Impact of Personality Type on Job Productivity

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Abstract

The objective of this research is to find out the impact of personality type of an employee on his job productivity. A survey of 10,000 individuals was conducted from different cities to elucidate the associations between organizational goals and a number of intra-organizational variables. In this research, author found that there are many factors which affect the employee performance and which are either affected by employee’s performance or employee’s performance is affected by them. Among those factors, personality of an employee plays an important role. The findings of the study also have numerous implications for practitioners. At a strategic level, the study suggests that executives should acknowledge in their change processes that decisions at an organizational level regarding the personality of an employee could have a profound effect on the productivity of an employee. Further, managers of functions may find it beneficial to manipulate a range of intra-organizational variables to enhance employee productivity.

Keywords: Personality type; Employee performance; Job productivity; Type of Job; Motivation

Introduction

Background of the study

The primary goal of every organization is to create surplus profit. Profit is a measure of surplus of amount incurred over income over expense. To accomplish this goal effectively the management must establish an environment in which people can work productively. And workforce demographics are strongly co-related with productivity and output.

The choice of occupation is dependent on personality type. Personality is positively associated with turnover intentions. Differences in job satisfaction occur due to personality. Possession of certain personality characteristics is associated with the choice of occupations, and individuals not possessing these characteristics are more likely to exhibit low job satisfaction [1].

A number of studies have shown a clear and consistent dominance of certain personality preferences, with some authors expressing concern about the implied narrowness of the accounting profession and the possible lack of certain valued skills such as strategic thinking and persuasive communication. Personality type has been shown to be related to management, leadership and decision-making style; for example, it has been suggested that the dominance of Sensing / Concrete types in the accounting profession as a whole does not apply to those at the higher levels, who are predominantly Intuitive / Conceptual [2].

In a review of the personality-occupational performance literature, Hogan, Hogan, and Roberts [3] concluded that well-constructed measures of normal personality are valid predictors of a wide range of occupational performance, they generally do not result in adverse impact for minority groups, and they can be linked to performance defined in terms of productivity. With the “whether personality predicts performance” question largely resolved, it is time to begin asking the “why and in what ways” question.

Rationale and significance of the study

While doing this research, we found that there are many factors which affect the type of Personality and which affects the employee's job productivity. Competing hypothesis will also be proposed for these direct or indirect effects.

The findings of the study also have numerous implications for practitioners. At a strategic level, the study suggests that executives should acknowledge in their change processes that personality-type could have a profound effect on job productivity in the organization. Further, given the significant effect of job-type, managers may find it beneficial to manipulate a range of personality-type variables to enhance job productivity.

If we find that what personality type is appropriate for a job then it can be a tool to choose the right person for the right job. It can be a base in recruiting process for recruiters and have a positive impact on organization's performance.

The value of the current study centres on the conceptual and empirical contributions regarding the drivers of personality type and its effect on job productivity with a moderation effect by type of job. This research study has been originated with a new concept in order to check a new relationship of Employee Performance with Organizational Conflict. This research has got a high value & paves a way for new researchers in this field. The further studies of this topic will help to find out other factors which may have a relationship between Employee Performance and organizational goals.

Purpose of the study

As mentioned above that the primary goal of every organization is to create surplus profit. For this purpose an organization has to be productive. In productivity of an organization workforce plays most important role. We found some clues that personality characteristics
Conscientious individuals are frequently described as purposeful, life styles. 

So the primary purpose of study to find impact of personality type on job productivity.

Research question: Does personality type have an impact on job productivity?

Research limitations

Despite the contributions of this study, some limitations must be noted. However, this model cannot be applied in government organizations. The reason for this limitation is that the government organizations have fixed pay rates and promotions over a fixed period of time irrespective of how well an employee performs at any level. The employees are appraised after they have served for a specified time in any pay scale, which do not motivate them. Due to this, employee performance is low which in return does not help an organization to achieve its goals. Due to limited time we only focused to Banking sector of Pakistan. Sample size is less. Lack of time and other resources as it was not possible to conduct survey at large level. This may not represent the whole Population.

