

MANAGERIAL PERSONALITY AND INNOVATIVE WORK BEHAVIOUR OF TELECOMMUNICATIONS FIRMS IN NIGERIA

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Abstract

Today organizations are striving for 'innovative work behaviour'. Innovative work behaviour is all employee behaviour aimed at the generation, introduction and/or application (within a role, group or organization) of ideas, processes, products or procedures, new and intended on a positive outcome for the organization. The purpose of this study is to examine the relationship between managerial personality and innovative work behaviour of telecommunication firms in Port Harcourt - Nigeria. Four research questions and research hypotheses were formulated for the study. The population of this study was 422 employees of the telecommunication firms in Port Harcourt - Nigeria. Using the Taro Yamane sampling size determination, the sample size for this study was 205. The study used systematic sampling technique. Descriptive and Inferential statistics (i.e. spearman rank correlation coefficient) were used to analyse the data with the aid of SPSS 18. The spearman rank correlation analysis results shows that the dimensions of managerial personality and the measures of innovative work behaviour are significant, therefore all the null hypotheses were rejected. The findings of this study provided empirical evidence regarding the gap between managerial personality and innovative work behaviour in the telecommunication firms. The study results show that extraversion and agreeableness personality trait significantly relates to innovative work behaviour measures (explorative and exploitative innovation).

Keywords: *Extraversion, Agreeableness, Managerial Personality, Explorative Innovation, Exploitative Innovation, Innovative Work Behaviour*

INTRODUCTION

Organizations globally compete vigorously because of the rapid changing innovative activities. Innovations play a vital role in firm long-term sustainability, growth and survival and have been long embraced by firms that want to be visible, viable, effective and competitive in the dynamic business world. Therefore, organizations that are unable to introduce better innovative ways to meet up intense competition may become extinct (Kanter, 1988). Innovation paradigms today are in forms, products, services, processes, market strategies and work methods. In recent time, the telecommunication industry world has seen a rapid change as people (individuals, group, and organizations) depend on their network for easy transmission of information. They are mostly known for the services of transmitting high speed and low voice signals, videos, fax, internet, microwave wireless transmissions and satellite and many more. The industry with a population of about 120million users in Nigeria, is referred to as a lucrative and important sector for investors, therefore, having a highly competitive market as a result of increasing demands of customers, unsatisfactory customers preferences, advancement in technology and switching cost of different operators (Samuel & Olatokun, 2014) . However, as competition increases, the telecommunication firms are facing many challenges that affect managerial personality and innovative work behaviour. Consumers in the telecommunication firm in Port Harcourt if permitted want to decide on the type of services they want, in essence telecommunication firms believes that providing affordable, flexible, simple and transparent products and services to increase customer's initial personal pleasures and satisfaction will keep them committed. Organizations who strives to remain competitive and sustain high performances understand the relevancy of incorporating innovativeness among its employees, they go as far as spending huge amount of money on research and development, considerable efforts and time to foster organizational conducive climate that contributes positively to the organization (Eminoglu, 2013).

In today business world, organizations face challenges that are internally and externally affecting individual innovative work behaviour in the working environment. Poor network and services quality, unsolicited text messages, tariffs deduction, Sim card registration, non-sustainable consumer's database, higher services charges and cost are factors identified as weaknesses in the Nigerian telecommunication industry despite been ranked as the top ten with higher consumers in the world (Samuel & Olakun, 2014; Aliede, 2015).

A manager trying to introduce the good practices of another company in his/her organization is certainly involved in innovation, despite the fact that he develops nothing absolutely new. Innovative work behaviour aid employee in developing and testing a new idea that ultimately proves to be effective and focused on a positive outcome for the organization.

Researches already hinted that the involvement of various types of employees is crucial for the organisational innovativeness. Innovative work behaviour involves problem recognition, idea development, idea championing and idea implementation.

Growing a competitive environment where employees are to be innovative requires an explorative innovation (radical innovation) and exploitative innovation (incremental innovation) change, moreover, organizations constantly need to adapt new procedures, practices and technologies in order to cope with the high demand of customers changing preferences and wants, therefore individual personality attributes can tackle customers changing desires and help achieve successful organizational innovation (explorative innovation and exploitative innovation); more often, the goal of every organization is to have credible innovative outcome for sustainability and competitiveness, firms want to achieve higher profits and expand its market share, therefore firms must strategies to be exceptionally innovative (Burgelman, Clayton & Steven, 2004; Wu, Levitas & Priem, 2011; Dasgupta & Gupta, 2009). Innovative work behaviour involves the introduction of new ideas, facilitating implementation and accomplishing the organization goals and organizations capitalize on their employee's cognitive, emotional and psychological ability to innovate, in this context employee's help in improving the performance of business by their ability to generate ideas and use these ideas for building better and new products, services and work processes. Theoretically, the individual is the key to new ideas, foundation of innovation, identifying opportunities for the organization and creating solutions to work problems (Redmond, Mumford & Teach, 1993; Shalley & Gilson, 2004; Oldham & Cummings, 1996). Hence, personality plays a vital role in innovative work behaviour as it impacts on the organization wealth creation, new processes, implementing change, improves quality, creative product and service ideas, business competitiveness and performance, reduces cost of products and services for potential and existing customers.(De Jong & Hartog,2007; Wu, Levitas, Priem, 2011; Janssen, Van, & West,2004; Benner & Tushman, 2003). For instance, most employees in an organization uses their personality trait to reach their goals, more especially they can adjust to situations that demands or requires tolerance, convergent thinking, openness to experience, curiosity and flexibility. sikszentnialy (1996) explained that it is commonly implicit that individual innovative work behaviour plays major contribution in firms long term performances and profitability in a highly competitive environment.

