Quality Circle and Organisational Citizenship Behaviour of Manufacturing Sector in Rivers State

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Abstract

This study scrutinized the association of quality circle and organizational citizenship behavior of telecommunication firms. The study adopted the survey design. From a population of 800 employees of the concerned organizations, a sample size of 267 was arrived at using the Taro Yemen's sampling technique. Data were collected through questionnaire and analysed using the Spearman Rank Order Correlation Coefficient; aided by the Statistical Package for Social Sciences. Results there from indicated a positive association of the predictor variable- quality circle and measures of organizational citizenship behavior of altruism, courtesy and conscientiousness. The study concluded that quality circles represent veritable tools for igniting citizenship behavior among employees and recommend that (1) Management should allow and encourage suggestions from staff to promote sense of dedication and commitment to the organization and by extension enhance organizational citizenship behaviour(3) Managers should incorporate and establish policies and frameworks to guide and streamline the activities relating to quality circle as a way to entrench internal collaborations and sense of belongingness.

Keywords: Quality, Circle, Organisational, Citizenship, Behaviour, Telecommunication

1. Introduction

OCB refers to a set of discretionary workplace behaviours that exceed one's basic job requirements or go beyond the call of duty (Organ, 1988). Robert Katz was among the first to notice that organisations needed cooperation to perform efficiently and effectively and stated that "an organisation which depends solely upon its blueprints for prescribed behaviour is a fragile social system" (Katz, 1964: 132) that would break down. The inestimable contributions of organizational citizenship behaviour (OCB) in the effectiveness of individuals, groups, and organization at large is however well documented (see Nielsen, Bachrach, Sundstrom, & Halfhill, 2012; Podsakoff, Mackenzie, Maynes, & Spoelma, 2013; Podsakoff, Whiting, Podsakoff, & Blume, 2009; Podsakoff & Mackenzie, 1997; Whitman, Van Rooy, & Viswesvaran, 2010).

Furthermore, it has been argued that organizations will necessarily become more dependent on individuals who are willing to contribute to successful change, regardless of formal job requirements (Somech and Drach-Zahavy, 2004: 281). Gabriel, Jaja & Zeb-Obipi (2013) and Gabriel (2015, 2018) have respectively re-echoed these assertions as they posit that OCB is *sine qua non* for the survivability and prosperity of modern organizations. It is on this backdrop that understanding how to arouse organizational citizenship behaviour should be of vital concern to today's managers. Although much of the existing research on OCB has focused on identifying employee dispositional and attitudinal antecedents and has greatly contributed to the field of organizational behaviour, (Chiaburu, Berry, Li, Gardner, & Oh, 2011; Hoffman, Blair, Meriac, & Woehr, 2007; Ilies, Nahrgang, &Morgeson, 2007), especially in the area of personality traits, job satisfaction, and leader-member exchange, one issue that has been neglected but which is currently gaining attention in OCB literature is the relative role of employee voice as an antecedent to organizational citizenship behaviour (McAllister, Kamdar, Morrison, & Turban, 2007; Morrison, 1994; Tepper, Lockhart, & Hoobler, 2001; Zellars, Tepper, & Duffy, 2002).

Wilkinson & Fay (2011) define voice as a way for employees to be able to have a say concerning work activities and decision-making issues in organizations. Employee voice is either direct or indirect (Kim et al, 2010). The direct form of voice could take place either individually or in groups, often through face to face communication between employees or among group of employees and their managers. This form of voice can occur in both informal (oral or verbal) and formal (written information or employee involvement programs) ways (Budd et al, 2010). On the contrary, indirect forms of employee voice are expressed through issues relevant to the workplace but overseen by employee representatives, such as unions and joint consultations (Kim et al, 2010).

Direct voice can be present through team briefings, quality circles and town hall meetings between managers and employees (Marginson et al., 2010). Quality Circle is basically a volunteer group made up of members who converge to discuss workplace and service improvements and make presentations to their management with their ideas. In the current endeavor, we are examining the association of quality circle; being part of employee voice, and organizational citizenship behavior. The objective of the study therefore is to ascertain the predicting influence of quality circle on altruism, courtesy and conscientiousness of manufacturing companies in Rivers State.

