

Relationship between Personality and Occupational Stress among Academic Managers at Higher Education Level

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Abstract

The present study is an attempt to understand relationship between personality and occupational stress of academic managers at higher education level. Qualitative and quantitative approaches have been used to explore the relationship between personality and occupational stress of academic managers by using a sample of 120 academic managers of public sector institutions of higher education located in Punjab, Pakistan. In order to select representative sample from the population, simple random sampling technique was used. Total sample size was 120. For data analysis; both descriptive and inferential statistics were used. Research instrument Occupational Stress Inventory–revised (OSI-R) and MBTI were used to collect data. For data analysis percentages, mean, standard deviation and Pearson correlation were used. Data analysis revealed that common main domains of personality characteristics found in academic managers were (extroversion, sensing, thinking, judging) and positive relationship was found in responses of academic managers regarding relationship between personality type and occupational stress while negative significant relationship was found between extroversion and sensing with personal resources. While negative significant correlation with occupational stress includes introversion whereas feeling, intuition and perceiving factors lack any significant correlation towards occupational stress.

Keywords: Occupational Stress, MBTI Personality type

INTRODUCTION

Personality is considered as a notion of a special characteristic of human behavior. The magnitude of personality traits, manager behavior, and occupational stress has become a matter of concern for researchers. Success of any process directly co-relates to its management. The role of an academic manager and his array of responsibilities are of great importance. Much is expected of him in connection with the successful accomplishments of management / a process / a system. For effective management, the most appropriate person must be recruited – a dynamic personality who is in possession of qualities of vibrant leadership and effective management.

A compact, healthy personality is dependent on sound physical as well as psychological health. The series of responsibilities / tasks / jobs to be performed by an academic manager is stacked with duties / responsibilities of diverse and complex nature. Facing tasks of such complex nature may give rise to psychological complications. An academic manager must be strong and tactful, equipped with such personality traits that will enable him to control / overcome the phenomenon of stress.

Personality can be defined as a dynamic and organized set of characteristics possessed by a person that uniquely influences his or her cognitions, motivations, and behaviors in various situations. Occupational stress is termed as mismatching of one's abilities and nature of responsibilities. It is a risk for the fulfillment of the occupational requirement. Enduring stress that is narrated with the place of work is called occupational stress. There must be some sort of the strategy which may reduce it and ultimately enhance the ability of the academic manager.

Every person on this planet has a different and unique personality. In educational institutions particularly, an academic managers behave differently with reference to occupational stress.

Although a number of researchers have explored relationship between personality and occupational stress among teachers but little research has been done in the area of academic managers using personality type and occupational stress questionnaires to analyze the relationship between these two independent variables. For this purpose the researcher used MBTI inventory to investigate the personality type and Occupational Stress Inventory–revised (OSI-R) to measure stress in academic managers. Thus, the purpose of this study was to examine personality type and relationship between occupational stress and their relationships among academic managers at higher education level in Pakistan.

Review of Literature

The purpose of this quantitative study was to understand how an individual's personality, that is, MBTI type, correlates with academic management. Hence, the literature review focuses on the MBTI, the primary tool used in this study, which was implemented in its first quantitative segment to determine whether any personality types appeared at frequencies higher than was normal in a comparative population. The MBTI was chosen for this study because it "is the most widely used personality instrument in the world" (Hoffman, 2003). The relatively stable behavioral patterns and attitudes of a given individual are known as Personality. (Costa & McCrae, 1985). Personality is the habitual patterns and qualities of behavior as expressed by physical and mental activities and attitudes. (Carter & Izumo, 2001) Jung believed that people belong to different psychological types (Karn & Cowling, 2006). The totality of a person's psychological qualities which consistently influence a person's mental processes behavior and emotional experiences sooner or later and across different situations.

Occupational stress has been described as the experience of negative feelings, such as frustration, worry and anxiety, perceived to arise from work related factors (Kyriacou, 2001). Recent studies have reported that a few personality traits predict specific work related behaviors, stress reactions and emotions fairly well under particular conditions. Researcher believes that effective managers have identifiable traits and that personality explains some of a person's positive attitudes and life happiness. Personality traits seem to help people to find the jobs that best suit their needs. Personality is still considered a relatively poor selection test, but this hasn't ended many companies from using personality assessments and tests to appoint executives or managers.

