PERSONALITY AS A PREDICTOR OF PERFORMANCE FOR CUSTOMER SERVICE CENTRE AGENTS IN THE BANKING INDUSTRY

by

Linda Blignaut

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SUPERVISOR: Dr. Leona Ungerer

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DECLARATION

I, Linda Blignaut, student number 32474482, declare that this dissertation, **"Personality as a predictor of performance for customer service centre agents in the banking industry"** is my own work, and that all the sources that I have used or have quoted from have been indicated and acknowledged by means of complete references.

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SUMMARY

This dissertation focused on identifying personality traits, as measured by the Occupational Personality Questionnaire 32 (OPQ32r) that may act as job performance predictors for customer service centre (CSC) agents in the banking industry. The purpose of this research was to determine whether there are relationships between certain personality traits of customer service centre agents and their job performance. Purposeful sampling was used to involve the entire agent base as participants (N=89). A quantitative empirical study was conducted in which the relationship between the independent variable (personality) and dependent variable (job performance) was investigated. Several personality traits that predicted job performance were identified. Identifying the personality characteristics of individuals who are successful in a CSC environment should aid organisations in creating a better/suitable fit between employees and the requirements of such an environment, thereby improving organisational outcomes. This research adds to current literature gaps in establishing the relationship between personality traits and performance in the context of a customer relations management call centre environment.

KEY TERMS

Personality, Personnel Psychology; recruitment; customer service, customer service centre, call centre, Occupational Personality Questionnaire 32 (OPQ32r), banking industry.

CHAPTER 1. SCIENTIFIC ORIENTATION TO THE RESEARCH

This study focused on identifying personality traits that can act as predictors of performance for customer service centre agents in the banking industry. Chapter 1 describes the background to and rationale for the study, problem statement, purpose, paradigm perspective, research design and methodology as well as the chapter layout.

1.1   BACKGROUND AND MOTIVATION

The world of business is changing rapidly – advances in technology, communications, electronics and the use of data have contributed to the globalisation of industries and the organisation of their clients. Survival in the new global business market calls for improved productivity and increased competition. Due to the market participants becoming global competitors, companies in various industries have to upgrade their products and use technology skilfully in order to face increased competition (Conversi, 2010). Customer service, especially aspects of customer base growth and retention, is currently promoted as a key ingredient to differentiate between organisations, and their increased competitiveness. Customer service is not limited to how companies offer products and services, but more specifically focuses on how products are supported after being sold to customers.

The above applies particularly to the banking industry as banks in essence offer similar products and services. Banks borrow money from clients, lend money to clients and provide almost all payment services for clients. It could be argued that the nature of the banking industry is service oriented and depends on human resources. This nature forced bank management to be very aware about achieving a high level of quality, on-time delivery, customer satisfaction and loyalty, employee satisfaction and loyalty in the changing business environment (Fakhri, Menacere & Pegum, 2011). Profitable growth of a bank can be constrained by external factors such as the economic environment, target markets and industry structure as well as internal factors such as branch network, technology and managerial capability for innovation and differentiation, marketing and customer relationships (Roy, 2011).

Call centres have emerged as one response to the changing world of business and the need to improve efficiency and customer service delivery. These centres offer versatility and present a means to provide quick and efficient service. Call centres aid customer service delivery and assist in consolidating customer service business operations (Zapf, Isic, Bechtoldt & Blau, 2003).

Bodin and Dawson (1999) describe call centres as places where calls are placed or received in high volume for the purpose of sales, marketing, customer service, telemarketing, technical support, and other specialised business activities. Call centres have become the central focus of many companies, as these centres stay in direct contact with the customers. Call centres are of two basic types: inbound call centres, where customers call in for service, and outbound call centres, where agents from contact centres call customers to offer services. Call centres not only offer phone-based support, but also support through online chat, SMS and e-mail (Subramaniam, 2008). They are found in most industries and include help desks, reservations desks, service centres and telemarketing bureaus.

Call centres are growing at an unprecedented rate and have become an integral part of most companies' marketing and customer service strategies (Gilson & Khandelwal, 2005; Subramaniam, 2008). The rapid increase of call centres has been accompanied, however, by a significant challenge in attracting and retaining suitable employees to work in the centres (Mahesh & Kasturi, 2006). This area particularly requires investigation because customers' perception of a company is often determined by the quality of their interaction with the company's frontline employees such as those in call centres (Mattila & Mount, 2003; Subramaniam, 2008).

Although many positions involve interaction with customers either face-to-face or telephonically, call centre agents face several unique job demands (Sawyer, Srinivas & Wang, 2009). One of these demands is the use of technology to determine the pace and volume of work in a call centre work environment (Houlihan, 2001). To a large extent, this technology-driven system also allows extensive monitoring of employee performance (Hutchinson, Purcell, & Kinnie, 2000; Subramaniam, 2008). Another quite unique requirement in most call centres is direct two-way interactions between employees and clients rather than teamwork

among groups of employees. The exchanges between employees and customers in a call centre are also highly scripted and there is no face-to-face interaction between the parties, which may result in call centre agents experiencing low levels of perceived job control (Varca, 2001).

Previous research on call centres has focused mainly on macro issues such as organisational structure and employee training and development strategies (Callaghan & Thompson, 2001, 2002; Houlihan, 2000; Sawyer et al., 2009). Micro issues such as the stress and burnout that result from call centre work have also received considerable attention (Houlihan, 2000; Knights & McCabe, 1998; Taylor & Bain, 2001; Sawyer et al., 2009). An area of research related to call centre work that has received scant attention is the relationship between the individual characteristics of call centre agents (for instance, their personality traits) and their job performance (Sawyer et al., 2009).

As indicated above, each contact with a customer by a call centre agent is of the utmost importance and could affect the manner in which a customer perceives the organisation, as customers often have little else on which to tangibly judge the organisation. It is therefore imperative to identify the relevant selection criteria to distinguish successful call centre agents. Achieving this could assist organisations in creating a better fit between employees and the requirements of the call centre environment.

Bain and Taylor (2000) point out that scant attention has been paid in existing research to identifying suitable selection criteria for call centre agents. In order to develop valid selection criteria for identifying successful call centre agents, the characteristics of those employees who are likely to be high performers and who would persevere in call centre environments need to be identified. These authors also suggested that investigating the role of personality factors in predicting the service performance and also the attendance and turnover rates of call centre agents could be of particular relevance.

The main responsibility of call centre agents in the banking industry is answering client calls and transferring them to various product or service desks. The call centre team leader or supervisor tends to be the most knowledgeable about the particular bank's products. These

team leaders manage the agents' performance based on the call duration time logged and how efficient each agent was in dealing with call requirements within the shortest time possible.

A call centre generally functions as an independent unit, separated from the business. The traditional call centre role has however lately been shifting from being an independent unit to becoming a strategic business unit called a contact centre (Merchants, 2006). Contact centres generate value by building relationships with customers, driving business processes, promoting the image of a company, and brand building (Adria & Chowdhury, 2004; Ashworth, 2003; Holland, 2003). The top strategic issues for contact centres are currently customer satisfaction, quality/process improvements, and technology strategy (Merchants, 2006). Contact centres have become important in modern organisations, responding to inbound requests and performing outbound sales and marketing over multiple channels. Contact centres often function as the sole point of contact between the organisation and its stakeholders, mainly customers, playing a vital role in influencing customers' experience and promoting the company culture (Merchants, 2006).

The organisation, in which this study was undertaken, forms part of one of the four largest banking groups in South Africa. The particular banking group offers a wide range of wholesale and retail banking services through three main business clusters. The organisation focuses on Southern Africa and is positioned as a "bank for all" – both from a retail and wholesale banking perspective. The principal services offered by this banking group comprise business, corporate and retail banking, property finance, investment banking, private banking, foreign exchange, and securities trading through a regional network located throughout South Africa, as well as facilities in other Southern African countries.

As far as could be determined, this banking group is currently the only known South African bank to have made the transition from a call centre to a contact centre or as termed in the organisation, a customer service centre (CSC). There are several differences between a CSC and a conventional call centre. Staff in a CSC is divided into client segment teams which respond to incoming calls and e-mails. Each team offers technical information, solutions and support on a number of products, such as internet banking, to their particular client segment. Client segments are determined by categorising clients according to their annual expenditure

with the banking group.

The CSC agents assist clients at two help desks. The outputs of these help desks are identical, but agents at help desk 2 assist the top 50 clients of the bank and agents at this desk are regarded as the senior CSC agents. Agents are initially appointed to assist clients at help desk 1 and need to be promoted to assist the top 50 clients of the bank at help desk 2. This is due to the differing levels of difficulty of the tasks performed by the agents at the two desks. In a CSC calls are not transferred to other product or service desks as one would encounter in a call centre. A CSC offers a one-stop or a one-contact experience to clients and the client's problem or request should be resolved during one interaction. This is also called first-call resolution and has been adopted by the contact centre industry as a key performance indicator, representing efficiency and competence in satisfying inbound customer requests (Merchants, 2006). Instead of using the call duration recorded and how efficient an agent was in dealing with the call requirements within the shortest possible time, CSC team leaders uses a client's experience in terms of satisfactory problem or query resolution as a measure of the agent's success.

The CSC forms an integral part of the particular banking group's business. It exclusively caters for the needs of the Business and Corporate cluster clients whose annual turnover within the bank is over R 5 million. This turnover can reach into the billions of Rands, indicating how important these clients are to this banking group. The CSC deals with highly important client segments and therefore plays an essential role in the bank's customer retention strategy and reputation. Selecting the most suitable candidates as CSC agents is therefore essential.