2. Literature

2.1 Theoretical Foundation

One of the most relevant baseline social theories for this study is that of social exchange theory (SET). According to Blau, (1964) social exchange refers to relationships that entail unspecified future obligations. Social exchange theory is a broad conceptual paradigm that spans a number of socio- scientific disciplines, such as management, social psychology, and anthropology. Despite its name, it is not a single theory but is better understood as a family of conceptual models (Cropanzano & Mitchell, 2005). In this regard, all social exchange theories share a number of common features. All social exchange theories treat social life as involving a series of sequential transactions between two or more parties wherein resources are exchanged through a process of reciprocity, whereby one party tends to repay the good (or sometimes bad) deeds of another party (Mitchell, Cropanzano, & Quisenberry, 2012). The unique quality of these exchanges is sometimes influenced by the relationship between the actor and the target such that whereas economic exchanges tend to be quid pro quo and involve less trust and more active monitoring, social exchanges tend to be open-ended and involve greater trust and flexibility (Cropanzano & Mitchell, 2005).

Social exchange theory has been used to explain the various phenomena and processes that occur in organizations, including organizational citizenship behaviour (Tsui and Wu, 2005; Van Dyne and Ang, 1998). For example, social exchange theory has been used to explain the relationship between employees and the organization with regards to concepts such as voice, recognition and support (Van Dyne and Ang, 1998). Employers utilizing the social exchange approach seek a long-term relationship with employees and show concern about employees' well-being, opinions with regards to decisions that may affect them and career development, and expect the concern and commitment to be reciprocated.

From the social exchange perspective, if an employee is treated with value and respect they would be more likely to engage in organizational citizenship behaviours (Cho and Johanson, 2008). Researchers also found that employee inclusivity and voice in the decisions and affairs of the organization can lead to employee citizenship behaviour because a social exchange relationship, anchored on recognition and relevance is developed between employees and their organization (Podsakoff, *et al*, 2000).

2.2 Organizational Citizenship Behaviour

The willingness of participants to exert effort beyond the formal obligations akin to their positions has long been recognized as an essential component of effective organizational performance. For example, several decades ago, Barnard (1938) cited in Wagner and Rush (2000) stated that the willingness of individuals to contribute cooperative efforts to the organization was indispensable to the effective attainment of organizational goals. Barnard elaborated that efforts must be exerted not only to perform the functions that contribute to the goals of the organization but also to maintain the organization itself. This is based on the assumption that individuals differ in their willingness to contribute to the "cooperative system", and these individual differences in behaviour cannot be explained by individual differences in ability (Borman & Motowidlo, 1993).

Successful organizations have employees who go beyond their formal job responsibilities and freely give of their time and energy to succeed at the assigned job. Such altruism is neither prescribed nor required; yet it contributes to the smooth functioning of the organization. Because of the importance of good citizenship for organizations, understanding the nature and sources of organizational citizenship behaviour has long been a high priority for organizational scholars (Singh, 2009) and remains so. The dimensions of OCB are altruism, conscientiousness, civic virtue, courtesy, and sportsmanship. However this study focuses on three of these dimensions, namely: altruism, courtesy and conscientiousness.

2.2.1 Altruism

Altruism (Carlo et al, 1991; Penner & Finkelstein, 1998) is the enduring tendency to think about the welfare and rights of other people, to feel concern and empathy for them, and to act in a way that benefits them (Penner & Finkelstein, 1998). Altruism is one of the most consistent individual resources that have been related to the engagement in helping behaviours (Carlo et al., 1991). Piliavin and Charng (1990) conclude that such altruistic resources indeed exist and that the willingness to consider others in our overall calculations of our own interests is natural to people. Studies show employees giving altruistic reasons for becoming involved in helping behaviours, such as the desire to see others happy or comfortable (Farmer & Fedor, 2001; Penner & Finkelstein, 1998).

2.2.2 Courtesy

These are voluntary behaviours aimed at preventing problems related to the work in advance (MacKenzie et al., 1993). According to Organ and Ryan (1995), courtesy is a sportsmanship behaviour which shows abstaining from little and temporary personal faults without disorder, objection and protest in the organization, and it is a behaviour of taking measures by foreseeing co-workers' problems and helping them. Gabriel (2015) describes it to include being mindful of and respectful to others; a behavior that can engender a feeling of respect for one another and consequently amount to conflicts minimization. Courtesy can be described in terms of gestures which are demonstrated in the interest of preventing the creation of problems for co-workers (Organ, 1988). A courteous employee avoiding creating problems for co-workers reduces intergroup conflict so managers do not fall into a pattern of crisis management (Podsakoff & MacKenzie, 1997).