Employees in an organization are a source of continuous improvement for competitiveness in the organization and the ability of firms to provide a comfortable climate encourages individual innovative work behaviour positively. The organization climate must be in a condition that encourages individual contribution towards work by allowing employees to

initiate plans, source for creative ideas and new ways of doing things in the work environment (Yu & Frenkel, 2013; Ismail, 2005). It has been argued that the key success of an organization to encourage innovative work behaviour is its ability to encourage a bond between its employees and its management team, allowing them involve in most of the decision making in the organization.

Innovative work behaviour is encouraged in an organization, as it stands as a source for competitiveness and high performance. Several researchers have studied the different employees' personality determinants that will improve innovative work behaviour in the organization. Parzefall, Seeck, & Leppanen (2008) investigated organization team job and level of individual factors that influences employee innovations. (De Jong & Hartog, 2008; Hu, Horng & Sun, 2009; Xiaojun & Peng, 2010) worked on the antecedent of individual behaviour on innovative work behaviour. Also, De Jong & Hartog (2007) laboured on "How leaders influence employee's innovative behaviour". Consequently, to fill the gap of literatures in the field, we worked on managerial personality and innovative work behaviour of telecommunication firms in Port Harcourt.

Problem statement

The shape of the telecommunication firms in Port Harcourt changed significantly with the recent issues of developing new ways of coordinating a proper database of all their users, constant disturbance of customers for SIM card registration, high tariff and services charges, poor quality of products and services, therefore, giving the Nigeria Communications Commission (NCC) the opportunity to impose a fine on some of the telecommunication companies (for delivering poor quality of services. A cumulative amount of N1.17bn was fined for not meeting with the minimum standard of quality of service (Samuel & Olatokun, 2016). This industry must recognise the fact that innovative activities like explorative and exploitative innovation can help them improve features of product and services, qualities and make them withstand pressures from other competitors. The telecommunication industry must incorporate new ways of searching of ideas, initiate and implement rather than sustaining their regular ways of doing things (Samuel & Olatokun, 2016). Reviews from the literatures has clearly stated that most theoretical and existing studies on innovative work behaviour has been on the organization level neglecting the individual contribution to innovative activities in the telecommunication firms (Samuel & Olatokun, 2016). The relevancy understanding the reason why individuals engage in innovative behaviour like introducing new ideas, products, services and implement and execute new work processes, initiate new methods and achieving objectives in the organization is very necessary for long term performances in the telecommunication industry. The importance for organization

to adapt new ways of doing things and be innovative has been demanding, especially for organizations that desires high performance and increase competitive advantage in the environment, such organizations are faced with innovative challenges (ability to adapt new ideas, procedures and practices) to achieve the organization objectives (Hayjan, 1999). The effect of managerial personality on innovative work behaviour can be productive and at the same time not productive depend on the managers personality traits. Organization negligence of their managerial personality, level of creativity, innovative ideas and organizational climate affects their performance and competitiveness. The major problem encountered by organization is to integrate managers who are assertive, energetic, outgoing and have active imagination in achieving innovative work behaviour of their employees. Issues persist with individuals who are faced with uncertainty in dealing with situation within and outside the environment; they are bias towards the proposition of innovative and creative ideas (Mueller, Melwani & Goncalo, 2011). Therefore, given that managerial personality and individual innovative work behaviour is underdeveloped in the Port Harcourt telecommunication companies requires a study to examine its effect on the study objectives.

Objectives of the Study

The objective of this study is to examine the relationship between managerial personality and innovative work behaviour of telecommunication firms in Port Harcourt - Nigeria. The study specific objectives are as follows:

1. To investigate the relationship between extraversion and explorative innovation of telecommunication firms in Port Harcourt.
2. To investigate the relationship between extraversion and exploitative innovation of telecommunication firms in Port Harcourt.
3. To determine the relationship between agreeableness and explorative innovation of telecommunication firms in Port Harcourt.
4. To determine the relationship between agreeableness and exploitative innovation of telecommunication firms in Port Harcourt.

Research Hypotheses

Ho₁: There is no significant relationship between extraversion and explorative innovation of telecommunication firms in Nigeria.

Ho₂: There is no significant relationship between extraversion and exploitative innovation of telecommunication firms in Nigeria.

Ho₃: There is no significant relationship between agreeableness and explorative innovation of telecommunication firms in Nigeria.

Ho₄: There is no significant relationship between agreeableness and exploitative innovation of telecommunication firms in Nigeria.