Definitions

Personality: The term personality refers to the sets of predictable behaviors by which people are recognized and identified [4].

Productivity: Productivity is an output-input ratio within a time period with due consideration for quality [5].

Extraversion: Extent to which individuals prefer to be alone or with others. Extroverts are highly social. They are talkative, active, and assertive than their introverted counterparts.

Agreeableness: The agreeableness linked to altruism, nurturance, caring and emotional support versus competitiveness, hostility, indecision, self-centeredness, spitefulness and jealousy [6].

Conscientiousness: Conscientiousness is characterized by personal competence, dutifulness, self-discipline, and deliberation. Conscientious individuals are frequently described as purposeful, strong willed, determined, punctual, and reliable [7].

Neuroticism: It describes neuroticism as emotional instability and adjustment characterized by negative emotions such as fear, anger, sadness, and negative self-concept and low self-esteem [7].

Openness to experience: Openness to experience is a measure of depth, breadth and variability in a person’s imagination and urge for experiences [6].

Personality construct

In 400 BC, Hippocrates claimed that different personality types are caused by the balance of bodily fluids. The terms he developed are still sometimes used today in describing personality, which are Phlegmatic (calm), sanguine (optimistic), melancholic (depressed) and irritable people. Immunal Kant recast the four humored temperaments along the dimensions of ‘feeling and ‘activity’. William Wundt described the four temperamental types in terms of two dimensions; strong-weak emotions versus changeable-unchangeable activity [13]. According Robert the "Psychoanalytical Perspective" emphasis is the unconscious. Most of personality is unconscious: we hide many unpleasant truths about ourselves from ourselves by using defensive mechanisms and we are driven by wishes, beliefs, fears, conflicts and memories of which we are totally unaware (Freud). Introversion and extraversion is a major aspect of personality [14]. Personality is shaped by the child’s relationship with parents and consciously chosen goals rather than by instincts (Adler). Personality is shaped much more by child’s relationship with parents than by instincts and sexuality and it is through a series of psychosocial stages that go from infancy to old age.

The “Social Cognitive Perspective” was developed by Bandura [15]. It views behavior as influenced by the interaction between persons and the social context. It is proposed that our thoughts and actions have impact on employee’s performance and different personality characteristics are appropriate for different tasks. So we want to investigate this phenomenon.

Allport [8] after an extensive analysis of possible definitions of personality he concluded “personality is the dynamic organization within the individual of those psychophysical systems that determine his unique adjustments to his environment.”

According Encyclopedia Britannica [9] personality is a characteristic way of thinking, feeling, and behaving. Personality embraces moods, attitudes, and opinions and is most clearly expressed in interactions with other people. It includes behavioral characteristics, both inherent and acquired, that distinguish one person from another and that can be observed in people’s relations to the environment and to the social group.

Personality is complex, and normal science approaches are inadequate to represent it. There are some important relationships between its personality factors and job performance. Personality is a living system that is self-organizing, self-maintaining, self-transcending, and self-renewing. Personality is an open system which is receptive to inputs and exchanges [10].

Eysenck and Junger [11] say that Personality is a continuously developing unity. It is shaped by environmental conditions, not animistic forces. While change is possible, it is not to be achieved merely by verbal magic. Scientific thinking about personality requires that we have abandoned evaluate, good-bad, moralistic concepts and study human beings with the same mature realism that we have learned to use so effectively in the physical realm.

Bano [12] says that there are two factors which plays important role in personality. i) Heredity ii) Environment. Heredity is the transmission of traits from new generation to next through process of reproduction. The role of gene is very important in this connection because they act as the unit determining the hereditary traits. Heredity defines people’s general level of intelligence, setting an upper limit which regardless of quality of quality of environment people cannot exceed and heredity also provides limits on physical ability. The word environment includes all the conditions inside and outside the organism that influence in one way our behavior, growth, development or life processes except the genes.
originating in the social world but it is essential to note that human beings have capacity for self-regulation and engage in active cognitive processes.