2.2.3 Conscientiousness

Conscientiousness is an employee's voluntary behaviours beyond his or her minimum role requirements in obeying rules and regulations (Podsakoff et al., 1990). Similarly, conscientiousness has been defined as discretionary behaviours that go beyond the basic requirements of the job in terms of obeying work rules, attendance and job performance (Redman and Snape, 2005). In other words, conscientiousness means the painstaking obedience to organisational rules and procedures, even when no one is watching. Conscientiousness captures a person's internalization and acceptance of the organisation's rules, regulations and procedures, which results in a scrupulous adherence to them even when no one observes or monitors compliance (Gabriel, 2015). Furthermore, being punctual, using tea, coffee and meal breaks carefully, attending regularly to meetings in organizations and obeying all formal and informal rules that are developed to maintain order in the organization are also examples of conscientious behavior

2.2.4 Quality Circles

Quality Circle as defined earlier is a volunteer group that is made up of members who converge to discuss workplace and service improvements and make presentations to their management on the outcomes of such discourse. These are related especially to the quality of output or services in order to improve the performance of the organization or department and motivate and enrich the work of employees. Quality circles carry on continuously as a part of organization-wide control activities, self and mutual developments as well as control and improvement within the workplace, utilizing quality control techniques with all the members participating (Marginson et al., 2010).

Generally six to twelve volunteers from the same work area make up a circle. The members receive training in problem solving, statistical quality control and group processes. Quality circle generally recommends solutions for quality and services which may be implemented by the management. Thus quality circle is not merely a quality control group but extends beyond that because its activities are more comprehensive. Furthermore, it is not a taskforce because it can be made a permanent feature of the organization or a department (Dundon et al, 2004).

Marginson et al., (2010) describe it as a formal, institutionalized mechanism for productive and participative problem solving interaction among the employees of an organization, consisting of a small group of employees from all levels of the existing hierarchical structure within an organization, voluntarily involved in the process of identifying, analysing and formulating solutions to various technical, manual and automation related problems encountered in daily work life.

The important feature of quality circles is that the basic philosophy, preamble, time and budget allocation is formulated by the organization itself and the members of each quality circle prepare the target achievement charts and decide the course of work culture. Once a particular organization adopts the practice of quality circle as part of its work life, it is the foremost duty of the organization to orient its employees about their multiple roles as participants, facilitators and agents for change.

2.2.5 Quality Circles and Organizational Citizenship behaviour

As quality circles resolve work related problems regarding quality, productivity, cost, and safety, the total performance of the work area naturally improves. This results in both tangible and intangible gains to the whole. Although studies have somewhat not been able to fully specify a theoretical model concerning the importance of quality circles, it is most often assumed that outcomes of enhanced employee attitudes are either directly or indirectly affected by their roles in quality circle activities (Catlette & Hadden, 2001). For instance, Dundon et al (2004) argued that the problem-solving procedure inherent in the quality circle technique is expected to modify the work-flow process by drawing on workers experience and expertise, thereby indicating the organizations recognition and value for its knowledgeable staff, thus boosting workers confidence and cooperative tendencies. In addition, cognitive and motivational benefits may accrue from enhanced hierarchical and lateral communication, increased feedback, and goal-setting, as well as the group process itself. Therefore based on the foregoing, the following hypotheses are put forward-

HO_1: There is no significant relationship between quality circles and altruism

HO_2: There is no significant relationship between quality circles and courtesy

HO_3: There is no significant relationship between quality circles and conscientiousness

3. Methodology

3.1 Research Design

The study adopts the cross-sectional survey design. Our study population comprised eight hundred (800) staff of MTN, Globacom, Airtel, and etisalat as sourced from their administrative and human resource offices across Bayelsa and Rivers States. See table 1