In 2009, the CSC staff turnover rate was 28.9% and in 2010 the turnover rate dropped slightly to 26.3%. According to Barnes (2001), the high turnover rate that is endemic in the call centre industry has been exacerbated by the recruitment of staff with the wrong personality type or whose personality types do not meet the job requirements. O'Hara (2001) emphasised further that the selection of suitable staff or staff whose personality types meet particular job requirements, can potentially reduce absenteeism and turnover rates, and is positively related to efficient service delivery. Improved selection strategies are therefore needed to choose the

most suitable candidates for customer service positions. Phelps (2002) maintained that the most suitable or relevant selection instruments will assist in this process.

Practically speaking, the primary objective of job selection is to predict the candidate's job performance. Various selection instruments for selection are currently available, ranging from structured interviews and assessment centres to psychological tests. Psychological tests are a measure or procedure in which a sample of an examinee's behaviour in a specific domain is obtained, evaluated and scored using a standardised process (Society for Industrial and Organisational Psychology of SA [SIOPSA], 2005). Psychological tests serve as a technique or measuring device to quantify behaviour or to understand the prediction thereof (Kaplan & Saccuzzo, 2001).

According to SIOPSA (2005), the essential principle in evaluating any selection procedure is the gathering of evidence to support an assumption of job relatedness. This is also a requirement of the Employment Equity Act (EEA), 55 of 1998. Job relatedness is demonstrated when evidence supports the accuracy of inferences made from scores on, or evaluations derived from, those procedures with regard to an aspect of work behaviour. The tests used therefore need to be valid. Validity is defined as the degree to which accumulated evidence (research) and theory support specific interpretations of scores from a selection procedure entailed by the proposed use of that selection procedure (SIOPSA, 2005). Despite this requirement, researchers often fail to pay attention to the predictive validity of the instruments they use. Although they are frequently used, limited research appears to have been undertaken to establish the validity of most personality instruments or measures that are used in the South Africa, especially in the call centre or customer service centre environment.

The organisation, in which this study was undertaken, currently uses the Occupational Personality Questionnaire 32r (OPQ32r) and a structured interview as part of its selection process for CSC agents. No research has yet been done within this organisation and specifically within its CSC to establish whether there is a relationship between the dimensions measured by the OPQ32r and the job performance of CSC agents.

The identification of the personality traits of individuals who are successful in the CSC environment may assist the organisation to create an enhanced fit between CSC agents and the requirements of their work. This, in turn, may improve organisational outcomes through improving the quality of its customer service to major clients and reducing the financial and human resource costs associated with poor service performance, poor attendance rates, high turnover rates and the cost of ineffective assessments. The use of a personality assessment instrument, such as the OPQ32r that has been validated to predict job performance, may particularly provide a positive and measurable return on investment to the organisation.

Research has found a significant relationship between personality and job performance in various industries (see Chapter 2). Although some research on this relationship has been conducted within the call centre environment, no published research on this relationship could be found for CSCs within the banking industry in South Africa. According to Sawyer et al. (2009), further research is needed to establish the relationship between personality factors and performance in the context of a customer relations management call centre environment. Huysamen (2002) maintains that ongoing research on assessment tools within the South African context is necessary. This research therefore examines the following research question: Which personality traits can predict job performance for CSC agents?

1.2   PROBLEM STATEMENT

As indicated above, contact centres play a vital role in influencing customers' experience and promoting the company culture (Merchants, 2006). Each contact with a customer by a call centre agent is of the utmost importance and could affect the manner in which a customer perceives the organisation, as customers often have little else on which to tangibly judge the organisation. The CSC deals with highly important client segments and therefore plays an essential role in the bank's customer retention strategy and reputation. Selecting the most suitable candidates as CSC agents is essential. O'Hara (2001) also stated that the development of valid selection criteria for successful contact centre agents is positively related to efficient service delivery. It is therefore imperative to identify the relevant selection criteria to distinguish successful call centre agents. Achieving this could assist organisations in creating a better fit between employees and the requirements of the call centre environment.

An area of research related to call centre work that has received scant attention is the relationship between the individual characteristics of call centre agents (for instance, their personality traits) and their job performance (Sawyer et al., 2009). Bain and Taylor (2000) also point out that scant attention has been paid in existing research to identifying suitable selection criteria for call centre agents. In order to develop valid selection criteria for identifying successful call centre agents, the characteristics of those employees who are likely to be high performers and who would persevere in call centre environments need to be identified. These authors also suggested that investigating the role of personality factors in predicting the service performance and also the attendance and turnover rates of call centre agents could be of particular relevance. As far as could be determined, little research has been done on the relationship between agents' personality traits and their job performance in the context of a customer relations management call centre environment. Furthermore, no published research on this relationship could be determined for a CSC within the banking industry in South Africa.

To address the above issues, this research was designed to answer the following literature and empirical questions:

1.3   AIMS

The general aim of this study was to determine whether personality traits of CSC agents are related to their job performance, and consequently, whether these personality traits can be used to predict job performance in this context. In order to achieve this general aim, the study aimed to answer the following question: Which personality traits can predict job performance for CSC agents?

Accordingly, the researcher conducted a literature review in order to conceptualise
- The variables and the relationships between the variables (personality traits and job performance in a CSC environment) from the literature.
- The role of personality in predicting work performance from the literature.

The aims of the empirical study were to

- Determine the relationship between personality traits and job performance.
- Determine whether it is justified to combine the data obtained from help desk 1 and help desk 2 in order to determine the relationship between personality and the performance variables.
- Evaluate the use of personality as a predictor of job performance.

1.4   PARADIGM PERSPECTIVE

The theoretical framework, as distinct from a theory, is sometimes referred to as the paradigm and influences the way knowledge is studied and interpreted. The choice of paradigm sets the intent, motivation and expectations for research (Bogdan & Biklen, 1998; Mertens, 2005).

This study was conducted within the discipline of Industrial Psychology, which applies psychological concepts and methods to optimise human potential in the workplace. It focused specifically on the subfield of Personnel Psychology, which according to the Society for Industrial and Organisational Psychology deals with job analysis, defining and measuring job performance, performance appraisal, tests, employment interviews, and employee selection and training (siop.org).

Logical positivism was selected as the paradigm for the study. Positivism was developed by Auguste Comte in the 19th century and holds that reality can be understood objectively and data (facts) should be separated from the theories that explain them (interpretations). Positivism argues that the one true knowledge is scientific knowledge, which can be gained from observed facts and experiences (Mertens, 2005; Suppe, 1999). It is assumed that there is one reality that everyone can view in the same way, or that there is a single answer to a posed question, although the answer may be composed of different variables. By the 1920s logical positivism emerged. It represented a more radical empiricism that stressed the principle of verification. Logical positivists dismissed arguments as metaphysical unless they could be verified on the basis of convention or with reference to empirical phenomena (Suppe, 1999). Positivistic research methods tend to be quantitative (Mertens, 2005; Suppe, 1999).

The research methodology was based mainly on ipsative and induction methods. In psychology, nomothetic measures are contrasted to ipsative measures. Nomothetic measures are measures that can be taken directly by an outside observer, such as a person's weight or how many times a particular behaviour occurs, whereas ipsative measures are self-reports such as a rank-ordered list of preferences (Blackburn, 2008). Personality and its dimensions usually are measured by means of self-report questionnaires.

In inductive methods specific observations are initially measured, after which patterns and regularities are detected. Some tentative hypotheses are formulated that can be explored, and finally some general conclusions or theories are developed (Trochim, 2006). The researcher utilised these two research methods to select the measurement instruments for this study.

In this study, the integration of aspects of personality and performance in the organisation was undertaken by means of systems theory. Systems theory is an interdisciplinary field of science and the study of the nature of complex systems in nature, society, and science. Systems theory further serves as a framework by which one can analyse and/or describe any group of objects that work together to produce some result. This could be a single organism, any organisation or society, or any electro-mechanical or informational artefact (Bale, 1995).

1.5   RESEARCH DESIGN

The research approach, method, participants, measuring instruments, procedure and statistical analysis were planned as follows.

1.5.1   Research approach

The researcher undertook a descriptive study in order to accurately describe the relationships between the independent variables (personality traits) and the dependent variable (job performance).

The independent variable refers to the antecedent phenomenon, while the dependent variable relates to the consequent phenomenon. The hypothesis created in the research consists either

of a suggested explanation for a phenomenon (an event that is observable), or of a reasoned proposal suggesting a possible correlation between multiple phenomena (Christensen, 1994).

An explorative literature review provided a theoretical basis to facilitate an understanding of the problem and the research (Christensen, 1994). The hypothesis was tested by measuring the variables and by statistically analysing the results.

The research problem and aims gave rise to the following research hypothesis for this study:

The personality traits of CSC agents are predictors of their job performance.

The research hypothesis led to the formulation of the following statistical hypothesis:

H_0: There are no statistically significant relationships between personality traits and job performance.

H_1: There are statistically significant relationships between personality traits and job performance.

1.5.2   Research method

The study was non-experimental research. It entailed a quantitative empirical study in which the relationship between the independent variable (personality) and dependent variable (job performance) was investigated. Quantitative research entails the collection of some type of numerical data to answer a given research question. As mentioned in 1.4 personality is normally measured with a self-report questionnaire, making the quantitative approach suitable for this study. Statistical analysis is then used to interpret the data (Christensen, 1994).

In experimental research, variables are manipulated and their effects upon other variables observed. This generally involves control groups. A non-experimental research design was chosen for this study as it involves research in which the researcher neither alters nor controls the research setting. These designs are also sometimes known as correlational, passive, non-interactive, naturalistic, and observational research designs. In non-experimental studies, independent variables are often called predictor variables and dependent variables are often

called criterion variables (Christensen, 1994).

In accordance with proper psychometric practice, the researcher attempted to limit distortion or faking among participants to the study. The researcher is an accredited and experienced test and OPQ administrator (SHL, 2005), which contributed to the reliability and validity of this process as OPQ accreditation ensures adherence to strict test administration guidelines. Furthermore, the OPQ32r (see section 1.5.4) has been found to have acceptable psychometric properties.