Carl Rogers and Abraham Maslow are the main proponents of the “Humanistic Perspective.” Human motives are arranged in a hierarchy of needs. Human needs are organized from physiological needs to self-transcendence. People are motivated to act in accordance with their self-concept. They deny or distort the experiences that are contrary to their self-concept [1].

Many economists and psychologists assume that preference and personality parameters are fixed early in life. The evidence suggests otherwise. Recent research shows how cognitive and personality skills are affected by parental investments and life experiences [16].

Personality types

Myers-Briggs type indicator (MBTI) model

This is based on his theory that all people share a collective unconscious that consists of universal memories and images, which he called archetypes. Myers-Briggs Type Indicator (MBTI) was developed by Isabel Myers and Katherine Briggs to try and understand the differences and similarities in human personalities. The test is based on the work of Carl Jung [14], a Swiss psychologist who believed that personality traits are innate. Basic Model is based on four ranges.

- **Thinking-feeling** range focuses on how people make decisions. Thinking (T) people prefer to decide on the basis of logic, analysis and reason. They tend to follow their head rather than their heart, whereas Feeling (F) people usually decide first on the basis of personal preferences, second, on the basis of logic.

- **Judging-perceiving** range suggests the type of lifestyle and work habits people prefer. Perceiving (P) types are more spontaneous and seek out additional information and options. Judging (J) types tend to be planners, preferring more order and structure.

- **Sensing-intuition** describes how people take in information. Sensing (S) people prefer concrete facts, organization and structure. Intuitive (N) people tend more to hunches. They want to know the theory first before deciding what facts are important.

- **Introvert-extrovert category** focuses on how people get their energy. Extroverts (E) are more energized by interaction with others, Introverts (I) by the inner world of reflection, thought and contemplation [17].

- **Circumplex model** (Holland), professor emeritus at Johns Hopkins University, is a psychologist who devoted his professional life to researching issues related to career choice and satisfaction. He developed a well-known theory, and designed several assessments and supporting materials to assist people in making effective career choices. Holland found that people needing help with career decisions can be supported by understanding their resemblance to the six ideal vocational personality types which are Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E) and Conventional (C). Work settings can also be categorized by their resemblance to six similar model work environments. Because people search for environments that allow them to express their interests, skills, attitudes and values, and take on interesting problems and agreeable roles, work environments become populated by individuals with related occupational personality types.

Big five factor model

A model developed for using factor analysis to try to determine the key traits in human personality. Although trait theories were well established by the 1960s, there was no consensus concerning the number or nature of the traits that make up personality. Since then, further research has confirmed a basic five factor model of personality or ‘Big Five’. This five factor structure has been replicated by Norma, Borgatta and Digman and Takemoto-Chock in list derived from Cattell’s 35 variables [19].

These scales are commonly alternatively represented by the OCEAN acronym: Openness to experience, Conscientiousness, Extraversion/Introversion, Agreeableness and Neuroticism. The Big Five structure captures, at a broad level of abstraction, commonalities among most of the existing systems of personality description, and provides an integrative descriptive model for personality research [19].

Economists are not alone in their interest in the description, prediction, and explanation of human behavior. Psychologists, too, have approached these challenges. Economists can profitably leverage research from psychology on the measurement, prediction, and malleability of personality traits organized in the widely accepted Big Five taxonomy [16].

Extraversion

Extraversion is marked by pronounced engagement with the external world. Extraverts enjoying with people, are full of energy, and often experience positive emotions. They tend to be enthusiastic, action-oriented, individuals who are likely to say “Yes!” or “Let’s go!” to opportunities for excitement. In groups they like to talk, assert themselves, and draw attention to themselves.

Openness to experience

Openness to experience is a measure of depth, breadth and variability in a person’s imagination and urge for experiences. The factor relates to intellect, openness to new ideas, cultural interests, educational aptitude and creativity as well as an interest in varied sensory and cognitive experiences. People with a high openness to experience have broad interests, are liberal and like novelty. The preservers with low openness to experience are conventional, conservative and prefer familiarity [6].