Personality researchers explain why some persons are more vulnerable to stressful situations than others. For example, Neuroticism is suggested to be linked to individual differences in emotional reactivity to stress (Costa & McCrae, 1985, 1987). Personality variables may contribute to a person's ability to deal effectively with a stressful situation. Two cardiologists (Friedman & Rosenman, 1974) defined that a higher incident of coronary heart disease is associated with distinct personality patterns, named as type A behavior pattern. Type B's possess an opposite behavior pattern than type A's. People possessing the type A tend to be time urgency or restlessness. The type B behavior patterns exhibits no sense of time urgency or restlessness and are not excessively competitive. Human behavior has a special characteristic of notion of personality. The studies have shown that people are less stressed and most satisfied at work when their personalities and the workplace match (Holland, 1992; Tokar, Fisher, & Subich, 1998) and they carry out better work (Barrick & Mount, 1991).

(Readeke & Smith, 2004; Van Dierendonck, 2005) found that Personality characteristics of employees are related to burnout. Moreover, personality characteristics of employees can moderate the effect of stressful situations on burnout and certain traits may defense or enhance negative outcomes. Relationship between personality characteristics and high stress has been focused in some studies and it is concluded that personality and situational variables interact in complex ways (Grundy, 2000; Zellars, Perrewe & Hochwarter, 2000; Van Dierendonck, Grassen & Visser, 2005). It is found in most of the studies that neuroticism (characterized by negative emotional states and predisposition) was positively related to high stress (Deary, Blenkin, Agius, Ender, Zealley & Wood, 1996; Kokkinos, 2005). (Grundy, 2000) found negative association between personality type and stress. An established link is found between both perceptions of stress and stress-related outcomes and the "Type A" behavior. (Froggatt & Cotton, 1987) found that by increasing the volume of workload imposed on them while completing a fairly simple task, "Type A" built significantly more stress than "Type B".

The MBTI was selected for research studies because it has a solid theoretical basis and has been used extensively for reliability and validity with adults (DiTiberio, 1996; Riding & Rayner, 1990). The MBTI is also well known within both academic and business settings. It is readily available, easy to administer and is self score-able. The MBTI is a self-reporting instrument designed to measure the personality type of normal, healthy people (Myers & Myers, 1995; Myers & McCaulley, 1985; Abrahamian, 2003).

Personality variables have link with stress this notion is further supported by (Murphy, 1995) Neuroticism is suggested to be linked to individual differences in emotional reactivity to stress (Costa & McCrae, 1985, 1987). Furthermore, personality characteristics of employees can moderate the effect of stressful situations on burnout such that certain traits may buffer or enhance negative outcomes (Van Dierendonck, 2005). The (Kokkinos, 2007) conducted study in 447 primary school teachers in Cyprus to investigating the relationship between personality characteristics, burnout, and job stressors. The literature also provides support that when an individual is confronted by a stressful event his/her personality characteristics influence the degree to which he or she seeks social support (Houston & Vavak, 1991; Watson & Clark, 1984). (Guglielmi & Tatrow, 1998) claimed that stress relate with personality traits. This study supports the researcher 'view that there is a relationship between occupational stress and personality types. Thus, personality and situational variables interact in complex ways. Over the past 50 years, research has converged on the existence of structural components (traits) of personality. (Van Dierendonck, Grassen & Visser, 2005) go on to argue that there is a relationship between personality characteristics and burnout. (Grundy, 2000) found negative association between extraversion and burnout.

Jylhä and Isometsä (2006) found significant associations between personality and stress in their Finnish general

population study. Carl Jung a colleague of Sigmund Freud introduced one of the earliest trait theories. Each of Jung's four psychological types are present in every individual, to varying degrees although most individuals are, according to Jung, predisposed to favoring one of the types to the detriment of others. The ideas of sensation and intuition oppose each other, just as thinking and feeling do as well. A person will either believe "I think it is good" or "I feel it is good" (Abrahamian, 2003), but never both. Jung later added two additional, opposing types: extraversion (E) and introversion (I) (Abrahamian, 2003).