1.5.3   Research participants

This study focused on the individual as the unit of analysis. Landman (1988) points out that, when a sample does not truly represent the population (universe) from which it is drawn, the sample is considered to be biased. In this study, employees in a CSC environment represented the entire population since the CSC approach is still rather unique in the South African banking industry.

Sampling is the use of a subset of the population to represent the whole population (Black, 2009, pp.5-6). Probability sampling, or random sampling, is a sampling technique in which the probability of getting any particular sample may be calculated. Non probability sampling techniques cannot be used to infer from the sample to the general population (Black, 2009). Purposive sampling was used in this study as the organisation's entire CSC agent base, consisting of 89 CSC agents, served as the sample. The CSC agents assist clients at two help desks in the CSC with 41 participants from help desk 1 and 48 participants from help desk 2.

The ages of the participants ranged between 20 and 57 years with a mean age of 27 years and a standard deviation of 5.80 years. All the participants in the total sample were English proficient and 36% reported English as their home language. Most participants (98%) had obtained a Grade 12 or higher qualification and more than half (57%) the sample was female. The race breakdown of the sample included African (52%), Coloured (14%), Indian (21%) and White (2%). The mean total work experience of the sample was 5.91 years and their mean length of service in their current role was 1.66 years. Upon joining the CSC, agents are

required to have basic computer literacy, some experience in using the internet to assist with web-based product solution generation and some call centre experience.

The limited sample used in this study may have impacted on the generalisability of findings, but as indicated earlier, the CSC approach is still unique in the South African banking industry. The results should therefore be of interest to most companies concerned with transforming their call centres into CSCs or opening their own CSC.

1.5.4 Measuring instrument

Psychological tests are a measure or procedure in which a sample of an examinee's behaviour in a specific domain is obtained, evaluated and scored using a standardised process (SIOPSA, 2005). Psychological tests also serve as a technique or measuring device to quantify behaviour or understanding the prediction thereof (Kaplan & Saccuzzo, 2001).

The OPQ32r results were used as measure of personality in this study. The OPQ32r provides information on the respondents' preferred behaviour on 32 relevant characteristics and consists of 104 blocks of three statements measuring different traits. For each block respondents have to choose one statement that is most like them and one that is least like them (SHL, 2009). This format is forced choice, which is more robust to biasing effects, and is scored using a multidimensional Item Response Theory (IRT) approach (Brown & Maydeu-Olivares, 2011).

Two further questionnaires based on the OPQ model are also available, namely the OPQ32n (normative scales, using single-stimulus format) and OPQ32i (ipsative scales, using forced-choice format). The OPQ32r is a shortened version of the OPQ32i. It is easier and faster to complete and is in the process of replacing the QPQ32i version completely (SHL, 2009).

Normative scales are favoured in traditional research practices and widely used in personality assessment. However, they are subject to numerous response biases such as acquiescence, leniency and central tendency, halo effects and socially desirable responding. These biases can be a serious threat to validity. The forced-choice format has been shown to successfully

reduce uniform response biases and to produce greater operational validity coefficients (Bartram, 2007; Christiansen, Burns & Montgomery, 2005).

Despite their clear advantages in reducing bias, forced-choice instruments are criticised because their traditional scoring methodology results in ipsative data, certain properties of which pose threats to construct validity and score interpretation as well as other substantial psychometric challenges (Meade, 2004). The OPQ32r enables the recovery of the latent traits underlying the responses, and produces scale scores that are not ipsative, as was the case with the OPQ32i version. The OPQ32r is a forced-choice questionnaire that delivers normative results (SHL, 2009) using multi-dimensional IRT modelling (Brown & Maydeu-Olivares, 2011).

1.5.4.1 Standardisation of the OPQ32r

According to SHL (2009), all previously available OPQ32i population, user and local norms can be used with the OPQ32r. This is because the rank ordering of items performed are expected to be unchanged when one of the items is removed.

SHL (SHL, 2004b) developed South African norms for the OPQ32i for two occupational groups, namely the managerial and professional group (N = 8 234), and the mixed occupational group (N = 17 368). The participants were 50% black and 50% white for the managerial and professional group, and 40% African, 9% Asian, 10% coloured and 40% white for the professional group. Using the existing OPQ32i language and norm group types, 92 norms were updated for the OPQ32r, spanning 24 languages and 37 countries or regions in the United Kingdom (UK), United States (US), China, Europe and South Africa. Twenty one completely new norms were created including South African norms for General Population, and Professional and Managerial. A sample size of 600 or more was set for general work population norms, and 300 or more for specific user norms, such as managerial and professional and graduates. These are in line with the Test Review Criteria of the European Federation of Psychologists Associations.

The ratio of male to female was 60 to 40 for most norm groups, which is representative of OPQ32r applicant data for most language or country versions. If the male to female ratio exceeded 65 to 35, the data was cut down accordingly, unless another ratio was more appropriate for a region or specific sample such as the general work population norm for Saudi Arabia (89 to 11).

Industry sectors were grouped into six overarching industry clusters that showed some differences on OPQ scale scores. These industries were Consulting and Professional Services; Finance and Insurance; Technology and Telecoms; Education, Government, Health, Non-profit (NPO); Consumer Services and Manufacturing, Construction, Transportation and Utilities (SHL, 2011).

In a study of bias no practically significant differences were found between cultural and gender groups in South Africa in terms of cultural and gender bias (SHL, 2001). The sample consisted of 6 058 participants from various industry sectors (65% male, 52% black and 48% white). The ages of the group ranged from 16 to 67 with a mean age of 34.07 years (SD = 10.01). No large practical significant differences were found between the means for black and white participants in terms of race and only two scales approached a medium effect size. The effect sizes ranged between 0.01 – 0.46. Only the scales Rule Following (d = .43) and Decisive (d = .46) obtained effect sizes of higher than 0.40. The black group obtained a higher score on Rule Following and a lower score on Decisive than the white group. Investigating the practical significant differences on the various personality attributes between male and female participants only one scale, Competitive (d = .42), obtained an effect size of higher than 0.40 where the males obtained a slightly higher score. The effect sizes in this case ranged between 0.01 and 0.42.

In an international reliability study, the internal consistency of each OPQ scale was determined by calculating Cronbach's coefficient alpha. The sample consisted of university students from the USA, the UK and the West Indies who completed the questionnaire in paper-and-pencil format (72.2%) as well as electronically (27.8%) to receive a comprehensive feedback report. Among 518 participants, 68.9% were female and 30.3% male (0.8% did not indicate their gender). Their ages ranged from 18 to 55, and the following age groups were

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most strongly represented: 21 – 24 (41%), 18 – 20 (21%) and 25 – 29 (14%). Only 57% of the participants indicated their ethnicity: of these, 36% were white and 48% were black. The alpha coefficients ranged between 0.74 and 0.91 (SHL, 2009).

An international concurrent validity study, using the OPQ32i (a precursor of the OPQ32r) as a predictor of performance in terms of managerial competencies, were conducted. The SHL Inventory of Management Competencies (IMC) was used as the 360-degree tool to obtain performance ratings. The IMC was completed by themselves, managers, colleagues and direct reports, in the appropriate language version. The sample consisted of 853 directors and senior managers who were located across Europe, Asia Pacific, North, Central and South America. The sample consisted of 81% males and 19% females. Their ages ranged between 35 and 60 years, the majority of participants were French nationals and almost all participants had a university level education. In every analysis, comparisons were made between the short IRT-scored OPQ32r and the OPQ32i.

Composite prediction scores were produced for each competency. The OPQ32 traits, that were hypothesised to be predictive of certain types of behaviour, were combined to predict each IMC competency. The scales were identified a priori and added up (without weights) to get to a composite score. Two composite prediction scores were produced for each of the competencies, based on the IRT-scored shortened OPQ and on the traditionally scored OPQ32i. The median correlation of composite personality predictors was 0.32 for the short IRT-scored OPQ and 0.35 for the full ipsative OPQ. Best validities for OPQ32 predictions reach as high as 0.29 (short IRT-scored) and 0.30 (full ipsative) for manager, 0.30 (short IRT-scored) and 0.33 (full ipsative) for colleagues, 0.27 (short IRT-scored) and 0.30 (full ipsative) for direct reports.

Observable competencies such as Action Orientation, Personal Motivation, Leadership, Creativity, Innovation, Interpersonal Sensitivity and Persuasiveness, displayed high validities for all rater categories. For competencies that are not as visible to others, such as Resilience (Funder & Dobroth, 1987), self-ratings have much higher validities than the ratings by others. Both the short IRT-scored OPQ32 and the full ipsative OPQ32i show that personality scales have generally low validities in predicting competencies such as Specialist Knowledge,

Written Communication, Problem Solving and Analysis. Validities of composite personality predictors based on the shortened IRT-scored OPQ32r in relation to the 16 different competencies as assessed by managers, colleagues and direct reports show no statistically significant difference to the validities for the composite predictors based on the full OPQ32i. This confirms that the OPQ32r version preserved the validity of the full OPQ32i (SHL, 2009).

As is evident from the above, the OPQ32r complies with the psychometric property standards as dictated by the South African Employment Equity Act (55 of 1998), which has the dual objective of ensuring that only valid and reliable assessments are used and that assessments are used in a fair manner that is free from bias. The OPQ32r has been shown not to discriminate against certain groups of people, is applicable for cross-cultural application and has appropriate norms. The OPQ32 is also provisionally registered with the Professional Board for Psychology of the Health Professions Council of SA (HPCSA) (www.hpcsa.co.za) as a psychological test. It was therefore deemed appropriate to use this measuring instrument for determining CSC agents' personality traits in this study.