Table 1: Population table

List of Organizations	Population
MTN (Rivers and Bayelsa States – 5 branches)	352
Globacom (Rivers and Bayelsa States – 5 branches)	225
Airtel (Rivers and Bayelsa States – 4 branches)	142
Etisalat (Rivers and Bayelsa States – 2 branches)	81
Total = 16 telecommunication firms	**800**

The sample size for this study was determined using the Taro Yamen 1970 sampling formula with the calculations illustrated below:

Taro Yamane formula:

$$n = \frac{N}{1 + N(e)^2}$$

Where   n   =   Desired sample size

N   =   Population of the study

e   =   precision of sampling error (0.05)

Where: N   =   800 participants

Thus:

$$n = \frac{800}{1 + 800(0.05)^2} = \frac{800}{1+2} = \frac{800}{3}$$

$$n = 267$$

Therefore the total sample size for this study is 267 staff of the four selected telecommunication companies in Rivers and Bayelsa states in Nigeria.

In sampling, emphasis is however placed on representativeness and given the characteristics of the population and the possibility of heterogeneity due to relative features such as administrative systems and leadership; the sample was proportionately distributed to allow for adequacy in representativeness and population modelling. Therefore the following formula illustrates the proportionate distribution of the sample sizes in accordance with the target telecommunication firms:

$$Cn = \frac{CN(n)}{N}$$

Where Cn = estimated sample size per telecommunication firm

CN = Total population per company

N= Total population of the study

n = Sample size of the study

The study adopted the simple random sampling method in the selection of the participants for the study (Bryman & Bell, 2003; Sarantakos, 2005).

Table 2: Proportionate sampling table

List of Organizations	Population	Sample
MTN (Rivers and Bayelsa States - 5)	352	118
Globacom (Rivers and Bayelsa States - 5)	225	75
Airtel (Rivers and Bayelsa States - 4)	142	47
Etisalat (Rivers and Bayelsa States - 2)	81	27
Total = 16 telecommunication firms	**800**	**267**

Structured (closed-ended) questionnaire was used for primary data collection. The questionnaire was designed as follows: First, the demographic data which is considered as being discrete in nature and scaled on the nominal (e.g. gender, type of organization) and ordinal (e.g. age, qualification, years of experience), second, the data on the variables of the study (Quality Circle and organizational citizenship behaviour,) which are considered as continuous and scaled on the 5 – point Likert type scale.

Quality Circle is the predictor variable of this study and its dimensions are adapted from the studies of Holland et al, (2011). It was further scaled on a 5 – item instrument. **Organizational citizenship behaviour** is the criterion variable for this study and its measures are adapted from the study of organ (1988) cited in Podaskoff et al (2000). It is operationalized using three dimensions – altruism, courtesy and conscientiousness. Each of the measures is also scaled on 5 – item instruments.

The Cronbach alpha coefficient was used for determining instrument reliability and the instrument was vetted by faculty experts for validity. Data were presented with the use of frequencies and percentage distributions for the demographic data illustrated through charts and contingency tables. Analysis involved the univariate properties of the variables and involved data distribution assessments through the use of measures of central tendencies (mean) and dispersion (standard deviation). The bivariate (test for hypothetical statements) was done through the Spearman's rank order correlation coefficient. All quantitative analysis were undertaken through the application of the Statistical Package for the Social Sciences (SPSS).