In 1921 Jung's book, *Psychological Types*, was published in Zurich. He hoped that his work would aid psychologists and psychiatrists in personality development theory (Jung, Adler, & Hull, 1971). A woman Isabel Myers, along with her mother Katherine Briggs, developed Jung's theories into what would become the most popular Myers-Briggs Type Indicator (MBTI) (Myers & McCaulley, 1985; Myers & Myers, 1995). Myers and Briggs realized that "differences in human behavior is not random, but rather the logical product of a few observable differences in mental functioning" (Abrahamian, 2003). They came to a decision to expand Jung's theory by adding perceiving (P) and judging (J). The J/P scale correlates to the S/I scale; sensing tends to be judging and intuitive people tend to be perceivers.

The characteristics of MBTI type are mentioned below.

Extraversion

"People with preference of extraversion have a propensity to focus on external events, the outer world of people and receive energy from external events, experiences, and interactions. Energy and attention are directed outward by extroverts. They like better to communicate by talking. They are expressive, social and take initiatives in relationships and in works. They have a width of interests and learn best through discussion or doing. They tend to reflect after speaking." (Abrahamian, 2003)

Introversion

"People with preference of extraversion like to focus on their own inner experiences, inner world of ideas and receive energy from their inner thoughts, feelings, and reflections. Energy and attention are directed inward by extroverts. They prefer to communicate by writing. They have depth of interest and tend to reflect before acting or speaking. They tend to reflect first, speak later. They are private and contained, and are able to focus readily. They learn best by reflection and mental practice." (Abrahamian, 2003)

Sensing

"People with preference of sensing have a propensity to get information and concrete facts in details through their eyes, ears, and other senses and focus on what is actual and real. They value practical applications. They trust experience rather than theory or abstraction and present-oriented. They are the good observant of practical realities of a situation, remember sequentially. They would like information step-by-step." (Abrahamian, 2003)

Intuition

"People who prefer intuition tend to receive information by focusing on the relationship and connections between facts and seeing the big picture, new possibilities of doing things. They are abstract and theoretical. They are future-oriented, value imaginative insight and see meaning in facts. They trust inspiration. They like to leap around and jump in anywhere." (Abrahamian, 2003)

Thinking

"People who prefer to exercise thinking tend to look at the logical consequences of an action in decision-making. They use cause-and-effect relation to solve problems and are fair, reasonable and analytical logical problem-solvers. They try to mentally remove themselves from a situation to inspect it objectively. They strive for impersonal, objective truth and are tough-minded." (Abrahamian, 2003)

Feeling

"People who have a preference to use feeling in decision-making tend to consider what is important to them and to other people. Their goal is harmony and recognition of individuals. They are sympathetic and assess impact on people. They can make decisions based on person-centered values by mentally placing themselves in a situation with the people involved so that. Their strengths include supporting, understanding and appreciating others. They strive for harmony and individual validation. They are "tender-hearted" and are driven by compassion." (Abrahamian, 2003)

Judging

"People who prefer to use their judging process in the outer world tend to live in a orderly, planned way, wanting to control and regulate life. Mostly they are methodical, structured, scheduled, systematic and organized. They enjoy their ability to get things done. They like planning in order to avoid last-minute stresses." (Abrahamian, 2003)

Perceiving

"People who prefer to use their perceiving process in the outer world tend to live in a flexible way, seeking to understand and experience life, rather than control it. They are spontaneous, open-ended, casual, flexible, adaptable and feel energized by last-minute pressures. They prefer to stay open to experience and last-minute options. They like things open to change and trust their resourcefulness and ability to fulfill the demands of

work.” (Abrahamian, 2003)