1.5.4.2 Criterion measures

In this study participant's OPQ32r scores were used as a measure of personality, the independent variable. During the CSC agent's bi-annual performance assessment discussion, in which their self rating and the rating of their line manager is compared and a final rating consensus is reached, the following sources were used to obtain ratings of job performance, the dependent variable:

- The customer-interaction quality inspection results. The team leader and agent randomly chose calls and e-mails on a monthly basis and analysed them according to certain agreed steps and standards as specified by the checklists used in the organisation. Each CSC agent's bi-annual performance rating consisted of the average of these ratings for the particular six-month period.
- 360 degree feedback. This type of feedback is used to assess agents' personal, inter-personal and team behaviour. This rating was based on bi-annual feedback from

colleagues, customers and supervisors to ensure objectivity in the measurement and to avoid rater errors.

- Balanced scorecard (BSC) performance ratings. These ratings were based on CSC agents' monthly performances based on the BSC measurements. This performance measurement incorporated the customer-interaction quality inspection results (mentioned above) to determine the overall performance rating scale for the individual during the month. The BSC measurement also included financial losses due to agents' negligence, lack of process adherence, and actual call case logging procedures. Each agent's bi-annual performance rating consisted of the average rating that the person obtained during the six month period that was measured.

Table 1.1 provides the rating scale used in the bi-annual performance assessment discussions.

1.5.5 Research procedure

The research purpose and the intended use of the data were explained to all participating agents and managers. Prior to starting the test all participating CSC agents were provided with a participant informed consent form to be completed on a voluntary basis.

CSC agents completed the assessment instrument (OPQ32r) in paper-and-pencil format. To ensure consistency the guidelines of the OPQ32r administration card was followed strictly during each test administration session. To further ensure standardisation of test administration, all the participants completed the questionnaire in the same venue, in equally sized groups over 15 consecutive days. In terms of the criterion measure for the research, the CSC agents' supervisors were requested to provide the most recent bi-annual performance rating details for each participant.

Table 1.1

Performance Management Rating Scale

Performance Rating	Descriptors
1-1.5	Most agreed outcomes/standards have not been met: Performing at a consistently low level which impacts both on the team and the clients. Performance must improve.
1.6-2.4	Some agreed outcomes/standards have been met: Performing below what was agreed to/expected relative to agreed outcomes or standards. Performance standard is inconsistent.
2.5-3.4	Most agreed outcomes/standards have been met: Performing almost at the required competence/standards level. Some outcomes may have been met, but on balance, overall performance is below target.
3.5-4.0	All outcomes/standards have been met and some have been exceeded: Performing at the required competence/standards level. The person has achieved all of what was expected and exceeded some standards/outcomes.
4.1-4.5	Performance exceeds all agreed outcomes/standards: Performance exceeds outcomes/standards, consistently delivering above average performance. There is excellent feedback from both internal and external clients, and high levels of expertise and initiative are demonstrated.
4.6-5.0	Exceptional performance against agreed outcomes/standards Exceptional performance: significantly exceeds all outcomes/standards by consistently delivering outstanding performance. Excellent client feedback and the person make a significant contribution or impact outside of the normal job requirements, to the benefit of the division.

1.5.6 Anticipated ethical issues

The following steps were instituted to prevent any anticipated ethical issues based on the *UNISA Policy on Research Ethics* (UNISA, 2007):

- Competence, ability and commitment to research. The researcher is a trained and accredited OPQ32r test administrator and adhered to the standardised administration procedure.

- Respect for cultural differences. The researcher treated the research participants as unique human beings within the context of their community systems, and attempted to

respect what is sacred and secret by tradition.

- Integrity, transparency and accountability. The researcher attempted to follow the guideline of being honest about her own limitations, competence, belief systems, values and needs. Participants' personal information was collected and processed with their specific informed consent. Only information that was considered relevant and necessary in order to achieve the aims of the research was collected.

- Informed and non-coerced consent. Autonomy requires that individuals' participation should be freely given, specific and based on informed consent. The participants were regarded /treated as autonomous agents who have the right to choose whether or not to be part of the research. The participants were informed about the UNISA Policy on Research Ethics. They were provided with a copy of the policy so that they could make an informed decision about whether they wanted to participate in the study. As indicated earlier, the participants provided their consent for taking part in the research in writing.

Before the study commenced, the participants were provided with detailed documentation about the study including the following (UNISA, 2007):

- The purpose of the study, including the aims, implications (including commercial implications) and possible outcomes of the study.

- Possible risks and benefits: possible, anticipated and potential benefits of the study as well as any potential risks (direct/indirect, immediate, long term).

- The methods of study and participants' actual role in the study.

- The details of the researcher, the institution and the chairperson of the relevant Ethics Review Committee who may be contacted, were provided.

- The reasons or method for selecting the particular locality, community, group and/or individual for participation in the study.

- Measures to ensure privacy, anonymity and confidentiality: The measures taken to ensure the participants' privacy, anonymity and the confidentiality of information, as well as any risk of breach of confidentiality and anonymity were explained. If there was a possibility that the data provided by participants, as well as their identity might

not be kept anonymous and confidential, they were promised that this would be disclosed to the participants.

- Participants' right not to participate in the study and to withdraw from it: The participants were informed that they had the right not to participate in the study at all. Furthermore, they could withdraw from the study at any time without any penalty or prejudice. They had the right to refuse to answer any questions which formed part of an interview or the questionnaire.

- The right to obtain help. The researcher undertook to assist participant(s) in case any adverse consequences resulted from their participation in the research.

1.5.7 Statistical analysis

In this study descriptive and correlational statistics were used. Descriptive statistics is the formulation of rules and procedures according to which data can be placed in a useful and significant order. It deals with the central tendency, variability (variation) and relationships (correlations) in data that are readily at hand. A basic principle of using descriptive statistics is the requirement for absolute representation of data (Landman, 1988). A significant use of descriptive statistics is to summarise a collection of data in a clear and understandable way. This includes the computation of statistics such as the mean and standard deviation (Lane, 2007). In this study, descriptive statistics were calculated for the participants' biographical information, for the criterion measure (CSC agents' performance ratings) and for predictor measure (CSC agents' scores on the OPQ32r) of the study in the form of frequencies, means, standard deviations, minimums and maximums.

A correlation coefficient is a numerical estimate of the degree to which the points on the scatter plot cluster around the regression line. It is a single number that summarises the dispersion of scores on a scatter plot. A strong correlation between two variables means that they are related, but not necessarily that the one variable (personality traits) causes the other (job performance). The correlation coefficient represents the strength of co variation between the two variables by means of a number that can range from –1 to 1. If all the cases on the scatter plot fell exactly on the regression line, we would have a perfect relationship that would have a correlation coefficient $r = 1.00$ if the relationship was positive, or a correlation

coefficient $r = -1.00$ if the relationship was negative (Terre Blanche, Durrheim & Painter, 2006). The Pearson's Product Moment Correlations test was used in this study.

Non-parametric and parametric statistical methods were used to ensure statistical robustness of the results based on a small sample size. Non-parametric methods are widely used for studying scores that take on a ranked order. The use of non-parametric methods may be necessary when data on an ordinal scale have a ranking, but no clear numerical interpretation in terms of levels of measurement (such as when assessing preferences). As non-parametric methods make fewer assumptions, their applicability is much wider than the corresponding parametric methods. In particular, they may be applied in situations where less is known about the application in question. Also, due to their reliance on fewer assumptions, non-parametric methods are more robust.

Another justification for the use of non-parametric methods is simplicity. In certain cases, even when the use of parametric methods is justified, non-parametric methods may be easier to use. Due both to this simplicity and to their greater robustness, non-parametric methods are regarded as leaving less room for improper use and misunderstanding. The wider applicability and increased robustness of non-parametric tests comes at a cost: in cases where a parametric test would be appropriate, non-parametric tests have less power. In other words, a larger sample size is required to draw conclusions with the same degree of confidence (Corder & Froneman, 2009; Wasserman, 2007).

The non-parametric test used in this study was (Corder et al., 2009):

- Pearson's chi-square test (χ^2): statistical procedures whose results are evaluated by reference to the chi-square distribution. It tests a null hypothesis that the relative frequencies of occurrence of observed events follow a specified frequency distribution. The events must be mutually exclusive. A sample with a sufficiently large size is assumed. If a chi square test is conducted on a sample with a smaller size, then the chi square test will yield an inaccurate inference. The researcher, by using chi square test on small samples, might end up committing a Type II error.

Parametric statistics is a branch of statistics that assumes data has come from a type of

probability distribution and makes inferences about the parameters of the distribution (Geisser & Wesley, 2006). Parametric methods are generally based on more underlying assumptions than non-parametric methods (Corder & Froneman, 2009). If those extra assumptions are correct, parametric methods can produce more accurate and precise estimates. As parametric statistics require a probability distribution, they are not distribution-free. In this study, the researcher used the independent samples T test as parametric test (Corder et al., 2009). The independent samples T test compares the mean scores of two groups on a given variable.

In statistics, moderation occurs when the relationship between two variables depends on a third variable. The third variable is referred to as the moderator variable or simply the moderator. The effect of a moderating variable is characterised statistically as an interaction, that is a qualitative (for instance, gender, race, class) or quantitative (for instance, level of reward) variable, that affects the direction and/or strength of the relation between dependent and independent variables. Specifically within a correlational analysis framework, a moderator is a third variable that affects the zero-order correlation between two other variables (Cohen, Cohen, Aiken & West, 2003; Hayes & Matthes, 2009). In this study, the researcher investigated the allocation to a specific help desk as a possible moderator by investigating the differences between the groups at help desk 1 and help desk 2.

