highly conducive to team work. As it is observed in the Figure 3 about both the teams, extraversion seems to be the most significant construct for team work related activities.

For the 2nd factor, high factor loading are obtained for the low performance team on independence (.48), internality (.56), persistence (.43), and self-control (.58). For the high performance team, high factor loadings on the 2nd factor are goal setting (.45), flow (.62), internality (.78), persistence (.76), and self control (.54). Observation of these traits in the 2nd factor both for low- and high performance teams point to the fact that they represent the conscientiousness construct of personality. The % of variance accounted for by this factor for low- and high performance teams are respectively 10.54 and 16.59. Hence it indicates that conscientiousness is another major personality construct which goes well with team work.

The 3rd factor that emerged for the low performance team has significant loadings on confidence in success (.47), dominance (.58), competitiveness (.52), compensatory effort (.45), and status orientation (.39). For the high performance team, tests those have significant factor loadings on the 3rd factor are preference for difficult task (.53), confidence in success (.52), dominance (.69), competitiveness (.75), compensatory effort (.56), and status orientation (.57). Observation of these traits reveals that those are emotion and ego-involved personality traits. The % of variance accounted for by the 3rd factor is respectively 9.35 and 16.24 for the low- and high performance teams. The significant difference in the % of variance accounted for by the two teams with respect to the 3rd factor clearly supports the important role of this factor for the team work. This aspect of personality which has been referred to as neuroticism in the Big-Factor model has been bought into a lot of team-work related research. In the present work, the factor is preferred to be called as Ego-involved factors because the traits do not strictly qualify the neuroticism, and here these traits are contributory to the efficiency of the team work.

The 4th factor that emerged for both the teams consists of the same personality traits. For the low- and high performance teams the significant loadings are respectively fearlessness (.37, .47), engagement (.48, .74), pride in productivity (.43, .53), status orientation (.59, .63), and flow (.36, .36). The traits in the 4th factor are all observed to be target-oriented behaviors. Hence the factor is named as target-behavior. The % of variance accounted for by this factor is 7.10 for low performance team and 12.15 for high performance team. This factor seems to make a lot of difference between the two teams. Hence, it may be concluded that some amount of target-oriented behavior among the members of the team is very much required for successful team work.

With respect to the 5th factor, the two teams vary enormously. While for the low performance team, significant factor is only on pride in productivity (.63), for high performance team significant loadings are on preference for difficult task (.44), goal setting (.52), engagement (.63), and self control (.58). This factor may be called as the motivational factor, which is likely to make a difference in the performance of the team work. The % of variance accounted for by this factor is respectively 5.09 and 11.51 for the low- and high performance teams.

5.   CONCLUSION

Factor analysis of the team-work related personality variables lead to the following conclusions.

5.1 Extraversion and conscientiousness are two important personality factors as observed under the Big Five Factor models are important constituents of team-wok activities

5.2 The other personality factors that are found to be important constituents of teamwork are ego-involved factors, the target- oriented factors and motivational factors.

6.   LIMITATIONS AND FUTURE RESEARCH

Population size of this study was limited, a large sample may show different impacts regarding the interpretation of this study's results. This study was unable to cover all the areas regarding individual personality. It is advised that a longitudinal study should be done next time.Only one college sample has been taken. A multidiscipline team work should have been considered.The influence of personality and ability in project teams that span more than one semester was not studied in this work, and would be of interest in longer term projects.

7.   IMPLICATIONS

- The study would help to understand the traits important for high team performance.
- Understanding the positive roles of extraversion and other factors in team composition in addition to ability can help form or guide effective teams.
- The study would help to develop intervention and training programme in order toimprove innovations and team work among employees and Managers.
- The findings in this study illuminate associations between personality and teamwork for a type of task that is commonly assigned as a group project at many organisations.

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