The Myers-Briggs Type Indicator (MBTI) with its four well-known dichotomous personality dimensions (i.e., Extroversion vs. Introversion, Intuition vs. Sensing, Thinking vs. Feeling, and Perception vs. Judging), has been used frequently to describe the personality characteristics of teachers as a whole. (Lawrence, 1979) reported MBTI test results on 5,366 teachers concluded that the primary MBTI typology for educators was Extroversion-Sensing-Feeling-Judging (ESFJ) because 52% of the sample reported themselves to be Es (Extroverted as opposed to Introverted); 52% were Ss (Sensing as opposed to Intuitive); 63% were Fs (Feeling as opposed to Thinking); and 63% were Js (Judging as opposed to Perception). (Lawrence, 1979) findings only partly supported the earlier speculation by (Keirse & Bates, 1984) that teachers are predominantly Extroversion-Intuition Feeling-Judging (ENFJ). Other descriptions of pre-service teachers, based on much smaller samples, have been reported by (Hinton & Stockburger, 1991) who has directed the MBTI to 122 pre-service teachers and found that E-S-F-J (Extroversion, Sensing, Feeling, Judging) was the most common type. (McCutcheon, Schmidt & Bolden, 1991) administered the MBTI to 79 student teachers at the elementary and secondary levels. They found that E-S-F-J was the dominant type among elementary teachers, but not among secondary teachers. Because of the lack of empirical evidence, to explore the particular patterns of MBTI found in academic managers is one of the main aims of this research. The present research compares the preferences of each orientation against its counterpart (E versus I; S versus N; T versus F; J versus P) to determine the different MBTI preferences among managers and its relation with occupational stress.

METHODOLOGY

In the first stage all the Government degree colleges of province Punjab were selected as a population. All the Public sector degree colleges of Punjab were taken as population of the present study. There were 345 public sector degree colleges in Punjab. Male degree colleges were 140, female degree colleges were 187 and co education degree colleges were 18. In order to select representative sample from the population, random sampling technique was used. The sample size was 120 heads of degree colleges. 60 males and 60 females' heads of degree colleges were selected as a sample.

Two instruments were used to collect the data, for measuring the stress of the subjects in work place, the Occupational Stress Inventory –Revised (OSI-R) developed by (Osipow, 1998) was used. Another instrument for measuring the personality type, the MBTI inventory was used. Which was developed by Isabel Briggs Myers and Katherine Briggs and contains four separate indices.

To explore the phenomenon, descriptive research design was used. Statistical package for social sciences (SPSS-X) software was used to analyze the data in this study. Such as mean, standard deviation, percentages and Pearson correlation were used.

DISCUSSION

This study represents an effort to examine the relationships between occupational stress and personality type. There are diverse researches on occupational stress and MBTI personality type in different fields but no unequivocal work is found in the field of education to investigate the relationship between occupational stress and personality type among academic managers in Pakistan.

(Table 1) shows the alpha reliability coefficient of OSI-R for its subscales of ORQ, PSQ and PRQ. It ranges from .68 to .78 which indicates that all the subscales of OSI-R are internally consistent with each other and correlated with each other.

(Table 2) shows the alpha reliability coefficient of MBTI for its subscales of Extroversion-Introversion, Sensing-Intuition, Thinking-Feeling, Judging –Perceiving. It ranges from .63 to .72, which indicates that all the subscales of MBTI are internally consistent with each other and correlated with each other.

(Table 3) shows that there are significant correlations among ORQ and PSQ($r=.77^{**}$, $p<.05$) and significant negative correlation of PRQ with ORQ($r=-.27^{**}$, $p<.05$) and PSQ($r=-.24^{*}$, $p<.05$). It indicates that those respondents who experience high level of occupational role stress, also experience personal strain but they employ less coping strategies.

(Table 4) shows that there are positive inter-correlations that are large, specifically extroversion with judging($r=.31^{**}$, $p<.05$), introversion with perceiving($r=.31^{**}$, $p<.05$), sensing with thinking($r=.30^{**}$, $p<.05$) and judging($r=.38^{**}$, $p<.05$), thinking with judging($r=.43^{**}$, $p<.05$), feeling with perceiving($r=.42^{**}$, $p<.05$), intuition with feeling ($r=.30^{**}$, $p<.05$) and perceiving($r=.38^{**}$, $p<.05$). while negative inter-correlations are also observed among thinking and intuition($r=-.30^{**}$, $p<.05$), extroversion and introversion($r=-1^{**}$, $p<.05$), extroversion and perceiving($r=-.31^{**}$, $p<.05$), introversion and judging($r=-.31^{**}$, $p<.05$), sensing with feeling($r=-.30^{**}$, $p<.05$) and perceiving, ($r=-.38^{**}$, $p<.05$) intuition with thinking ($r=-.30^{**}$, $p<.05$) and judging($r=-.38^{**}$, $p<.05$), thinking with feeling($r=-1^{**}$, $p<.05$) and perceiving($r=-.43^{**}$, $p<.05$), feeling with judging($r=-.42^{**}$, $p<.05$) and judging with perceiving($r=-1^{**}$, $p<.05$). Few correlations are low or not correlated indicating that different dimensions tap different aspects of MBTI, therefore all the subscales are not completely independent of each other.