In statistics, measures of skewness and kurtosis are utilised to investigate the normal distribution of the sample's data. Statistical skewness is a measure of the asymmetry of the probability distribution of a real-valued random variable. The skewness value can be positive or negative, or even undefined. Qualitatively, a negative skew indicates that the tail on the left side of the probability density function is longer than the right side and the bulk of the values (possibly including the median) lie to the right of the mean. A positive skew indicates that the tail on the right side is longer than the left side and the bulk of the values lie to the left of the mean. A zero value indicates that the values are relatively evenly distributed on both sides of the mean, typically but not necessarily implying a symmetric distribution. Given samples from a population, the equation for the sample skewness is a biased estimator of the population skewness. An understanding of the skewness of the dataset indicates whether deviations from the mean are positive or negative.

Kurtosis is any measure of the peakedness of the probability distribution of a real-valued random variable. Kurtosis is a descriptor of the shape of a probability distribution and, as in the case of skewness, there are different ways of quantifying it for a theoretical distribution and corresponding ways of estimating it from a sample from a population (Hosking, 2006). In this study, measures of skewness and kurtosis were included in by means of the Pearson's skewness coefficients test.

1.6   CHAPTER LAYOUT

The study consists of the following chapters:

Chapter 1   Orientation to the study

Chapter 2   Literature review

Chapter 3   Article

Chapter 4   Conclusions, limitations and recommendations

1.7   CHAPTER SUMMARY

Chapter 1 introduced the study, outlining the background to and motivation for the study, the research problem, aims, paradigm perspective, research design and method. The chapter concluded with the chapter layout of the dissertation.

CHAPTER 2. LITERATURE REVIEW

The literature review was conducted to conceptualise

- The variables and relationships between the variables (personality traits and job performance in a CSC environment) from the literature
- The role of personality in predicting work performance

2.1 THE VARIABLES

In this study the dependent variable was job performance of the CSC agents and the independent variable was their personality traits. In this section, these two variables are defined and discussed and the relationship between them reviewed in the light of current literature.

2.1.1 Job performance

Campbell (1990, p. 704) defined job performance as "those actions or behaviours relevant to the organisation's goals". He also distinguished between performance (the behaviours), effectiveness (the evaluation of the results of performance), and productivity (the cost of getting to certain levels of effectiveness). As effectiveness and productivity measures are the results of both performance and other factors such as opportunity and working conditions, Campbell (1990) noted that to the degree that effectiveness and productivity measures are contaminated, they are not acceptable measures of performance.

Some of the most commonly accepted theories of job performance are based on Campbell's (1990) work. Based on a psychological perspective, Campbell described job performance as an individual level variable; that is, performance is something a single person does. This differentiates job performance from more encompassing constructs such as organisational performance or national performance, which are considered higher level variables.

Motowidlo (2003) also viewed job performance as the total expected value to the organisation of the individual behavioural episodes over a standard period of time. Motowildo, Borman

and Schmit (1997) described job performance as a behavioural construct and state that behaviour, job performance and results are not the same. Behaviour is what people do while at work. Performance is behaviour with an evaluative component that can be evaluated as positive or negative for individual or organisational effectiveness. Results are states or conditions of people or things that are changed by performance and consequently either contribute to or detract from organisational goal accomplishment. Results are the route through which an individual's performance helps or hinders an organisation in reaching its goals, and this is what makes it appealing to focus on results when considering individual performance (Motowildo et al., 1997).

2.1.1.1 Measurement of job performance

The measurement of job performance is recognised as one of the significant challenges that managers and researchers face (Murphy, 2008). The performance indicators used in performance measurement typically include the following (Hakala, 2008):

- Quantity: The number of units produced, processed or sold is an objective indicator of performance.
- Quality: The quality of work performed can be measured by several means. The percentage of work output that must be redone or is rejected is one such indicator.
- Timeliness: How fast work is performed.
- Cost-effectiveness: The cost of work performed. This should be used as a measure of performance only if the employee has some degree of control over the costs involved.
- Absenteeism: The rate that an employee is not at work.
- Creativity: It may be difficult to quantify creativity as a performance indicator, but in many white-collar jobs, it is vital. Supervisors and employees should keep track of creative work examples and attempt to quantify them.
- Adherence to policy: Deviations from policy indicate an employee whose performance goals are not well aligned with those of the company.

Performance indicators should be assessed by some means in order to measure performance itself. There are various ways to assess performance, each with its own set of advantages and

limitations. Some of the more common ways of assessing performance includes (Hakala, 2008):

- Performance appraisal by the line manager. A manager or supervisor appraises the employee's performance and delivers the appraisal to the employee. The employee is not involved in the appraisal process resulting in a one-sided view of performance.

- Self-appraisal. The employee appraises his or her own performance, in many cases comparing the self-appraisal to the manager's appraisal. Self-appraisals can highlight discrepancies between what the employee and management think are important performance factors and provide mutual feedback for meaningful adjustment of expectations.

- Peer appraisal. Employees in similar positions appraise an employee's performance. This method is based on the assumption that co-workers tend to be most familiar with an employee's performance

- Team appraisal. This type of appraisal is similar to peer appraisal in that members of a team, who may hold different positions, are asked to appraise each other's work and work styles.

- Assessment centre. The employee is appraised by professional assessors who may evaluate simulated or actual work activities. Assessment centres offer the advantage of being objective, which produce reviews that are not clouded by personal relationships with employees.

- 360-degree appraisal. The employee's performance is appraised by everyone with whom he or she interacts, including managers, peers, customers and members of other departments.

- Management by objectives (MBO). The employee's achievement of objective goals set is assessed. The MBO process begins with action statements and at the annual review, progress towards objectives is assessed, and new goals are set.

- Work samples as measures of job performance. The employee's performance is appraised by a supervisor who observes while the employees perform their normal job tasks.

Warr (1999) stated that the correlation between self-rating and supervisor-ratings tends to be higher when criterion behaviours are less highly evaluated, when criterion behaviours are

more observable; and when they are less open to impression management. The results of both the MBO and the work samples methods of job performance measurement can potentially be distorted due to the influence of the Hawthorne effect. The Hawthorne effect is a form of reactivity whereby subjects improve or modify aspects of their behaviour that are under investigation in response to the fact that they know they are being studied and not in response to any particular experimental manipulation (McCarney, Warner, Iliffe, van Haselen, Griffin & Fisher, 2007).

According to Dreher and Dougherty (2001), a number of rater errors, perceptual biases and other sources of distortion in performance ratings serve as barriers to the accuracy and credibility of performance measures. Rater errors are errors in judgment that occur in a systematic manner when an individual observes and evaluates another. Personal perceptions and biases may influence how direct line management evaluate an employee's job performance. Rater errors are often difficult to rectify as the observer is usually unaware of making these errors.

According to Dreher and Dougherty (2001), rater errors include:
• Halo effect. This refers to the tendency by a rater to make inappropriate generalisations from one aspect of a person's job performance. This results from the rater being influenced by one or more outstanding characteristics, either positive or negative.
• Leniency. This refers to the tendency by a rater to evaluate all people as outstanding and to give inflated ratings rather than true assessments of performance.
• Central tendency. This refers to the tendency by a rater to evaluate every person as average regardless of differences in performance.
• Strictness. This refers to the tendency by a rater to rate all people at the lower end of the scale and to be overly critical of performance.
• Contrast effect. This refers to the tendency by a rater to evaluate a person relative to other individuals rather than on-the-job requirements.
• First impression error. This refers to the tendency by a rater to make an initial favourable or unfavourable judgment about someone, and then ignore subsequent information that does not support this impression.

- Similar-to-me effect. This refers to the tendency by a rater to more favourably judge those people perceived as similar to him-/herself.

- Recency error. This refers to the tendency by a rater to allow recent incidents (either effective or ineffective) of employee behaviour to carry too much weight in evaluation of performance over an entire rating period. This can be extreme on both ends of the spectrum. An employee may just have finished a major project successfully or an employee may have had a negative incident just before the performance appraisal process, and this may dominate the rater's thoughts about the particular employee. In light of this error, then, it is essential to keep accurate records of performance throughout the year to refer back to during the performance appraisal.

- Range restriction errors. This refers to the tendency by a rater not to use the entire response range available, thereby making it difficult to make fine distinctions between the work performances of similar workers.

- Memory distortions. This may make it difficult for a rater to remember all the work-related behaviour of a particular worker that he/she has observed since the previous rating period. This may occur particularly when a rater is responsible for rating a large number of employees.

Performance measures can be characterised as either objective (measures that require few judgments, such as production counts) or subjective (measures that rely on the evaluative judgment of raters). Although in principle objective measures might be preferable measures of job performance, these types may not be possible in all settings.

Firstly, many objective measures show low levels of reliability and consistency across what should be equivalent indices. This is particularly evident in measures of absenteeism (Landy & Farr, 1983; Murphy, 2008). Secondly, objective measures of output and sales tend to be available for only a limited number of jobs. Thirdly, objective measures of performance may exhibit criterion deficiency in that there are parts of virtually any job that might be represented well with production counts or other objective measures, but there are other aspects of job performance (teamwork, contextual performance) that are not easily measured without the use of judgments. Finally, the use of objective measures of performance tends to

skew performance management and reward systems toward the countable, which can have adverse effects on performance (Murphy, 2008).

Due to the limitations of objective performance measures, most systems for measuring job performance depend partly on the evaluative judgments of supervisors or other stakeholders in organisations (Murphy & Cleveland, 1995). These subjective judgments of performance are mostly collected in the form of performance ratings, in which a supervisor, peer, or other stakeholder is asked to evaluate the effectiveness of performance on a series of dimensions and often to also make judgments of the overall performance and effectiveness of the individual over a fixed period of time (for instance, over the last year) (Landy & Farr, 1983).

Line management performance ratings represent the most common method for assessing job performance. Some performance assessment systems depend on rankings rather than ratings, or combine assessments of several different aspects of performance into an overall performance score rather than requesting explicit judgments about overall performance levels. The norm, however, seems to be to obtain judgments about both performance dimensions and overall performance from an employee's direct manager and to use those judgments as the basis for high-stake decisions like promotions and raises (Murphy, 2008).