Agreeableness

The agreeableness linked to altruism, nurturance, caring and emotional support versus competitiveness, hostility, indifference, self-centeredness, spitefulness and jealousy [6].

Conscientiousness

Conscientiousness is a measure of goal-directed behavior and amount of control over impulses. Conscientiousness has been linked to educational achievement and particularly to the will to achieve. The focused person concentrates on a limited number of goals but strives hard to reach them, while the flexible person is more impulsive and easier to persuade from one task to another [20].

Neuroticism

Neuroticism is a measure of affect and emotional control. Low levels of neuroticism indicate emotional stability whereas high levels of
neuroticism increase the likelihood of experiencing negative emotions. Persons with high levels of neuroticism are reactive and more easily bothered by stimuli in their environment. They more frequently become unstable, worried, temperamental and sad. Resistant persons on the other hand need strong stimuli to be provoked [14].

Productivity

Profit is a measure of surplus of amount incurred over income over expense. To accomplish this goal effectively the management must establish an environment in which people can work productively. Productivity is an output-input ratio within a time period with due consideration for quality [21].

Measuring productivity starts from an input minimizing production frontier model based on real input, output and quality attributes. Productivity can be analyzed from quality and quantity of products. The degree of reward influences the quality and quantity of work, and in turn productivity. The degree of reward influences the quality and quantity of work, and in turn productivity.

Factors affecting productivity

Workforce demographics are strongly co-related with productivity and output. The results suggest that a significant portion of the productivity gap between rich and poor countries is related to different demographic structures [22].

The majority of studies show associations between mental health conditions and absenteeism. When presenteeism is measured by a validated questionnaire, results show that depression significantly impacts on-the-job productivity (presenteeism). Studies also indicate that the treatment expenditures for employees with depression may be offset by reductions in absenteeism, disability and on the job productivity losses [23].

A direct correlation was also found between low productivity and poor communication between management, supervisors and employees. Productivity can be improved by increasing employee involvement and communication [24].

Workforce productivity can be related to a variety of factors, which may influence productivity directly by occupational environment or on-the-job-training or indirectly by the effect of health and well-being [22].

It is found that firms do not reward employees’ skills according to their contribution to firms’ productivity. Employees’ work experience positively affects their wages but does not have real productivity effects. Whereas employing many employees by temporary contracts appears to have a negative effect on productivity [25].

Personality and job type

A number of studies of accountants have shown a clear and consistent dominance of certain personality preferences, with some authors expressing concern about the implied narrowness of the accounting profession and the possible lack of certain valued skills such as strategic thinking and persuasive communication. Personality type has been shown to be related to management, leadership and decision-making style; for example, it has been suggested that the dominance of Sensing / Concrete types in the accounting profession as a whole does not apply to those at the higher levels, who are predominantly Intuitive / Conceptual [2]. Carol and Richard [1] suggested that future research should also determine if organizations employing accountants are attempting to assess whether potential employees possess the requisite personality type apparently necessary for success. Empirical findings of John and Frederic [18] determine that the differences in team performance were primarily caused by differences in the personality-type composition of the two teams.

“Worker Types” are needed in certain positions, that classic concept of putting the right people in the right seats of an organization. “Worker Type” profiles can be done empirically by benchmarking successful versus mediocre employees in the same position (quantitative approach), or by having the hiring professional or supervisor of the job position compare the competencies documented in a job description against the competencies on the assessment (qualitative approach). “Worker Types” show different degrees of compatibility between each other. As a result, professionals can also use these labels to help know better which people will form the most cohesive teams or in what way teams are not working together optimally [22].

Significant differences were found between franchise ownership groups on four personality measures conscientiousness, emotional stability, empathic perspective taking and emotional intelligence and service type groups on two measures extraversion and empathic perspective [26].