(Table 5) shows the scores of academic managers on OSI-R for the variable gender. The results show that female academic managers have higher occupational stress than the male academic managers (Female; M=225.28, Male; M= 205.88). The mean scores on ORQ and PSQ are the highest for females which indicates that female academic managers experience more occupational role stress (Female; M=105.27, Male; M= 94.03) and personal strain (Female; M=72.12, Male; M= 63.37).

In order to find out the relationship between occupational stress and personality type, inter-correlation between total scale and subscale of OSI-R and MBTI personality type were calculated. Personalities that are more outgoing and positive generally experience positive psychological health while personalities which are more negative are traditionally associated with greater stress, (Duggan, Sham, Lee, Minne, & Murray, 1995; Suls, Green, & Hillis, 1998; Vollrath & Torgersen, 2000). These studies support the result of present study that Positive correlation was found between personality type (Extroversion, sensing, thinking and judging) and occupational stress among academic managers.

(Table 6) shows the mean scores of academic managers on MBTI for the variable gender. The results reflect that male academic managers have almost same mean score of the mean score of female except the mean scores on the pole of judging of the Judging-Perceiving scale is higher for males than female academic managers (Male M=9.57) as no female scored on perceiving preference. Another study conducted by (Cloninger, Svrakic, & Przybeck, 1993) congruent with present study by highlighting strong associations between Cloninger's personality traits and stress which suggests that certain personalities may be genetically predisposed to experience stress. Individuals high in neuroticism are the most vulnerable to experiencing increased stress. (Duggan et al. 1995)

(Table 7) shows the correlation between three subscales of occupational stress and eight personality factors as measured by Myers Briggs Type Indicator(N=120) of the possible 32 correlation coefficient. Extraversion has a significant positive correlation with role stress($r = .307^{**}$, $p < 0.01$), personal strain($r = .239^*$, $p < 0.05$) and occupational stress ($r = .342^{**}$, $p < 0.01$), while has a significant negative correlation with personal resources($r = -.209^*$, $p < 0.05$). A significant negative relationship between introversion and occupational role stress exists($r = -.530^{**}$, $p < 0.01$), personal strain ($r = -.443^{**}$, $p < 0.01$) and occupational stress ($r = -.580^{**}$, $p < 0.01$), a direct correlation exists between extraversion and occupational stress. Sensing has a significant positive correlation with role stress($r = .350^{**}$, $p < 0.01$), personal strain($r = .403^{**}$, $p < 0.01$) and occupational stress ($r = .423^{**}$, $p < 0.01$), while has a significant negative correlation with personal resources($r = -.200^*$, $p < 0.05$). Furthermore, thinking factor has significant positive correlation with role stress($r = .294^{**}$, $p < 0.01$), personal strain($r = .321^{**}$, $p < 0.01$) and occupational stress ($r = .337^{**}$, $p < 0.01$). The judgment factor also has a significant positive correlation with the occupational stress ($r = .385^{**}$, $p < 0.01$) and in-significant correlation with resources. Above analysis explain that personality types that have most positive significant correlation with occupational stress include extraverts, thinking, sensing and judging while negative significant correlation with occupational stress includes introversion whereas feeling, intuition and perceiving factors lack any significant correlation towards occupational stress. Study conducted by (Suls, Green, & Hillis, 1998) found positive relationship between personality and stress. Another Study conducted by (Vollrath, 2000) showed different findings by studying that students with more adaptive personalities such as high extraversion and conscientiousness were less affected by daily stress while (Grundy, 2000) found negative association between extraversion and high stress.