The dynamic nature of performance should also be taken into account when considering the relationship between job performance and ratings of job performance. Job performance typically changes over time. Changes in the performance of the person being rated (the ratee) impact both what raters observe and how they integrate these observations into overall performance ratings. In most evaluations, a rater will not have the opportunity to observe all possible ratee behaviours during the given evaluation period. As performance changes over time raters who observe only a subset of behaviours being rated tend to base their evaluations on deficient information, thereby weakening the link between performance and the ratings of performance. Furthermore, observing different subsets of ratee behaviours introduces variation between raters and probably partly explains the low rater agreement between and within rater sources (Reb & Greguras, 2008).

Murphy (2008) noted that a dominant theme of research on performance evaluations over the past 75 years has been the need to improve the quality of performance ratings and, in particular, to assess and strengthen the link between job performance and measurement of job performance. Over this period, a number of rating scale formats have been proposed to impose structure on the rater's judgments and make performance assessment easier and more reliable (Murphy, 2008).

Another approach to improving performance ratings involves the reduction of rating errors through rater training or statistical control (Bernardin & Walter, 1977; Landy, Vance, Barnes-Farrell & Steele, 1980; Murphy, 1982). The use of 360-degree evaluations, in which assessments are obtained from supervisors, subordinates, peers, and sometimes clients (as discussed earlier) is one of the latest approaches to improving performance appraisals (Bracken, Timmreck & Church, 2001). The 360-degree evaluations are often designed for feedback rather than for obtaining assessments of performance that can be used to help make administrative decisions, but in principle, rating systems that combine information from many sources might overcome many of the weaknesses that affect supervisory performance appraisals.

2.1.2 Personality

Santrock (2008) described personality (the independent variable in this research study) as a dynamic and organised set of characteristics possessed by a person that uniquely influences his or her cognitions, motivations, and behaviours in various situations. Personality arises from within the individual and remains fairly consistent throughout life.

Gregory (2004) classified personality psychology into two fields. The first field relate to personality theories that are semi-philosophical attempts to conceptualise human nature. The second field relate to personality assessments that are practical exercises that use psychometric procedures to predict significant life outcomes (for instance, job performance), and provide people with feedback to assist their personal and professional development.

2.1.2.1 Theories of personality

There are a number of different theories about how personality develops. Different schools of thought in psychology influence many of these theories. Some of these perspectives on personality include Type theories, Behavioural genetics, Psychoanalytic theory, Behavioural theories, Developmental theories, Humanist theories and Trait theories, which will be briefly discussed.

a   Type theories

Type theories are the early perspectives on personality that attempted to sort individuals into discrete categories or types. These theories suggest that there are a limited number of personality types, which are related to biological influences (Gregory, 2004). The theory of temperaments is among a variety of systems that deal with human personality by dividing it into types. A widely popularized (but scientifically dubious) modern typology of personality was developed in the 1940s by William Sheldon, an American psychologist. Sheldon classified personality into three categories based on body types: the endomorph (heavy and easy-going), mesomorph (muscular and aggressive) and ectomorph (thin and intellectual or artistic) (Encyclopaedia of Psychology, 2000).

b   Behavioural genetics

Behavioural genetics is the study of the influence of hereditary factors on behaviour. Behavioural genetics viewed personality as the result of internal characteristics that are genetically based. The science of behaviour genetics seeks to determine to what extent individual differences in a population are due to genetic processes, environmental variation, and joint functions of these factors, and to identify the genetic architecture that underlies behaviour (DeFries, McGuffin, McClearn & Plomin, 2000).

c   Psychoanalytic theory

Psychoanalysis theory of personality is heavily influenced by the work of Sigmund Freud and emphasises the influence of the unconscious on personality (in Berger & Berger, 1991). Freud held that the direction of the adult libidinal urge fell into three broad categories, according to whether the instinctual id, the super-ego, or the ego predominated in a person's psychological make-up. The ego is the part that remembers, evaluates, plans, and in other ways is responsive to and acts in the surrounding physical and social world. It coexists with the id (the unconscious, instinctual portion of the psyche) and the superego (the portion representing the conscience, or the internalisation of societal norms). The ego serves to integrate the body, personality and other aspects of the person, such as memory, imagination, and behaviour. It mediates between the id and the superego by building up various defence mechanisms.

d   Behavioural theories

Behavioural theorists suggest that personality results from the interaction between an individual and his or her environment. Behavioural psychology, also known as behaviourism, is a theory of learning based on the idea that all behaviours are acquired through conditioning. Behavioural theorists study observable and measurable behaviours, and reject theories that take internal thoughts and feelings into account. Behavioural techniques are currently still widely used in therapeutic settings to help clients learn new skills and behaviours (Boeree, 2006c).

Skinner, one of the major behavioural theorists, believed the mind to be an unnecessary construct as science concerns itself with inputs and outputs (Boeree, 2006c). Skinner's behavioural theory is based on operant conditioning and he proposed the concept of shaping to explain more complex types of behaviours. Shaping involves firstly reinforcing behaviour only vaguely similar to the desired behaviour. Once the link between the reinforcement and desired behaviours is established, variations that come a little closer to what is desired are

identified, until the desired behaviour is displayed (Boeree, 2006c). This technique is still used today in behaviour-altering techniques like systematic desensitisation.

As indicated earlier, the dependent variable in this study, job performance is viewed as a behavioural construct. Behaviourism has been criticised for oversimplifying human behaviour and not considering the mental processes involved in people's perception and responses to a stimulus (Boeree, 2006c).

e   Developmental theories

Theories of development provide a framework for thinking about human growth, development, and learning. Some of the major humanist theorists were Freud and Jung discussed earlier. Bandura' social learning theory is also classified as a developmental theory.

Rotter (Boeree, 2006b) moved away from theories based on psychoanalysis and behaviourism, and developed a social learning theory. Bandura (Boeree, 2006b) added a social element to social learning, arguing that people can learn new information and behaviours by watching other people. Behavioural learning is based on the premise that people's environment causes them to behave in certain ways. Cognitive learning presumes that psychological factors are important for influencing how one behaves. Social learning, however, suggests that a combination of environmental and psychological factors influence behaviour and outlines three requirements for people to learn and model behaviour namely attention and retention, reproduction, and motivation to adopt the behaviour (Boeree, 2006b).

f   Humanist theories

Humanist theories emphasise the importance of people's free will and their individual experiences in the development of personality. Humanistic psychology began as a reaction to psychoanalysis and behaviourism. It focused on each individual's potential and stressed the importance of growth and self-actualisation. The fundamental belief of humanistic psychology was that people are innately good, and that mental and social problems result from deviations from this natural tendency. It took a more holistic view of the individual than

psychoanalysis and behaviourism (Boeree, 2006a). Some of the major humanist theorists include Abraham Maslow and Carl Rogers. The theories of wellness developed by these humanistic psychologists have recently been supported by humanistic and positive psychologists.

Maslow first introduced his concept of a hierarchy of needs that suggests that people are motivated to fulfil basic needs before moving on to other needs. Maslow's well known hierarchy of needs is most often displayed as a pyramid with needs at the bottom of the pyramid representing basic physical requirements including the need for food, water, sleep and warmth. As people progress up the pyramid, their needs become increasingly psychological and social in nature while emphasis is placed on the importance of self-actualisation, which is a process of growing and developing as a person to achieve individual potential. Maslow believed that the needs he proposed are similar to instincts and play a major role in motivating human behaviour and that growth needs do not stem from a lack of something, but rather from a desire to grow as a person (Boeree, 2006a).

The theory of Carl Rogers is considered to be both humanistic and phenomenological (referring to the subjective experiences of the subject being studied) in nature. Rogers originally developed his theory to serve as the foundation for a system of client-centred therapy. Rogers attempted to bring therapists in closer contact with their clients by listening to clients' reports of their recent subjective experiences, especially emotions of which they are not fully aware. This field focuses on how the person feels at a particular moment (Prochaska & Norcross, 2007). His theory was based on nineteen propositions about the individual, an individual's surroundings, the self, values and behaviour. Rogers is also known for practising unconditional positive regard – accepting a person without negative judgment of a person's basic worth.

(i)   Positive psychology

Positive psychology is the study of the conditions and processes that contribute to the flourishing or optimal functioning of people, groups, and institutions and focuses on mental wellness rather than mental illness (Gable & Haidt, 2005). The theories of wellness developed

by humanistic psychologists such as Maslow and Rogers have recently been supported by humanistic and positive psychologists that maintain that a positive state of mind gives rise to a sense of well being that enables a person to function effectively within society.

People who have good mental health are well-adjusted to society, are able to relate well to others, and basically feel satisfied with themselves and their role in society. Personal wellness involves a person's whole life, not just the treatment of a psychological disorder. It is about reaching for optimal well being of mind-body-spirit through attaining balance in life (Gable & Haidt, 2005).

Positive psychology can be delineated into three areas:

- Pleasant Life examines how people optimally experience, forecast, and savour the positive feelings and emotions that are part of normal and healthy living.
- Good Life or Life of Engagement investigates the beneficial effects of immersion, absorption, and flow that individuals feel when optimally engaged with their primary activities. These states are experienced when there is a positive match between a person's strengths and the task they are doing; that is, when they feel confident that they can accomplish the tasks they face.
- Meaningful Life or Life of Affiliation investigates/focuses on how individuals derive a positive sense of well-being, belonging, meaning, and purpose from being part of and contributing back to something larger and more permanent than themselves.