4. Results

4.1 Demographic Data Analysis

This section of the study aims at presenting the results from the data analysis for the demographic data of the study. The data in this section is discrete in nature and is concerned with the frequency and categorical distribution of the participants based on specified demographic characteristics such as gender, marital status, qualification, years of experience and age.
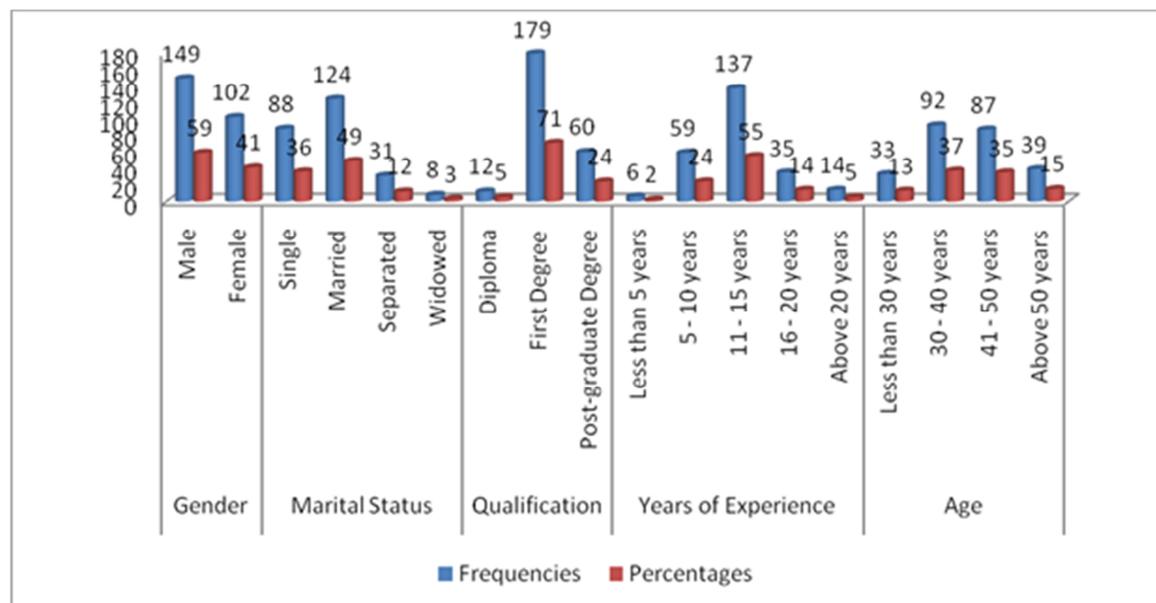

Figure:1 Demographic Distribution for the study

4.2 Univariate Analysis

This section presents the results for the analysis on the distribution of the variables of the study. The scaling adopted is multi-item scale (5 indicators each) on the 5 – point Likert scale and hence interpretations which follow the summarization based on central tendencies and standard deviation values (mean and standard deviation). Given the adopted scale, a benchmark and mid-point value of 2.5 is adopted in ascertaining levels of

affirmation to the indicators (where x > 2.5) or instances where participants on the average do not consider the variable as being significant or substantial in their organizations (where x <2.5).

Table 3: Descriptive statistics for the indicators of the dimensions of Quality Circle

Dimensions of Predictor	Indicators of Dimensions	Mean (x)	Standard Deviation
Quality Circles	Some workers belong to a project team/quality circle in this company	4.1275	.97143
	Members of team/circle meet regularly to identify and solve work related problems	4.0996	.91326
	This company implements certain suggestions for improvement advocated by quality circles	4.1195	.87273
	Quality circles have made notable and worthwhile contributions to the company	4.1594	.92439
	Quality circles in the organization are recognized and their efforts appreciated by management	4.1195	.92610

Source: Survey data, 2018

The distribution for the quality circle as presented in table 3 suggests that "Quality circles have made notable and worthwhile contributions to the company" with a high mean value of x = 4.1594 implying that majority of the participants significantly affirm to this indicator and hold it to be true.

Table 4: Descriptive statistics for the dimensions of Employee Voice

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Team	251	1.20	5.00	4.1004	.80565	-2.125	.154	4.371	.306
Quality	251	1.20	5.00	4.1251	.71608	-1.763	.154	2.875	.306
Valid N (listwise)	251								

Source: Survey data, 2018

The evidence presented in table 4 reveals that quality circles is significant in its manifestation within the target organizations with a mean value of (x) = 4.1251.

Organizational citizenship behaviour: This is considered the criterion variable for this study and is operationalized using three measures, namely: Altruism, courtesy and conscientiousness. Its measures are also scaled on a multi-item scale which is further ranked on the 5-point Likert type scale. Consequently, the x = 2.5 mid-point is also adopted in ascertaining significant levels of manifestation (where x > 2.5) and insignificant levels of manifestation (where x < 2.5).