Younger workers are seen to be more amenable to risk and regular changes in job type and location, while older workers, and those with families of their own, tend to value secure employment. Older workers, particularly those whose own families have been established, may also become more interested in intrinsic job rewards associated with feelings of satisfaction in providing services to the community.

A study conducted by Felix, Amitava and Mammo represents an attempt to correlate students’ learning style preferences to performance on four types of examination questions. The results reported in this study shows that intuitive and thinking students do not perform well on open-ended quantitative test. Moreover, intuitive students are not very good when it comes to multiple-choice quantitative test. Finally, feeling, sensing, and thinking students perform better on multiple-choice theory tests.

Personality type and productivity

Barry’s study provides evidence for the hypothesis that it is the behavioral components that have a greater impact on perceived productivity than the physical components. The components interaction and distraction are constantly perceived as the components that have the most positive and most negative effect, respectively, on perceived productivity.

John and Frederic [18] suggest that personality types are an important factor in successful team performance. Organizations that desire to develop effective teams need to analyze the personality-type compositions of these groups and help team members understand their own personal attributes as well as appreciate the contribution of the other team members.

Group comparisons revealed that psychological characteristics as well as the business environment were both significant predictors. Psychological characteristics were a stronger influence for potential entrepreneurs and the business environment stronger for successful entrepreneurs [27].
The covert behaviors of organizational members refer to such psychological phenomena as job satisfaction, involvement and other related attitudes and beliefs. The overt behaviors, on the other hand, refer to directly observable behaviors such as absenteeism, tardiness, and other forms of on-the-job behavior. It is the task of organizational psychologists to identify these behaviors and establish specific causal relationships between these behaviors and productivity.

Not everyone has the right combination of technical skills and personality type to be effective. Diversity in skills and knowledge combined with a balance of personality types is desirable for effective teams. Certain personality types are more accepting of others and more willing to consider different perspectives. Each personality type has a positive contribution to make to the overall effectiveness of the team, therefore a balance of personality types should be sought [28].

Extraversion and agreeableness are the strongest predictors of salary. Emotional stability and proactive personality predicted team. Certain personality types are more accepting of others and more willing to consider different perspectives. Each personality type has a positive contribution to make to the overall effectiveness of the team, therefore a balance of personality types should be sought [28].

Extraversion and agreeableness are the strongest predictors of salary. Emotional stability and proactive personality predicted perceived job success, while extraversion was significantly related to perceived career success [29].

Agreeableness and conscientiousness are found to vary in a pattern related to levels of vocal attractiveness such that both personality factors predict performance more strongly for people with more attractive voices [14].

Silvia and Mar [22] suggest that composites created with job experience and personality measures can be useful for personnel selection. Findings of Tanja reveals that two personality traits openness to experience and core self-evaluations (CSE) are consistently found to be positively related to the preference concerning work characteristics, and CSE showed incremental validity with regard to intrinsic work motivation factors (e.g., experienced meaningfulness, autonomy).

Theoretical Framework

To assess the personality type there are two most commonly used models or taxonomy are Myers-Briggs Type Indicator (MBTI) model and Big Five factor model. We will use Big Five factor model because the Big Five structure captures, at a broad level of abstraction, commonalities among most of the existing systems of personality description, and provides an integrative descriptive model for personality research. Economists are not alone in their interest in the description, prediction, and explanation of human behavior. Psychologists, too, have approached these challenges. Economists can profitably leverage research from psychology on the measurement, prediction, and malleability of personality traits organized in the widely accepted Big Five taxonomy [16].

Model

There are two variables involve in our study.

- Personality Type (Independent variable)
- Job Productivity (Dependant variable)
- Type of Job (Moderating Variable)

Hypothesis

The basic question we want to investigate is:

- Q: Is there is a relationship between personality type and job productivity of employees?