Practical applications of positive psychology include helping individuals and organisations correctly identify their strengths and use them to increase and sustain their respective levels of well-being. Therapists, counsellors, coaches, and various other psychological professionals can use the new methods and techniques to build and broaden the lives of people who are not necessarily suffering from mental illness or disorder as people's lifestyles have changed vastly with the advancement of technology and the changing nature of work. Most people may find it difficult to achieve a balance in life to achieve mental and physical wellness or fitness (Gable et al., 2005).

g   *Trait theories*

A balanced view that recognises the importance of both genetics and environment is in trait theories of personality. A trait refers to a characteristic way in which individuals perceive, feel, believe, or act and differ from one another. Trait theorists are primarily interested in the measurement of traits, which can be defined as habitual patterns of behaviour, thought and emotion. According to this perspective, traits are relatively stable over time, differ across individuals and influence behaviour. Psychologists are interested in determining which traits are broad and possibly genetically based, and which are rather peculiar and change easily (Gregory, 2004). Unlike many other theories of personality, such as psychoanalytic or humanistic theories, the trait approach to personality is focused on differences between individuals, particularly how the combination and interaction of various traits form a personality that is unique to each individual. Trait theory is focused on identifying and measuring these individual personality characteristics. Over the years, a number of theories attempted to describe the key traits of human beings.

Allport (in Boeree, 2006d) identified more than 4,000 words that describe different personality traits, and categorises these traits into three types:

- Cardinal traits. Traits that dominate an individual's whole life, often to the point that the person becomes known specifically for these traits.
- Central traits. The general characteristics that form the basic foundations of personality.
- Secondary traits. The traits that are sometimes related to attitudes or preferences and often appear only in certain situations or under specific circumstances.

Cattell (in Boeree, 2006d) reduced the number of main personality traits from Allport's initial list by eliminating uncommon traits and combining common characteristics. He then rated a large sample of individuals for the remaining 171 different traits, and eventually reduced his list to 16 key personality traits. Cattell regarded these 16 traits as the source of all human personality, and they formed the basis for the development of the Sixteen Personality Factor Questionnaire (16PF).

Eysenck (1992) developed a model of personality based on three universal traits labelled introversion/extraversion, neuroticism/emotional stability and psychoticism. Considerable research on Cattell and Eysenck's theories led theorists to believe that Cattell focused on too many traits, while Eysenck focused on too few (McCrae & Costa, 1997). Thus the five factor model (FFM) or Big Five theory emerged. This theory of personality represents five core traits that interact to form human personality. Although there is no consensus on the exact labels for each dimension, the following are used most commonly (McCrae & Costa, 1997):

- Extraversion. This personality dimension includes characteristics such as excitability, sociability, talkativeness, assertiveness, and high amounts of emotional expressiveness.
- Agreeableness. This personality dimension includes attributes such as trust, altruism, kindness, affection and other prosocial behaviours.
- Conscientiousness. Common features of this dimension include high levels of thoughtfulness, with good impulse control and goal-directed behaviours. Those high in conscientiousness tend to be organised and mindful of details.
- Neuroticism. Individuals high in this trait tend to experience emotional instability, anxiety, moodiness, irritability, and sadness.
- Openness. This personality dimension features characteristics such as imagination and insight, and those high in this trait also tend to have a broad range of interests.

The most common models of traits incorporate three or five broad dimensions or factors. Both approaches extensively use self-report questionnaires. The most frequently used measures of the Big Five comprise either items that are self-descriptive sentences or, in the case of lexical measures, items that consist of single adjectives (De Fryut, McCae, Szirmák & Nagy, 2004).

The higher-order factors of extraversion and neuroticism are represented in both three and five factor models. Both models broadly accept that extraversion is associated with sociability and positive affect, whereas neuroticism is associated with emotional instability and negative affect. Many lower-order factors are similar between the two models (Matthews, Deary & Whiteman, 2003). Although these two approaches are comparable because of the use of factor analysis to construct hierarchical taxonomies, they differ in the organisation and number of

factors. The factors are intended to be orthogonal (uncorrelated), though there are often small positive correlations between factors (Goldberg, 1993).

The FFM in particular has been criticised for losing the orthogonal structure between factors (Costa & McCrae, 1992; Russel & Karol, 1994). Critics further indicate that the FFM personality traits have too many overlapping factors and cannot be simplified into five main factors. Each of the five factors has too much of an impact on the other factors in a particular individual. Because the Big Five traits are broad and comprehensive, they tend not to be as powerful in predicting and explaining actual behaviour as the more numerous lower-level traits. It has been confirmed empirically that the more numerous facet or primary level traits are far more effective in predicting actual behaviour (Mershon & Gorsuch, 1988; Paunonon & Ashton, 2001).

Warr, Bartram and Martin (2005) concluded that the aggregation of scales to the level of the Big Five can sometimes result in a loss of important information. Warr et al. (2005) found that for both Extraversion and Conscientiousness, separate examination of facets revealed patterns that were concealed by the overall composite. As a general rule, then, in order to avoid loss of information, one should examine separate facets of the Big Five before aggregation into the broad factors (Warr et al., 2005).

One of the areas that research seems to be focusing on concerns whether or not the five factors used in the FFM are the appropriate factors. Attempts to replicate the Big Five in other countries with local dictionaries have succeeded in some countries but not in others. For example, the Hungarian results indicated not one Agreeableness factor (De Fruyt et al., 2004).

There appears to be general agreement that people can be described according to their personality traits, but consensus has not been reached on the number of basic traits that make up human personality. Some of the most common criticisms of trait theory centre on the fact that traits are often poor predictors of behaviour. Although a person may score highly on a specific trait, his/her behaviour may not constantly reflect this trait in every situation. Another criticism is that since trait theory offers no guidance about the development of these traits, there are no applications for helping someone change. A further issue is that trait theories do

not explain how or why individual differences in personality develop or emerge (Gregory, 2004).

The measuring instrument used in this study, the OPQ32r, was developed based on the trait theory of personality. The OPQ uses an occupational model of personality, which describes thirty two (32) dimensions or factors of people's preferred style of behaviour at work. It describes personality across four domains or factors: Relationships with People, Thinking Styles, Feelings and Emotions, and Dynamism, which is related to sources of energy. The OPQ model of personality provides users with a clear framework for interpreting complex patterns of personality utilising collections of scales which relate to different aspects of behaviour and work-relevant dimensions that predict workplace competence (SHL, 2009).

The OPQ32r utilises the forced-choice format that has been shown to successfully reduce uniform response biases, produce greater operational validity coefficients and provide an accurate indication of absolute trait standing (Cheung & Chan, 2002; Bartram, 2007; Christiansen et al, 2005). This measuring instrument enables the recovery of the latent traits underlying the responses through probabilistic estimation, rather than operating on the scale-by-scale basis as well as on the relationships between scales (SHL, 2009). One of the advantages of OPQ32 is that it provides a fine-grained analysis of occupationally relevant personality traits. Evidence for the job-related validity of the OPQ instruments has been found in a number of studies across a range of industry sectors and job types (Bartram, 2005).

Even though the OPQ was not developed specifically to fit the FFM, a subset of the 32 narrowband scales map onto the FFM of personality and extensive construct validation research supports this (SHL, 2005). Based on this research, the FFM can be measured using specification equations based on a subset of OPQ scales. The OPQ32r, however, measures a broader personality domain than the FFM as well as elements that are not apparent in the big five classification such as Energy, Drive and Interests. Applying the FFM measurement allows for validity generalisation and comparison with other personality instruments and previous research findings (Bartram, 2005).

Regarding how personality develops, this section discussed Type theories, Behavioural genetics, Psychoanalytic theory, Behavioural theories, Developmental theories, Humanist theories and Trait theories. The dependent variable in this study, job performance is viewed as a behavioural construct. The measuring instrument used in this study, the OPQ32r, was developed on the trait theory of personality and measures 32 personality traits.

2.1.3 The role of personality in predicting job performance

The activities of personality psychology include personality assessments, which are often used to predict significant life outcomes such as job performance. Industrial psychologists, however, question the usefulness of personality measures in predicting job-related criteria such as job performance and job satisfaction for a considerable time. Their concerns are mainly based on pessimistic conclusions of early reviews of this relationship, and concerns that respondents tend to provide biased or fake responses on personality measures (Borman, Hedge, Ferstl, Kaufman, Farmer & Bearden, 2003).

However, a meta-analysis of research in this area suggested that personality measures are valid predictors of diverse job related criteria and typically do not have an adverse impact on disadvantaged employees who may not be testwise/familiar with assessment situations (Barrick & Mount, 1991; Barrick, Mount & Judge, 2001; Salgado, 1997; Hogan, Hogan, & Roberts, 1996). Moreover, Tett and Christiansen (2007) and Ones, Dilchert, Viswesvaran and Judge (2007) pointed out that personality measures may enhance fairness in personnel decisions.

Research into the role of personality in predicting job performance has largely been motivated by practical objectives such as discovering traits related to performance in particular jobs. Most meta-analyses utilise a construct-orientated approach to the study of the relationship between specific personality traits and performance in various jobs (Tett & Burnett, 2003). The FFM, as discussed previously, has been the most frequently used taxonomy in these meta-analyses. Barrick, Mount and Judge (2001) point out that since the mid-1980's personality research focused largely on the use of the FFM or some variant of it to classify personality.

Research findings on the role of personality in predicting job performance will be briefly discussed next.

2.1.3.1 Research findings

Considerable research indicates that the FFM personality dimension of Conscientiousness is one of the best predictors of job performance (Salgado, 1997). Conscientiousness tends to be the only personality trait that correlates with performance across all categories of jobs, including customer service centres. However, other personality dimensions identified by the FFM, such as Agreeableness and Emotional Stability, may also be of importance, particularly in jobs that involve a significant degree of social interaction (Mount, Barrick & Stewart, 1998). Skyrme, Wilkinson, Abraham and Morrison (2005) also found that the FFM personality dimensions of Conscientiousness, Agreeableness and Emotional Stability were positively related to employee performance. The FFM personality dimension of Agreeableness is associated with behaviours such as tolerance, good nature and flexibility (Judge, Higgins, Thoresen & Barrick, 1999). Given the nature of CSC work, with its emphasis on providing quality customer service, it is likely that those characteristics associated with conscientious individuals will make them suitable for this type of work.