Scope of the study

The study scope followed three perspectives: geographical scope, content scope and unit of analysis-

Geographical scope: the study geographical scope is four telecommunication firms namely (MTN, Globacom, Airtel and Etisalat) in Port Harcourt metropolis, Nigeria. The telecommunication firms were selected because it renders services to the general public.

Content scope: the study covered the following variables: extraversion, agreeableness, explorative innovation, and exploitative innovation

Unit of analysis: the level of analysis is shaped by the material of the study, the individual is known as the unit of analysis in this research, thereby positioning our research employees of different departments (marketing, customer service, accounting, advertisement, research & development, production), supervisors and unit heads in MTN, Globacom, Airtel and Etisalat in Port Harcourt.

LITERATURE REVIEW

Innovative Work Behaviour

The ability of the individual to carry out innovative activities in the work environment is regarded to be one of the most important ways to produce innovation in an organization. Individuals in the organization have behaviours that introduce and implement these activities. Researchers in literature stress on the survival and performance of organization on innovative work behaviour (De Jong & Hartog, 2007; Janssen, 2000; Unsworth & Parker, 2003). Due to innovative work behaviour exclusive nature, several definitions can be found in the literatures that require broader aspect which covers all behaviours. Innovative work behaviour construct distinguished between two phases which are initiation and implementation. The idea of innovative work behaviour is to ensure innovative positive output and generate benefit for the organization and captivates on the employee behaviour to achieve production of new work processes, new products and services (Imram, Saeed, Haq & Fatima, 2010; West, 2002). Scott & Bruce (1994) defined innovative work behaviour as the multifunctional processes involving different activities and individual behaviour is necessary for every functional stage which are idea generation, implementation and coalition. From another view, Wu, Parker & De Jong (2001) innovative work

behaviour is defined as the involvement of individual in generating new ideas and applying its new approach in the workplace.

Explorative Innovation

explorative innovation are radical innovation which involves activities that aimed to introducing new possibilities and opportunities such as experimentation, innovation and search whereas, exploitative innovation involves activities that focus on the improvement of existing processes via production, refinement and execution. Organizations that innovate through explorative innovation meet the requirements of introducing new products, entering new markets and satisfying customers by developing standardized and quality products and services, capabilities and advanced technologies (Albernathy & Clark, 1985; Benner & Tushman, 2003; Danneels, 2002; Jansen, Van & Voldberda, 2006) These construct captures a firm's fundamental behaviour in terms of exploring new opportunities. In the view of, Benner & Tushman (2003) organizations that involve in explorative innovation develop new products, new designs, develop new channels of distribution, chase new knowledge and create new services for potential markets and customers.

Exploitative Innovation

Prior to March theory (1991) exploitative innovation are incremental innovation involves risk taking, variation, experimentations, discovery and closely related search; several researchers have adopted these measures in innovative literatures and studied it independently on innovative work behaviour. These construct captures a firm's fundamental behaviour in terms of exploring old certainties, exploitative innovation improve on existing product, quality and existing knowledge, improve on the efficiency and accuracy of existing distribution channels, improve and increase established designs and patterns for existing customers.

Managerial Personality

Managers are known to have a unique personality trait in order to encourage leading change in the organization. Managerial personality can influence employee's behaviour either positively or negatively. Managers who have the unique traits of flexibility, listening and communication can easily influence their employees to positively source for new ideas, products, services and markets. They can further implement these changes in the organization if they have a friendly relationship with their employees. In the view of Browne (2002) managers should possess personality trait that must often help subordinates to effectively carry out job roles and each managers is characterized by different personality traits. For example, extraversion personality

trait are efficient in leading change, leading meetings and confront presentation while managers with low agreeableness traits frequently acquire new skills for team building, mentoring and coaching. In a similar view, Doc (2004) stated that managerial personality reflects on the relationship between managers and employees in the workplace. Managers who are optimistic, cheerful and open-minded seek stimulation and excitement in the organization, therefore encouraging innovative work behaviour. Pervin, Cervone & John (2005) defined managerial personality as manager's characteristics that accounts for his constant behaviour in the organization. Psychologist researchers studied the different dimensions of managerial personality traits, which are extraversion, agreeableness, conscientiousness, neuroticism and openness to experience. In another definition by Robbins (2005) managerial personality is a sum total of different ways an individual reacts and relate with other individuals in the organization. This reflects that an individual personality traits which are determinants of his behaviour patterns (Korzaan and Boswell, 2008). They further indicated that an individual that possess a certain traits, is likely to behave better in that particular trait he or she possesses. It is argued that managerial personality influences innovative performances in the organization (Lefebvre, 1992).