Hypothesis

- H1: There is a positive relationship between Extraversion and employee productivity.
- H2: There is a negative relationship between Extraversion and employee productivity.
- H3: There is a positive relationship between Agreeableness and employee productivity.
- H4: There is H1: There is a positive relationship between Agreeableness and employee productivity.
- H5: There is a positive relationship between Conscientiousness and employee productivity.
- H6: There is a negative relationship between Conscientiousness and employee productivity.
- H7: There is a positive relationship between Neuroticism and employee productivity.
- H8: There is a negative relationship between Neuroticism and employee productivity.
- H9: There is a positive relationship between Openness to Experience and employee productivity.
- H10: There is a negative relationship between Openness to Experience and employee productivity.

Research Methodology

Instrument

One approach to constructing short tests is to select the best performing items from longer tests on the basis of psychometric criteria, such as item-total correlations. We used a strategy akin to the one used by Hazan and Shaver who created paragraph-long items that clearly described the heart and breadth of the attachment-style constructs they were assessing. To create items, John and Srivastava [19] have recommended adding elaborative, clarifying, or contextual information to one or two prototypical adjectives. John and Srivastava [19] note that augmented items retain the advantages of brevity and simplicity associated with single adjectives, while avoiding some of their pitfalls, such as ambiguous or multiple meanings.

Thus, we consensually selected descriptors to represent each of the domains. Where possible, we culled descriptors from existing Big-Five instruments, drawing most heavily on Goldberg's list of uni-polar and bipolar Big-Five markers, adjectives from the BFI, and John and Srivastava [19] Adjective Checklist Big-Five markers. Selection was based on the following five guidelines.

First, we strove for breadth of coverage, using the facets of the Big Five to guide our selections. Second, we identified items representing both poles of each dimension. Third, where possible we selected items that were not evaluative extreme. Fourth, for the sake of clarity, we avoided using items that were simply negations. Fifth, we attempted to minimize redundancy among the descriptors.

We developed a standard format, in which each item was defined by two central descriptors and clarified by six other descriptors, that together covered the breadth of each domain and included items from the high and low poles. The resulting five items were: Extraverted, enthusiastic (that is, sociable, assertive, talkative, active, NOT reserved, or shy); Agreeable, kind (that is, trusting, generous, sympathetic, cooperative, NOT aggressive, or cold); Dependable, organized (that is, hardworking, responsible, self-disciplined, thorough, NOT careless, or...
impulsive); Emotionally stable, calm (that is, relaxed, self-confident, NOT anxious, moody, easily upset, or easily stressed); Open to experience, imaginative (that is, curious, reflective, creative, deep, open-minded, NOT conventional).

Research philosophy

The philosophy of research can be divided into two broad methods of reasoning; deductive and inductive researches. These two methods of reasoning are different in a way to conduct research. Inductive reasoning is more open-ended and used to understand of new or unknown phenomena. The theory usually follows data and the finding is difficult to replicate. In contrast, deductive reasoning is narrower in nature and is concerned with testing or confirming hypotheses. This study employs deductive research. It begins by examining theories related to personality type and productivity. The hypothesis is developed by the assumption that type of personality has an impact on productivity of an employee. The study also applies quantitative research, which data will be collected through questionnaire.

Data collection method

There are two types of data available when conducting a research: primary and secondary data. Primary data is the data that researchers collect by themselves. The main advantage is that the data are directly collected toward the purposes of the research at hand. However, the disadvantage is that it will take a long time to collect the data. It also costs a lot and probably difficult to access the right respondents.

This study employs survey technique as a tool to conduct a quantitative study. In developing questionnaire, author got help from my supervisor and literature review especially John, Noumann and Soto [29] who developed Big Five Inventory (BFI) to measure personality regarding Big Five Factor Model of personality type. Questionnaire was distributed by hand with respect to approach and convenience. The questionnaire was divided into three parts: general information about respondent, Personality type questions and employee productivity.

Reliability and validity of instrument

There are three well known and tested instruments to measure Big Five Factor Model. Here are the details about their validity and reliability.