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Table 5: Descriptive statistics for the indicators of the measures of Organizational Citizenship Behaviour

Measures of Criterion	Indicators of Measures	Mean (x)	Standard Deviation
Altruism	I have helped a colleague with arrangements at the workplace	4.1195	.87273
	I have allowed someone to go ahead of me in a line-up (at photocopy machine)	4.1594	.92439
	I have pointed out a colleague's error during the discharge of duty	4.0478	.98270
	I have helped a worker who I did not know that well with an assignment when my knowledge was greater than his or hers	4.1076	.97999
	I accept criticism and guidance from my supervisor with an open mind.	4.1076	.82485
Courtesy	I adjust work schedule to accommodate other employees' requests for time off.	4.1315	.93094
	I show genuine concern toward co-workers, even under the most trying business or personal situations.	4.1474	.94983
	I Offer ideas to improve the functioning of the organization.	4.1434	.95674
	I am polite in relationship with colleagues and superiors	4.0757	.89345
	I maintain cordial relations with colleagues at the workplace	4.1275	.96316
Conscientiousness	I rarely take long lunches or breaks.	4.0956	.85254
	I do not take unnecessary time off work.	4.1753	.96806
	I do not take extra breaks.	4.1155	.89811
	My attendance at work is above the norm	4.1673	.92298
	I obey company rules and regulations even when no one is watching.	4.1076	.89464

Source: Survey data, 2018

Table 5 presents evidence on the data distribution for the measures of organizational citizenship behaviour which is the criterion variable of the study. The results indicate that all indicators for the four measures, altruism, sportsmanship, courtesy and conscientiousness are significantly manifested in the examined organizations and affirmed by the majority to be substantial in their experiences and interpersonal relations. This is as the mean coefficients for the four measures are observed to be above the adopted affirmation benchmark of a mid-point of $x = 2.5$. It was revealed that the highest mean value is on the conscientiousness indicator "I do not take unnecessary time off work" where $x = 4.1753$ and the lowest mean value is on the altruism indicator "I have pointed out a colleague's error during the discharge of duty" where $x = 4.0478$. The evidence from the analysis reveals that all four dimensions are relatively affirmed by the majority of the participants of the study to be well manifested and to also hold significant implications for the relationships within the examined organizations.

Table 6: Descriptive statistics for the measures of Organizational Citizenship Behaviour

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Altruism	251	1.00	5.00	4.1028	.85292	-2.283	.154	5.210	.306
Courtesy	251	1.20	5.00	4.1251	.83530	-2.409	.154	5.401	.306
Conscient	251	1.20	5.00	4.1323	.81488	-2.280	.154	5.436	.306
Valid N (listwise)	251								

Source: Survey data, 2018

The result for the summary descriptive analysis on the measures of the criterion variable is presented in Table 6 with all four measures having substantial mean values which can be considered as significant and surpassing the adopted benchmark of $x = 2.5$. The result is based on the summarization of the central tendencies of the indicators for each measure and presents the summary distribution for each of the measures. Conscientious is observed to have the highest mean coefficient at $(x) = 4.1323$ implying that most of the participants of the study believe and affirm to behaving conscientiously towards their superiors and co-workers in the organization, while

the measure with the lowest mean coefficient is Sportsmanship with a mean coefficient of (x) = 4.1004 which is also nonetheless highly significant given the adopted mean benchmark of x > 2.5 for significant levels of affirmation or agreement to the manifestations of the variable.

4.3 Bivariate Analysis

Decision Rule for Tests: The decision rule for this study with regards the tests for correlation between the variables of the study is based on the adoption of the 0.05 level of significance. The Probability (P) value is adopted herein as the criterion value for the acceptance or rejection of the null hypotheses of the study, hence, where P > 0.05 the null hypothesis is accepted and considered as true with regards to the nature of the relationship between the variables, and where P < 0.05, the null hypothesis is considered as false and is rejected based on the lack of statistical evidence to prove otherwise. Each test is considered as non-directional (based on the statement of the hypotheses) and thus interpretations do not consider the direction of the relationship, rather, emphasis is placed on the significance and strength of the relationships.