Theoretical Framework

This study theory anchored on the Kanter's '1988' theory of two stage innovation. In line with this theory, activities carried out to develop new product designs, services, and work processes involve opportunity exploration, idea generation, idea promotion and idea implementation. In the idea generation stage of kanter's theory, individuals become innovative in the working environment through directing behaviours towards initiating and introducing ideas for new and existing products, services, work processes and problem solving. De Jong, (2003) & Munford, (2000) acknowledged the fact that it has been related that idea generation innovation process involves generating ideas for renewed and new products, services and effective generation of ideas emerges when there is a need for better service delivery, solutions to problems and enhancement of performances. Innovative work behaviour in the opportunity exploration stage starts when individuals behaviour is directed to searching, identifying and responding to new ideas opportunities for modification of existing products and services, quality, work processes and existing market. Mostly, in this stage of idea exploration, individuals identify the failure in meeting customer's needs, development of faults in existing and new prototypes, slow delivery lines and work process, hence, they capitalize on exploring opportunities by finding new ways of improving quality of services, work process, and looking for solution to problems (Atuahene-Gima, 1996; Farr & Ford, 1990). Through this phase the individual is able to promote and

champion ideas for improving of quality of services, products and work process. The championing stage in Kanter's theory of innovation individual understands that innovative work behaviour involves pushing, negotiating, mobilizing several resources, persuading and influencing, challenging and risk taking for actualization of potential ideas for new products designs, services quality, improved prototypes and work process. Anderson & King (2004) elaborating on this theory, explained that idea implementation or application stage in innovative work behaviour encompasses individuals ability to develop, commercialize and test a new product design, prototypes, new work methods service speed and new activity implemented. This stage shows the organization working process and performances based on its employees ability to captivate the first three stages of the Kanter's '1988' theory of innovation, hence employees must modify ideas generated, explored, champion and implement to create sustainable products, services and procedures. Relating the kanter's 1988 theory to innovative work behaviour in this study, individuals achieves explorative and exploitative innovation by searching for new ideas (idea generation), introducing and initiating new designs, products, procedures and work process (idea exploration) and achieving new markets, modification of explored ideas (championing) are applied to improve existing and new products, increase quality of services, work procedures and process and distribution channels (implementation).

Hypotheses Development

Literature review in line with the study variables are as follows:

i. Extraversion and Explorative Innovation

Extraversion managers have the tendency to be active, flexible, sociable, self-confident, excited and dominant. According to Bakker, Van, Lewig & Dollard (2002) extraversion personality traits reflect positive emotions, high personal interaction intensity, higher stimulation need and higher frequency. Organizations that aim at initiating new ideas, products and entering into new markets must apply the knowledge of explorative innovation (He & Wong, 2004; Smith & Tushman, 2005). Previous research on explorative innovation shows that innovative work behaviour activities involving pursuing of new product development and services for emerging markets and customers lead to effective and competitive organization performance (Jansen, Bosch & Volberda, 2005; Benner & Tushman, 2003). In essence, Basadur (2004) advocated that managers who are mostly effective and flexible in the organization will help individuals explore different innovative styles by continuously discovering new ideas, defining new problem in the market and implementing solutions. Hence, this study hypothesized that:

Ho₁: There is no significant relationship between extraversion and explorative innovation of telecommunication firms in Port Harcourt.

ii. Extraversion and Exploitative Innovation

As earlier mentioned extraversion personality implies individuals with flexibility, enthusiasm, sociability, assertiveness and positive emotional (John & Srivastava, 1999, p.121). Extravert uses inspirational method like influencing behaviour of employees, arousing enthusiasm of other individuals to increase tactic (Cable & Judge, 2003; Yulk & Falbe, 1990). Previous findings, denoted that individuals with extraversion personality trait positively impact on innovation capacity and knowledge accumulation, accumulation and knowledge application significantly improves firms innovative performances. Exploitative innovations involve the ability of the firm to significantly apply knowledge of new ideas, new products, and new markets on existing products and services in the organization. Arising from the fore point literatures, it was hypothesized that:

Ho₂: There is no significant relationship between extraversion and exploitative innovation of telecommunication firms in Port Harcourt.

iii. Agreeableness and Explorative Innovation

Personality trait agreeableness consists of individuals with high degree of acceptance, trust, cooperation and warmth. Individuals with agreeableness personality traits have high tendency in terms of attentiveness, flexibility, courteousness and modesty (McCrae & Costa, 1992; Barrick, Mount & Judge, 2001; Bono & Judge, 2000). Thus agreeableness personality traits influences organization decision that focus on fostering innovative performances. These individuals with the agreeableness personality trait have the capability to introduce new product design, practices, processes and initiate new prototypes as they tend to have a strong relationship with new markets and customers. They foster ways of communicating with new customers, as mostly, they want to give them the services, qualities and products they want (Laursen, 2002). Therefore it is hypothesized that:

Ho₃: There is no significant relationship between agreeableness and explorative innovation of telecommunication firms in Port Harcourt.

iv. Agreeableness and Exploitative Innovation

This personality dimension involves individuals with affectionate, kind and sympathetic traits. According to Daft (2005) agreeableness personality trait is an individual ability to associate with others by having the attributes of cooperativeness, understanding, trusting and forgiving spirit. Prather (2000) argued that individuals who are trusting are important in shaping the organization innovation. Exploitative innovation requires improvement on existing products, services, qualities and technologies. Syrett and Lammiman (2002) found out that individuals who attempt

to forgive easily and have high tendency to adopt, helps organization achieve exploitative innovation breakthrough. Therefore, since individuals who have agreeableness personality trait easily accept new innovation, implements it and flow with team work, we hypothesized that:

Ho₄: There is no significant relationship between agreeableness and exploitative innovation of telecommunication firms in Port Harcourt.