- NEO-FFI = NEO Five Factor Inventory (Developed by Costa)
- BFI = Big Five Inventory
- TDA = Trait Descriptive Adjectives (Developed by Goldberg)
- BFI-NEO-FFI = Tested by John [18,19,29]
- John, Noumann and Soto [29]

Sampling

The population of our research is Banking Sector of Pakistan. Author chose the sample of 300 employees. Author used systematic and convenient techniques of sampling. Author tried to collect data from almost every bank of Industry less or more which was approachable which include:

- National Bank of Pakistan (NBP)
- Habib Bank Limited (HBL)
- Allied Bank Limited (ABL)
- United Bank Limited (UCL)
- Meezan Bank Limited (MBL)
- Standard Chartered Bank (SCB)
- Bank AlFalah Limited (BAL)

Results and Analysis

Response Rate

Sample size of this study was 300 employees from different Banks. But there was low response rate. Out of 300 employees only 122 replies back. So response rate was 41% (Figure 1).

Regression statistics

For data analysis regression test was run on the data and followings are the details (Table 1).

<table>
<thead>
<tr>
<th>Regression Statistics</th>
<th>5% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>0.633</td>
</tr>
<tr>
<td>R Square</td>
<td>0.401</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.375</td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.516</td>
</tr>
<tr>
<td>Observations</td>
<td>122</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>5%</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>Regression</td>
</tr>
<tr>
<td>Residual</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Table 2: Value of F is statistically.
In Table 1, the value of multiple R shows a 63.3% correlation among Employee Productivity and explanatory variables Agreeableness, Consciousness, Neuroticism, Openness and Extraversion. The value of co-efficient of determination shows that 40.1% variation in Employee Productivity is explained by the explanatory variables Agreeableness, Consciousness, Neuroticism, Openness and Extraversion. Thus these factors Agreeableness, Consciousness, Neuroticism, Openness and Extraversion are associated with Employees Productivity for the Banking Sector of Pakistan (Table 2).

In Table 2 the value of F is statistically significant at 5% level of significance. It implies that Personality type of employees do result in significant change in the employee productivity for banking sector of Pakistan (Table 3).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>5.283</td>
<td>0.633</td>
<td>8.340</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>0.200</td>
<td>0.084</td>
<td>-2.370</td>
</tr>
<tr>
<td>Consciousness</td>
<td>0.389</td>
<td>0.101</td>
<td>3.864</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>-0.453</td>
<td>0.096</td>
<td>-4.738</td>
</tr>
<tr>
<td>Openness</td>
<td>-0.189</td>
<td>0.061</td>
<td>-3.067</td>
</tr>
<tr>
<td>Extraversion</td>
<td>0.024</td>
<td>0.071</td>
<td>0.341</td>
</tr>
</tbody>
</table>

Table 3: The values of Intercept and co-efficient of explanatory variables related to the regression model.

The values of Intercept and co-efficient of explanatory variables related to the regression model are shown in Table 3 to investigate the individual impact of each variable on employee productivity. The values of intercept and explanatory variables are statistically significant at 5% level of significance except Extraversion which is insignificant. There is a positive relationship among Employee Productivity and explanatory variables like Agreeableness, Consciousness and extraversion. While there is a negative relationship among employee productivity and explanatory variables Neuroticism and Openness to experience. It implies that the personality type effect the employees productivity regarding Banking Sector of Pakistan.

Discussion

In this study, we explored the effects of type of personality of an employee on employee's performance in terms employee productivity. We have done experimental study of Pakistani companies that suffered from a financial crisis. Based upon a large survey of 258 employees, we identified the following three findings regarding the personality-type effect on an individual's performance.

First, individuals are having different type of personalities and they behave in different manners in different situations. We saw that they tended to suffer more difficulties than their counterparts if they are not employed in their preferable field and it also depends on the type of job they are doing. This finding is similar to that of Soto et al. [29] results. Based upon a study of 118 individuals, they found that type of personality effects job productivity and it experienced declines in operating performance. It is not surprising to imagine that market job difficulties, followed by type of job due to job market problems, led many individuals to produce the output effective and efficient as an acute response. In particular, the data showed that the type of job affected large number of individuals in terms of both job type and personality type.