Quality Circle and Organizational Citizenship Behaviour: This relationship is examined based on three null hypothetical statements stated previously:

Table 7: Quality circles and organizational citizenship behavior

			Quality	Altruism	Sports	Courtesy	Conscient
Spearman's rho	Quality	Correlation Coefficient	1.000	.773**	.661**	.555**	.738**
		Sig. (2-tailed)	.	.000	.000	.000	.000
		N	251	251	251	251	251
	Altruism	Correlation Coefficient	.773**	1.000	.696**	.751**	.789**
		Sig. (2-tailed)	.000	.	.000	.000	.000
		N	251	251	251	251	251
	Courtesy	Correlation Coefficient	.555**	.751**	.677**	1.000	.661**
		Sig. (2-tailed)	.000	.000	.000	.	.000
		N	251	251	251	251	251
	Conscient	Correlation Coefficient	.738**	.789**	.783**	.661**	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.
		N	251	251	251	251	251

Source: Survey data, 2018

The relationship between quality circle and altruism: The tests for the relationship between quality circle and altruism is revealed to be significant at a P < 0.05 value where P = 0.00 and rho = 0.773. The evidence of the analysis reveals that quality circle is significantly associated with altruism and therefore can be considered as having significant implications for outcomes of altruism within the examined organizations of the study. Given this result, the null hypothesis of no significant relationship between the variables is therefore rejected as evidence supports significant levels of association. Hence, the results reveal that there is a significant relationship between quality circles and altruism.

The relationship between quality circle and courtesy: The tests for the association between quality circle and courtesy is revealed to be significant at a P < 0.05 value where P = 0.00 and rho = 0.555. The result of the analysis indicates that quality circle is significantly associated and influences practices and behaviour considered as reflecting courtesy in the examined organizations. Based on the results obtained from the analysis, the null hypothesis of no significant relationship between the variables is therefore rejected as evidence supports significant levels of association. Therefore, the result supports the position that there is a significant relationship between quality circle and courtesy.

The relationship between quality circle and conscientiousness: The analysis on the relationship between quality circle and conscientiousness is revealed to be significant at a P < 0.05 value where P = 0.000 and rho = 0.783. The result of the analysis indicates that quality circle is significantly associated and contributes to the manifestations of conscientiousness within the examined organizations of the study. Based on the evidence generated from the analysis, the null hypothesis of no significant relationship between the variables is therefore rejected as evidence supports significant levels of correlation between quality circles and conscientiousness. Hence, based on the result, there is a significant relationship between quality circles and conscientiousness.

4.4 Discussion

Quality Circles and Organizational Citizenship Behaviour

The analysis on the relationship between quality circles and organizational citizenship behaviour is revealed to be significant. This is as the evidence from the analysis reveals that quality circle significantly enhances organizational citizenship behaviour measures such as altruism, courtesy and conscientiousness. The finding suggests that quality circle plays an integral role within the framework of organizations and assists top management with issues such as the generation of ideas as well as creative approaches towards problem solving. This observation supports the assertion of Beaumont and Hunter (2005) that quality circles form a core process and forum within the organization and have been used primarily with blue-collar production employees. However, as Beaumont and Hunter (2005) opine, the production sphere encompasses a large quantity of employees who can be considered as being service oriented and who may also benefit from the utilization of this technique.

This is as the authors (Beaumont & Hunter, 2005) further argue that service quality circle forums tend to encounter and are more often faced with additional challenges as compared to those in manufacturing organizations due to the intangible nature of most quality circle objectives and projects. Nonetheless, it was argued, as also evidenced by the facts of this study that quality circles facilitate much more than just innovation, creativity and the harnessing of expert opinions but also enhance workers sense of duty to their organization and reassures them of their membership of these organization as such they are more inclined to exhibiting citizenship behaviours, hence despite the inherent or identified complexities, quality circles in service organizations should not be discouraged, rather, it is important that these organizations (service especially with regards to the telecommunication firms of which this study is interested) realize the benefits associated with a well-managed and coordinated quality circle program or forum .

In addition to the performance advantages the organization stands to benefit as a result of quality circles, there are also cognitive and motivational benefits which may accrue from the improved hierarchical and lateral levels of exchange and goal-setting processes based on mutual agreement, as well as the group process itself. Tortorich et al (1981) also observed that quality circles enhanced interpersonal relations within the organization. In his study which was based at Martin Marietta Aerospace, he observed that participation in quality circles had a significant and positive effect on employee attitudes towards their jobs, their supervisors, and their peers in the workplace. Similarly, Alexander (1981) put forward certain reasons which may be considered as imperative for the success or effectiveness of quality circles, this include: commitment to workers development, trust, and commitment to quality, communication, organizational support, patience, training and development, a focus on goals and objectives, strong policies and systems, as well as shared responsibilities.