METHODOLOGY

This research adopted a cross sectional survey, which is quasi- experimental design, this particular research design is adopted because the researcher aim to generate data with no bias and no intention of manipulating the variables under study. The study population is four hundred and twenty-two respondents (422) from four telecommunication firms in Port Harcourt, out of the eighteen (18) functioning telecommunication firms recognised by the Nigeria Communications Commission (NCC). The researcher adopted a probability sampling technique, precisely systematic sampling method. Systematic sampling design is a kind of sampling using a random number to pick the unit which is to be studied. Systematic sampling design was used in this study because it spreads evenly over an entire population and eliminates bias. The Taro-Yamane's sample size determination formula was employed to determine 205 sample size out of 422. Inferential statistics was done by adopting the Spearman rank order correlation in testing for the hypotheses one to four. The Spearman rank order correlation was employed in order to identify and test the significant relationship between two sets of variables and test its correlation if it is positive or negative to either accept or reject the null hypothesis. Spearman rank correlation coefficient is a non-parametric test that shows the direction of relationship and intensity of the relationship. Also correlation coefficient ranges from -1.0 to + 1.0 (this signs of correlation coefficient shows the direction of relationship). The test of significant in spearman correlation estimates the relationship between two variables and it shows the p-value (probability value).

RESULTS

Table 1: Number of Questionnaire administered and retrieved

	Number of employees	Percentages (%)
Distribution	205	100%
Useful copies	188	92%
Incomplete responses	7	3%
Lost in transit	10	5%

From table 1, a total number of two hundred and five (205) copies of the questionnaire were distributed among the employees of telecommunication firms in Port Harcourt. Out of the two hundred and five (205) questionnaires administered, only one hundred and eighty eight copies of the questionnaire were retrieved and were considered useful. This accounted to 92% useful questionnaire, 3% incomplete responses and 5% lost in transit.

Table 2: Analysis of items of extraversion

S/N	Question Items	SD (%)	D (%)	A (%)	SA (%)	Mean	Standard deviation	Decision
MPE1	I see myself as someone who is a talkative	86 (45.7)	51 (27.1)	30 (6.0)	21 (11.2)	1.93	1.03	Reject
MPE2	I see myself as someone who generates a lot of enthusiasm	8 (4.3)	24 (12.8)	82 (43.6)	74 (39.4)	3.18	0.81	Accept
MPE3	I see myself as someone is full of energy	76 (40.4)	54 (28.7)	33 (17.6)	25 (13.3)	2.05	1.06	Reject
MPE4	I see myself as someone who is outgoing and sociable	7 (3.7)	23 (12.2)	84 (44.7)	74 (39.4)	3.19	0.79	Accept
MPE5	I see myself as someone who has an assertive personality	4 (2.1)	22 (11.7)	83 (44.1)	79 (42.0)	3.26	0.74	Accept
Grand total		181 (19.2)	174 (18.5)	312 (31.2)	273 (29.1)	2.72	0.89	Accept

Note: MPE1=managerial personality extraversion item1, MPE2=managerial personality extraversion item2, MPE3=managerial personality extraversion item3, MPE4=managerial personality extraversion item4, MPE5=managerial personality extraversion item5

The table 2 shows the responses of respondents' opinion on the items of extraversion a dimension of managerial personality of telecommunication firms in Port Harcourt. The analysis revealed that the grand percentage of 19.2% indicated 'strongly disagree' (SD), 18.5% of respondents indicated 'Disagree' (D), 31.2% indicated 'agree' (A) and 29.1% of respondents indicated 'strongly agree' (SA). The table also revealed that employees in the telecommunication firms see themselves as someone who is a talkative (mean=3.18, Std=0.81), someone who generates a lot of enthusiasm (mean=3.18, Std=0.81), someone who is full of energy (mean=2.05, Std=1.06), someone who is outgoing and sociable (mean=3.19, Std=0.79)

and someone who has an assertive personality (mean=3.19, Std=0.79). three of the items MPE2, MPE4 and MPE5 are significant because it is higher than the criterion mean 2.5 while MPE1 and MPE is not significant because it is lesser than the criterion mean 2.5. the table also revealed that the grand total mean response score was 2.72 higher than the criteria mean of 2.5, this represents that extraversion is a significant dimension of managerial personality.

Table 3: Analysis of items of agreeableness

S/N	Question Items	SD (%)	D (%)	A (%)	SA (%)	Mean	Standard deviation	Decision
MPA1	I see myself as someone who is helpful and unselfish with others	35 (18.6)	60 (31.9)	43 (22.9)	50 (26.6)	2.57	1.07	Accept
MPA2	I see myself as someone who is generally trusting	20 (10.6)	46 (24.5)	63 (33.4)	59 (31.4)	2.86	0.98	Accept
MPA3	I see myself as someone who likes to co-operate with others	19 (10.1)	38 (20.2)	80 (42.6)	51 (27.1)	2.87	0.93	Accept
MPA4	I see myself as someone who is considerate and kind to almost everyone	41 (21.8)	51 (27.1)	50 (26.6)	46 (24.5)	2.54	1.09	Accept
MPA5	I see myself as someone who has a forgiving spirit	26 (13.8)	52 (27.7)	57 (30.3)	53 (28.2)	2.73	1.02	Accept
Grand total		141 (15.0)	247 (26.3)	293 (31.2)	259 (27.6)	2.71	1.02	Accept