Second, regression analyses showed the positive effect of type of job on the improvement of an employee's productivity and efficiency, but no effect on organizational productivity. We consistently found that personality-type employees having same job-type outperformed their counterparts in terms of improvement in the productivity and efficiency measures. Other things being equal, the reduction of employment will result in the increase of employee's productivity, therefore, generating better organizational productivity. This result is in part consistent with previous studies' findings that type of job has a positive effect on an employee's performance. Robbins [30] also found that type of personality focusing on productivity showed positive results for employee and its related productivity.

While we found a positive effect from type of personality on employee's productivity measures, there was zero or even negative effects from personality-type on employee productivity. Previous literature has been inconclusive on this issue. Although Soto et al. [29] found a positive effect from personality-type on employee's productivity, Suarez [30] ascertained that type of personality showed more positive long term for employees productivity. This may not be true for employees productivity and other variables is also considered.

In this study, we argue that while an employee can generate better productivity by getting same type of job, our results show that although type of personality is effective in job-type, it does not enhance employee productivity. As theories have insisted, type of personality may negatively influence employee productivity by “reducing job satisfaction and organizational commitment through survivor’s syndrome” or by “breaking social network developed intangibly for long periods among have survived, there are hidden costs when a firm downsizes employees”. As Fisher and White [31] have insisted, there are hidden costs when a firm downsizes employees, in particular.

Limitations and implications for future studies

Although this study utilized a unique opportunity for investigating the type of personality effect on employee's productivity, the results of this study should be interpreted with caution due to a number of limitations. Despite the contributions of this study, some limitations must be noted. However, this model cannot be applied in government organizations. The reason for this limitation is that the government organizations have fixed pay rates & promotions over fixed period of time irrespective of how well an employee performs at any level. The employees are appraised after they have served for a specified time in any pay scale, which do not motivate them. Due to this, employee performance is low which in return does not help an organization to achieve its goals. Due to limited time we only focused to Banking sector of Pakistan. Sample size is less. Lack of time and other resources as it was not possible to conduct survey at large level. This may not represent the whole Population.

Conclusion

Our basic question to investigate was that is there personality type has impact and relationship with employee productivity? After data analysis it is very clear that personality type has an impact and relationship with employees' productivity. Secondly we wanted to test personality factors relationships individually on employee productivity. Those factors are Neuroticism, Agreeableness, Consciousness,
Openness to Experience and Extraversion. The result showed that all factors have significant relationship with employee productivity except Extraversion. Agreeableness and Conscientiousness has positive relationship with employee productivity. While Neuroticism and Openness to experience has negative relationship with employee productivity. In this scenario we accept following hypothesis

- H1: There is a positive relationship between Extraversion and employee productivity.
- H2: There is a negative relationship between Extraversion and employee productivity.
- H3: There is a positive relationship between Agreeableness and employee productivity.
- H4: There is a negative relationship between Agreeableness and employee productivity.
- H5: There is a positive relationship between Conscientiousness and employee productivity.
- H6: There is a negative relationship between Conscientiousness and employee productivity.
- H7: There is a positive relationship between Neuroticism and employee productivity.
- H8: There is a negative relationship between Neuroticism and employee productivity.
- H9: There is a positive relationship between Openness to Experience and employee productivity.
- H10: There is a negative relationship between Openness to Experience and employee.

Our findings confirm the findings of Timothy, Marne, Christine, Janet and Joseph [29] that agreeableness is the strongest predictors of salary. Emotional stability and proactive personality predicted perceived job success.

Suggestions

There is very less literature on relationship between personality type and productivity. So there is need to conduct research on this relationship in different populations with larger samples. Different jobs require different qualities. If a person possess those qualities can perform better if he lacks can be less productive so job type can be added to explore this phenomena.

During this research we found other factors which also affect productivity. Those variables can also be added in model. Like

- Workforce demographics [22].
- Mental health conditions [23].
- Employee involvement and communication [24].

References