Table 1: Alpha reliability coefficient of occupational stress inventory (N=120)

Subscales	Alpha coefficient
Occupational role questionnaire(ORQ)	.68
Personal strain questionnaire(PSQ)	.72
Personal resources questionnaire(PRQ)	.78
Total	.91

Table2: Alpha reliability coefficient of Myers Briggs type indicator (N=120)

Subscales	Alpha coefficient
Extroversion-Introversion	.67
Sensing-Intuition	.72
Thinking-Feeling	.63
Judging -Perceiving	.70

Table 3: Inter-scales correlation of the subscales of Occupational Stress Inventory-Revised (N=120)

Subscales	ORQ	PSQ	PRQ
ORQ	-		
PSQ	.77**	-	
PRQ	-.27**	-.24**	-
OSI	.89**	.82**	-.20*

Table 4 : Inter-correlation among Myers Briggs Type Indicator subscales (N=120)

S#	Variables	E	I	S	N	T	F	J	P
1	E	1	-	-	-	-	-	-	-
2	I	-.1**	-	-	-	-	-	-	-
3	N	.17	-.17	-	-	-	-	-	-
4	S	-.17	.17	-.1**	-	-	-	-	-
5	T	.05	-.05	.30**	-.30**	-	-	-	-
6	F	-.04	.04	-.30**	.30**	-.1**	-	-	-
7	J	.31**	-.31**	.38**	-.38**	.43**	-.42**	-	-
8	P	-.31**	.31**	-.38**	.38**	-.43**	.42**	-.1**	-

Note: E = Extroversion I=Introversion, N= Intuitive S=Sensing, T= Thinking F= Feeling, J = Judging, P=Perceiving

Table 5: Comparison of Mean and SD of Academic Managers on Occupational stress and Gender (N=120)

Subscales	Male(n=60)		Female(n=60)	
	M	SD	M	SD
ORQ	94.03	10.72	105.27	8.17
PSQ	63.37	10.13	72.12	9.32
PRQ	48.48	2.29	47.90	2.04
TOTAL	205.88	18.11	225.28	15.24

Table 6: Comparison of Mean and SD of Academic managers on MBTI for Gender (N=120)

Subscales	Male(n=60)		Female(n=60)	
	M	SD	M	SD
Extroversion	7.74	1.45	7.36	1.26
Introversion	4.33	.888	3.85	1.21
Sensing	15.05	2.39	14.79	1.91
Intuition	9.25	1.50	9.43	1.13
Thinking	15.09	2.40	14.58	2.08
Feeling	8.57	.787	8.71	2.56
Judging	17.19	2.07	16.15	2.48
Perceiving	9.57	.535	-	-

Table 7: Correlation between Subscales of Occupational Stress and Myers Briggs Type Indicator Personality Factors

Sr #	Variables	ORQ	PSQ	PRQ	OSIT
1	Extroversion	.307**	.239*	-.209*	.342**
2	Introversion	-.530**	-.443*	.201	-.580**
3	Sensing	.350**	.403**	-.200*	.423**
4	Intuition	.234	.195	-.117	.204
5	Thinking	.294**	.321**	-.015	.337**
6	Feeling	-.305	-.256	.230	-.306
7	Judging	.309**	.355**	.029	.385**
8	Perceiving	-.272	-.342	.193	-.349

*. Correlation is significant at the 0.05 level (2-tailed).

**.. Correlation is significant at the 0.01 level (2-tailed).

Note: ORQ=Occupational Role Questionnaire, PSQ=Personal Strain Questionnaire, PRQ=Personal Resources, OSIT=Occupational Stress Inventory Total.

RECOMMENDATIONS

The present study confined to province Punjab and public sector; further research should be extended to wider jurisdiction. Similarities and differences across occupational groups also need further researches Common stress generating factors like occupational role, work environment, vocational strain among academic managers, as evident from personality type like extroversion, sensing, thinking and judging should carefully and thoroughly be analyzed by experts from the relevant fields. Stress coping resources are available. A proper strategy is required to exploit those resources constructively. Extroversion, sensing, thinking and judging personalities enable them to cope with the stress but there is a dire need of specific guidance and strategies to be devised to

employ and manipulate these stress coping personal resources properly.

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