Note: MPA1=Managerial personality agreeableness item1, MPA2=Managerial personality agreeableness item2, MPA3=Managerial personality agreeableness item3, MPA4=Managerial personality agreeableness item4,MPA5=Managerial personality agreeableness item5

Table 3 represents the opinions of the respondent on items of agreeableness dimension of managerial personality of telecommunication firms in Port Harcourt. The analysis shows that grand percentage of 15.0% indicates responses of 'Strongly disagree' (SD), 26.3% respondent indicates 'disagree' (D), 31.2% of respondents indicated 'Agree' (A) and 27.6% respondents indicated 'Strongly Agree' (SA). The table further shows that employees see themselves as who is helpful and unselfish (mean= 2.57, std=1.07), someone who is generally trusting (mean=2.86, std=0.98), someone who likes to cooperate with others (mean=2.87, std=0.93), someone who is considerate and kind to almost everyone (mean=2.54, std=1.09) and someone who has a

forgiving spirit (mean=2.73, std=1.02). The items are all significant since the means are greater than the criterion mean of 2.5. The table also reveals that the grand mean response score is 2.71 which are higher than the criteria mean of 2.5. Therefore agreeableness is significant dimension of managerial personality.

Table 4: Analysis of items of explorative innovation

S/N	Question Items	SD (%)	D (%)	A (%)	SA (%)	Mean	Standard deviation	Decision
Explorative1	Has acquired technologies and skills that are entirely new to the firm.	31 (16.5)	28 (14.9)	83 (44.1)	46 (24.6)	2.77	1.00	Accept
Explorative2	Has learned product development skills and processes	38 (20.2)	58 (30.9)	51 (27.1)	41 (21.8)	2.50	1.05	Accept
Explorative3	Has systematically introduced innovative new ideas into work practice.	41 (21.8)	58 (30.9)	52 (27.7)	37 (19.7)	2.50	1.04	Accept
Explorative4	Has strengthened innovation activities and skills in areas where it had no prior experience	9 (4.8)	28 (14.9)	88 (46.8)	63 (33.0)	3.09	0.82	Accept
Explorative5	Has acquired entirely new managerial and organizational skills that are important for innovative work behaviour	17 (9.0)	42 (22.3)	67 (35.6)	62 (33.0)	2.93	0.96	Accept
Grand total		136 (14.5)	214 (22.8)	341 (36.1)	249 (26.5)	2.76	0.97	Accept

Table 4 shows analysis of items of explorative innovation of the respondents of telecommunication firms in Port Harcourt. The information reveals that grand percentage of 14.5% respondents indicated 'strongly disagree' (SD), 22.8% respondents indicated 'Disagree' (D), 36.1% respondents indicated 'agree' (A) and 26.5% of respondents indicated 'strongly

agree' (SA) to the questionnaire views in this particular section. The table also reveals the different telecommunication firms has acquired technologies and skills that are entirely new to the firm (mean=2.77, std=1.00), has learned product development skills and processes (mean=2.50, std=1.05), has systematically introduced innovative new ideas into work practice (mean=2.50, std=1.04), has strengthened innovation activities and skills in areas where it has no prior experience (mean=3.09, std=0.82) and has acquired new managerial and organizational skills that are important to the firm (mean=2.93, std=0.96). From the analysis, the items in this section are significant since the means are greater than the criterion mean of 2.5. The table also reveals that the grand mean score is 2.76 higher than the criteria mean of 2.5. This analysis shows that explorative innovation is a significant measure of innovative work behaviour of telecommunication firms in Port Harcourt.

Table 5: analysis of items of exploitative innovation

S/N	Question Items	SD (%)	D (%)	A (%)	SA (%)	Mean	Standard deviation	Decision
Exploitative1	Has based its strategy on knowledge abilities and ideas of products and services that your firm is familiar with	20 (10.6)	43 (22.9)	92 (48.9)	33 (17.6)	2.73	0.90	Accept
Exploitative2	Has invested majorly in exploiting mature technologies, products, services, processes and markets.	44 (23.4)	39 (20.7)	52 (27.7)	53 (28.2)	2.61	1.13	Accept
Exploitative3	Has searched for solutions to customer preferences	34 (18.1)	51 (27.1)	51 (27.1)	52 (27.7)	2.64	1.07	Accept
Exploitative4	Has upgraded skills in product and services development processes	19 (17.6)	54 (28.7)	72 (38.3)	43 (22.9)	2.74	0.93	Accept
Exploitative5	Has targeted the effort to improve the efficiency of the innovation processes	33 (17.6)	51 (27.1)	59 (31.4)	45 (23.9)	2.62	1.04	Accept
Grand total		150 (15.9)	238 (25.3)	326 (34.8)	226 (24.1)	2.67	1.01	Accept