The findings of this study corroborate the positions and assertions of Tortorich et al (1981) and Alexander et al (1981) on the effect of quality circles on the attitude and behaviour of employees within the organization. The implications of the findings of this relationship suggest that activities such as quality circles provide for the generation of ideas, grant workers meaning in their jobs and role expectations, and also provide them with a sense of responsibility towards the organization as a whole, hence it significantly enhances workers citizenship behaviour with regards to altruism, courtesy and conscientiousness.

As a result of the findings, this study affirms as follows:

1. Quality circles provide the framework through which workers can contribute towards decision making and as such become fostered with responsibility towards the organization, thereby enhancing altruism
2. Quality circles allow for collaboration and cooperation between management and junior staff and as such promotes workers courtesy
3. Quality circles enable workers a platform for relevance within the organization and thereby facilitates feelings of conscientiousness.

4.5 Conclusion

Quality circle is significantly associated with the organizational citizenship behaviour of workers in telecommunication firms in Rivers and Bayelsa State. This implies that when there are functional quality circles in the organization, employees would be naturally poised to exhibit citizenship behavior.

4.6 Theoretical Implications

The implications of this assertion is that by identifying quality circle as a significant antecedent to organizational behaviour, the study affirms and offers factual support for the positions of previous studies (Wolf and Zwick, 2008; Harrison and Freeman 2004). The position of the study goes to validate and corroborate the views of Dundon et al. (2004) and Jones et al., (2010) that quality circles are critical and sensitive issue within today's organizations, and also impacts significantly on the attitudes and behaviour of workers, especially in service organizations.

Furthermore, in line with the observed relationship between the variables and the extent to which quality circle associates with organizational citizenship behaviour, the findings of this study further validates the theoretical framework (social exchange theory) within which it is premised. This is as the evidence provides facts which affirm workers willingness and readiness to engage and express behaviour which can be considered as desired or favourable to the organization based on their observed or experienced feelings of management support, recognition and opportunity for involvement in the decision making activities of the organization. This is considered as the crux of the exchange theory which according to (Cropanzano & Mitchell, 2005) forms the premise for the argument of reciprocity.

4.7 Practical Implications

Based on the assertions and theoretical position of this study, with regards to the role of quality circle as a significant antecedent of organizational citizenship behaviour, the implications follow that quality circle is an imperative and yields considerable effect on the behaviour of workers within organizations. The position of the study presents managers and other related professional personnel managers with evidence based assertions which identify quality circles as desirable platform for effective interactions and decision making within the organization and, secondly, presents it as being a prerequisite for the manifestations of organizational citizenship behaviour within the work environment.

The implications also follow that quality circles can be affirmed as being advantageous to the organization and also as being the bedrock for the generation and stimulation of innovative ideas and information which can further be utilized especially at such a time when the organization is facing challenges of adaptation and where there is the need to draw from its availability of internal resource pool. This is in line with Wood and Menezes's (1998) argument that the knowledge and practical experiences of some of the experienced and exposed workers within the organization can be used to leverage some of the challenges affecting the organization.

4.8 Recommendations

The following recommendations are premised on the evidence presented by the findings of the study and the conclusions drawn thereof, they are as follows:

i. Managers should encourage the stimulation and pooling of ideas through collaborative team work such as availed by quality circles as this would go a long way in providing management with a diverse innovative approaches and would also endear within the workers feelings of placement within the organization and thus enhancing their citizenship behaviour towards co-workers and the organization as a whole.

ii. Management should allow and encourage suggestions from their staff and junior workers especially when its task related and related to decision-making which would affect the techniques, procedures and processes of work. This medium would allow for inclusivity even at the lowest level of the organization, thereby impacting on workers perceptions of relevance, recognition and placement. This would promote a sense of duty to the organization and further enhance the organizational citizenship behaviour of the workers

iii. Managers should incorporate and establish policies and frameworks which should serve to guide and streamline the activities related to quality circle and thus provide such processes with consistency, credibility and legitimacy, such that they become valid and accepted referent mediums and therefore provide the platform through which management and subordinates can effectively collaborate and cooperate in decision making and other related work issues.

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