Table 5 represents the response rate on items of exploitative innovation (a measure of innovative work behaviour) of the telecommunication firms in Port Harcourt. The analysis revealed that the grand percentage 15.9% represents respondent response on 'strongly disagree' (SD), 25.3% respondents indicated 'disagree'(D), 34.8% respondents indicated 'Agree' (A) and 24.1% respondents indicated 'Strongly agree' (SA) to the questionnaire views in this particular section. The table further reveals that telecommunication firms in Port Harcourt strategies on knowledge, abilities, ideas of products (mean=2.73, std=0.90), invest majorly in exploiting matured technologies (mean=2.61, std=1.13), search for solutions to customers preferences (mean=2.64, std=1.07), upgraded skills in products and services development (mean=2.74, std=0.93) and targeted efforts to improve efficiency of innovation (mean=2.62, std=1.04). This analysis shows that the items are significant since the means are greater than the criterion mean of 2.5. The grand mean also reveals a higher response score than the criteria mean of 2.5. This can be explained as exploitative innovation is a significant measure of innovative work behaviour of telecommunication firms in Port Harcourt.

Ho₁: There is no significant relationship between extraversion and explorative innovation of telecommunication firms in Nigeria.

Table 6: Correlation of extraversion and explorative innovation

		extraversion	Explorative
Spearman's rho	Extraversion	Correlation Coefficient	1.000
		Sig. (2-tailed)	.475**
		N	.000
	Explorative	Correlation Coefficient	.475**
		Sig. (2-tailed)	1.000
		N	.000

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

The SPSS output of hypothesis one (Ho₁) shows a moderate but positive significant relationship existing between extraversion and explorative innovation with a correlation coefficient of 0.475 and a p-value of 0.000 lesser than alpha value (0.05). The null hypothesis is rejected, therefore accepting the alternate hypothesis which stated that: there is a significant relationship between extraversion and explorative innovation of telecommunication firms in Nigeria

Ho₂: There is no significant relationship between extraversion and exploitative innovation of telecommunication firms in Nigeria.

Table 7: Correlation of extraversion and exploitative innovation

			extraversion	Exploitative
Spearman's rho	extraversion	Correlation Coefficient	1.000	.332**
		Sig. (2-tailed)	.	.000
		N	188	188
	exploitative	Correlation Coefficient	.332**	1.000
		Sig. (2-tailed)	.000	.
		N	188	188

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

From the analysis, hypothesis two (Ho₂) shows an existing relationship between extraversion and exploitative innovation with correlation coefficient 0.332 and p-value of 0.000 which is lesser than the alpha value (0.05), therefore, null hypothesis will be rejected and alternate hypothesis accepted, which states that there is a significant relationship between extraversion and exploitative innovation.

Ho₃: There is no significant relationship between agreeableness and explorative innovation of telecommunication firms in Nigeria.

Table 8: Correlation of agreeableness and explorative innovation

			agreeableness	Explorative
Spearman's rho	agreeableness	Correlation Coefficient	1.000	.494**
		Sig. (2-tailed)	.	.000
		N	188	188
	explorative	Correlation Coefficient	.494**	1.000
		Sig. (2-tailed)	.000	.
		N	188	188

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

Hypothesis three (Ho₃) shows a moderate existing relationship between agreeableness and explorative innovation with a coefficient of 0.494 and a p-value of 0.000 which is less than the alpha value 0.05, therefore the null hypothesis will be rejected and the alternate hypothesis will be accepted. The alternate hypothesis therefore stated that: there is a significant relationship between agreeable and exploitative innovation.

Ho₄: There is no significant relationship between agreeableness and exploitative innovation of telecommunication firms in Nigeria.

Table 9: Correlations of agreeableness and exploitative innovation

		agreeableness	exploitative
Spearman's rho	agreeableness	Correlation Coefficient	1.000
		Sig. (2-tailed)	.000
		N	188
	Exploitative	Correlation Coefficient	-.598**
		Sig. (2-tailed)	.000
		N	188

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

Hypothesis four (H_{o4}) shows moderate but negative existing relationship between agreeableness and exploitative innovation with a coefficient of -0.598 and a p-value of 0.000 which is less than the alpha value 0.05, therefore the null hypothesis will be rejected and the alternate hypothesis will be. The alternate hypothesis therefore stated that: there is a significant relationship between agreeable and exploitative innovation.

Table 10: Summary of hypotheses testing results

Hypotheses	P-value/ coefficient	Accept/Reject
H_{o1} : There is no significant relationship between extraversion and explorative innovation of telecommunication firms in Nigeria.	Coeff = 0.475 p-value = .000	Rejected null hypothesis Accept alternate hypothesis
H_{o2} : There is no significant relationship between extraversion and exploitative innovation of telecommunication firms in Nigeria.	Coeff = 0.332 p-value = .000	Rejected null hypothesis Accept alternate hypothesis
H_{o3} : There is no significant relationship between agreeableness and explorative innovation of telecommunication firms in Nigeria.	Coeff = 0.494 p-value = .000	Rejected null hypothesis Accept alternate hypothesis
H_{o4} : There is no significant relationship between agreeableness and exploitative innovation of telecommunication firms in Nigeria.	Coeff = -0.598 p-value = .000	Rejected null hypothesis Accept alternate hypothesis

DISCUSSION OF FINDINGS

The research hypotheses were tested using spearman's Rank Order Correlation Coefficient. The results in Table X indicate that's extraversion has a positive but moderate association with explorative innovation as indicated in the coefficients in H_{o1} : ($r = 0.475$; $p = .000$). Also, the association between extraversion and exploitative innovation shows a moderate association in

Ho₂: ($r=0.332$; $p=.000$) agreeableness and explorative innovation in Ho₃ ($r=0.494$; $p=.000$) shows a moderate association with explorative innovation and the association between agreeableness and exploitative innovation show high level of significance in Ho₄: ($r=.598$; $p=.000$). The result of hypothesis one shows that extraversion has a moderate positive significant relationship with explorative innovation of telecommunication firms in Port Harcourt with [$r=.475$] and the correlation determination (r^2) is 0.225 which implies that extraversion helps to explain 23% of the variance respondents scores on explorative innovation. In other words, individuals within the age of 25-35, mostly males that are single who have extraversion personality trait has the opportunity to stimulate new ideas, new designs more in telecommunication firms in Nigeria. This result highlight the importance of employee's ability to explore different innovative style by constantly discovering new ways of problem solving, improving quality of products and services, implementing work processes and achieving new market. An increase in employee's ability to be assertive, sociable, outgoing, vibrant and energetic can contribute to explorative innovation activities leading to higher firm performances. In line with this study, Basadur (2004) a positive significance relationship was found between extraversion traits and innovative work behaviour. Secondly, a research conducted by Owoseni (2011) shows that extraversion trait significantly influences innovative work behaviour and creativity. The result of hypothesis two findings revealed that extraversion has a moderate positive significant relationship with exploitative innovation of telecommunication firms in Port Harcourt with [$r=.332$] and the correlation determination (r^2) is 0.110 which implies that extraversion helps to explain 11% of the variance respondents scores on exploitative innovation. The result highlights the relevance of improving an existing idea, product and services, designs, work practices and procedures. This can only be done when employees are willing to contribute to innovativeness through his innovative behaviour by having attributes of being exposed, search for different variations, sociable and communicate frequently with people within and outside the organization. This result directly supports theoretical arguments highlighting the positive relationship between extraversion and innovative work behaviour. Patterson, Kerrin & Gatto (2009) study shows a significant relationship between extraversion and innovative work behaviour, in similar case Wolfradt & Pretz (2001) found a high score on extraversion and creativity, although other evidence by Barrick and Mount (2001) found no significant relationship between extraversion and creativity and innovative performances. The result of hypothesis three shows that agreeableness has a moderate positive significant relationship with explorative innovation (a measure of innovative work behaviour) of telecommunication firms in Port Harcourt with [$r=0.494$] and the correlation determination (r^2) is 0.244 which implies that agreeableness helps to explain 24% of the variance respondents

scores on explorative innovation This result can further be explained that employees within the age of 25-35 and single represents innovative work behaviour with high degree of acceptance, trust, warmth and cooperation fosters innovative performances through their innovative behaviour, they have capabilities to introduce new product designs, practices, processes, initiate new prototypes by having a strong relationship with existing customers and potential ones. This result shows the value of agreeableness for innovative individuals. This result is in line with empirical findings also stating that agreeableness is related to explorative innovation (Patterson, Kerrin & Gatto. 2009). In another research by Matzler, Renzl, Mooradian, Krogh & Mueller (2011) agreeableness is found to be significantly related to employee's work place performance and innovative activities in terms of initiating and introducing new ideas, designs and practices. The result of hypothesis four shows that agreeableness has a moderate negative significant relationship with exploitative innovation of telecommunication firms in Port Harcourt with [$r = -0.598$] and the correlation determination (r^2) is 0.357 which implies that agreeableness helps to explain 36% of the variance respondents scores on exploitative innovation. This simply implies that employees who are single and youthful get along with others and are cooperative, negatively significantly relates to the improvement of existing products, services, production and execution in telecommunication firms. This study agrees with several studies by George and Zhou (2001) and Patterson (1999) that show there is a negative association between agreeableness and innovative activities.

RECOMMENDATIONS

From the results of the research analysis, the following recommendations were made to help telecommunication firms:

- Human resource department should assign employees with extraversion personality traits to a department that needs intense searching for new designs, patterns and products to give the firm sustainability and withstand high competition from the global business environment.
- They should also employ individuals with agreeableness personality traits and assign them to jobs that require production, refinement and improvement of existing qualities and services.
- Telecommunication firms need to pay attention to extraversion and agreeableness personalities of their employees during career development so that they can increase their innovative capability, potential and performances

CONCLUSION

Firms generally focus on their resources, successes and achievement and pay less attention on the individual contribution to innovation and performances, which are their personality attributes to initiate innovativeness. Although empirical evidence on the different personality dimensions on innovative work behaviour are still scattered, extraversion and agreeableness are known to have a positive significant relationship on innovative work behaviour based on our findings. Our research shows that it is important to employ individuals with different personality traits as they help in exploring new ways of increasing innovative activities, in return, the firms benefit financially and remain competitive in the ever changing business environments. The individual been known as the most valuable asset need to be channelled to be innovative for the success of the organisation.

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