Fort (2010) found facets of Conscientiousness, Self-Reported Achievement and Dependability to be predictors of job performance, which would be expected since they are components of one broader domain. Likewise, Implicit Achievement and Dependability were also found to be predictors of job performance, indicating that these two measures may be components of Implicit Conscientiousness which relates to the FFM personality dimension of Conscientiousness. The participants were employees of a contact centre company that provides services to the education industry. Both Achievement and Dependability have been shown to be related to performance numerous in numerous studies (Dudley, Orvis, Lebiecki & Cortina, 2006). Nicholls, Viviers and Visser (2009) found Structured and Results-oriented as moderately strong predictors of performance.

Taylor (1998) refers to the demands made on call centre staff as "emotional labour" because

call agents have to both manage their feelings and attitudes, and possess product knowledge. Managing their feelings and attitudes is particularly important in providing suitable levels of service (both in terms of quality and quantity) to enhance customer satisfaction. Skills such as controlling one's feelings are associated with the FFM personality dimension of Emotional stability, which has been positively related to job performance (Mount et al, 1998; Skyrme et al., 2005).

In terms of the FFM personality dimension of Extraversion, Sawyer, Srinivas and Wang (2009) found that whether or not staff members are characterised as being Extraverted or Intraverted does not seem to have any bearing on their performance in call centres. Emotionally stable individuals appear to function well in a call centre environment because they are able to cope with high levels of emotional exhaustion and particularly because they tend not to leave the job. Furthermore, given the restrictive nature of call centres with scripts and work monitoring, call centre agents who are creative and who seek new experiences (the FFM personality dimension of Openness to new experience) may not be well-suited to call centre work.

Little academic research has been conducted on South African contact centres, with most of it focused on agent behaviour. Nel and de Villiers (2004) found that job performance of call centre agents was significantly positively related to their emotional intelligence scores. Visser and Matthews (2005) investigated how well thin slices of non-verbal agent behaviour could predict ratings of job performance by management and customers, and found that the relationship was not significantly improved by the addition of a verbal channel. Moller, Crous and Schepers (2004) examined the personality traits of agents satisfied with call centre work, and identified a self-assertive personality type that was dissatisfied with the variety of work available.

Several psychometric measurement tools that measure personality have been tested for their effectiveness in predicting job performance. In 2001, SHL investigated the effectiveness of using the SA Wechsler Adult Intelligence Scale (WAIS), Occupational Personality Questionnaire 32 Ipsative (OPQ32i), Minnesota Multiphasic Personality Inventory (MMPI-2) and 16 Personality Factor Questionnaire (16PFi) for the selection of supervisors in a large

food production company. All these instruments were found to be good predictors of job performance.

There appears to be a significant relationship between people's personality traits and their job performance. Although some research has been conducted within the call centre environment, no published research on this relationship could be found for CSCs within the banking industry in South Africa. As pointed out in Chapter 1, Sawyer et al. (2009) emphasised that further research is required to establish the relationship between personality factors and performance in the context of a customer relations management call centre environment. It is envisaged that this study will contribute to this field of investigation.

2.2   CHAPTER SUMMARY

Chapter 2 discussed the literature review conducted for the study in order to conceptualise the variables and the relationship between the variables (personality traits and job performance in a CSC environment) as well as the role of personality in predicting job performance.

CHAPTER 3. ARTICLE

Personality as a predictor of performance for customer service centre agents in the banking industry

Linda Blignaut
Industrial and Organisational Psychology
University of South Africa

ABSTRACT

The study focused on identifying personality traits, as measured by the Occupational Personality Questionnaire 32 (OPQ32r) that may act as job performance predictors for customer service centre (CSC) agents in the banking industry. Purposeful sampling was used to involve the entire CSC agent base of a particular banking group as participants (N = 89). Several personality traits significantly predicted the job performance of CSC agents. Based on these personality traits successful CSC agents can be described as scoring high on Conceptual, Controlling, Data Rational and Modest while scoring low on Competitive, Outgoing and Variety Seeking. Identifying the personality characteristics of individuals who are successful in a CSC environment should aid organisations in creating an enhanced fit between employees and the requirements of such an environment, thereby improving organisational outcomes.

KEY WORDS

Personality, Personnel Psychology; recruitment; customer service, customer service centre, call centre, Occupational Personality Questionnaire 32 (OPQ32r), banking industry.

INTRODUCTION

Key focus of the study

Customers' perception of a company is often determined by the quality of their interaction

with the company's frontline employees such as those in call centres (Mattila & Mount, 2003; Subramaniam, 2008). Call centres have emerged due to a changing world of work and the need to improve efficiency and customer service delivery. These centres offer versatility and present a means to provide quick and efficient service. Call centres aid customer service delivery and assist in consolidating customer service business operations (Zapf, Isic, Bechtoldt & Blau, 2003).

The traditional call centre role is shifting from being a cost centre to becoming a strategic business unit (Merchants, 2006). Contact centres generate value by building relationships with customers, driving business processes, promoting the image of a company, and brand building (Adria & Chowdhury, 2004; Ashworth, 2003; Holland, 2003). The top strategic issues for contact centres are currently customer satisfaction, quality/process improvements, and technology strategy (Merchants, 2006). Contact centres have become significant in modern organisations, responding to inbound requests and performing outbound sales and marketing over multiple channels (Merchants, 2006).

As far as could be determined, the banking group in which this study was conducted, is currently the only known South African bank to have made the transition from a call centre to a contact centre or, as termed in the organisation, a customer service centre (CSC). Contact centres often function as the sole point of contact between the organisation and its stakeholders, mainly customers, playing a vital role in influencing customers' experience and promoting the company culture (Merchants, 2006). It would therefore be of importance to this bank to determine valid selection criteria for CSC agents. Research indicates that the relationship between people's personality traits and their job performance appears to be well-established (Barrick & Mount, 1991; Barrick, Mount & Judge, 2001; Salgado, 1997; Tett & Burnett, 2003; Skyrme, Wilkinson, Abraham & Morrison, 2005; Sawyer, Srinivas & Wang, 2009). In order to determine valid selection criteria for CSC agents, the relationship between personality traits and job performance for CSC agents need to be determined.

Background to the study

There are several differences between a conventional call centre and the CSC. Staff in the

CSC is divided into client segment teams who respond to incoming calls and e-mails from clients. Each team provides technical information, solutions and support on a number of products like internet banking to their particular client segment. Client segments are determined by categorising clients according to their annual expenditure with the banking group. The CSC agents assist clients at two help desks. The outputs of these help desks are the same, but agents at help desk 2 assist the top 50 clients of the bank and agents at this desk are regarded as the senior CSC agents. Agents are initially appointed to assist clients at help desk 1 and have to be promoted to assist the top 50 clients of the bank at help desk 2. This is due to the difference in the levels of difficulty of the tasks performed by agents at the two help desks.

In a CSC calls are not transferred to other product or service desks as one would encounter in a call centre. A CSC offers a one-stop or a one-contact experience to clients and the client's problem or request should be resolved during one interaction. First Call Resolution (FCR) has been adopted by the contact centre industry as a key performance indicator (KPI), representing efficiency and competence in satisfying inbound customer requests (Merchants, 2006). Instead of merely using the call duration recorded and how efficient an agent was in dealing with call requirements in the shortest time period, CSC team leaders uses a client's experience in terms of satisfactory problem or query resolution as a measure of the job performance.

The CSC forms an integral part of the banking group's business. It caters exclusively for the needs of business and corporate clients, whose annual turnover within the bank is over R 5 million. The fact that this turnover can reach billions of Rands, explains why these clients are so important to the banking group. The CSC therefore plays an essential role in the bank's customer retention strategy and reputation, and it is essential to select the most suitable candidates as CSC agents.

In 2009, the CSC staff turnover rate in the banking group was 29% and dropped slightly to 27% in 2010. According to Barnes (2001), the high turnover rate that is endemic in the call centre industry is exacerbated by the recruitment of staff with the wrong personality type or whose personality types do not meet the job requirements. O'Hara (2001) further points out

that the selection of suitable staff or staff whose personality types meet the job requirements can potentially reduce the absenteeism and turnover rates and have a positive impact on customer service. Improved selection strategies are therefore needed to choose the most suitable candidates for CSC agent positions. The most suitable or relevant selection instruments will assist in this process (Phelps, 2002). Using a personality assessment instrument that has been found to validly predict performance may particularly provide a positive and measurable return on investment to an organisation in terms of selection and training expenses.

Although some research on the relationship between people's personality traits and their job performance has been conducted within the call centre environment, no published research on this relationship could be determined for CSCs within the banking industry in South Africa. According to Sawyer, Srinivas and Wang (2009), further research is needed to establish the relationship between personality factors and performance in the context of a customer relations management call centre environment. Huysamen (2002) also advised that ongoing research on assessment tools within the South African context is necessary. To this end, the researcher set out to accurately describe the relationships between the independent variables (personality traits) and the dependent variable (job performance) for CSC agents in the banking industry.

Trends from the literature review

In this section, the key concepts will be conceptualised followed by a critical review and summary of the themes around the role of personality measures in predicting job performance emerging from previous research.

Campbell (1990, p. 704) defined job performance (the dependent variable in this research) as "those actions or behaviours relevant to the organisation's goals". He also distinguished between performance (the behaviours), effectiveness (the evaluation of the results of performance), and productivity (the cost of getting to certain levels of effectiveness). Because effectiveness and productivity measures are the results of both performance and other factors such as opportunity and weather, Campbell (1990) noted that to the degree they are

contaminated, effectiveness and productivity do not serve as acceptable measures of performance.

Some of the most commonly accepted theories of job performance are based on Campbell's (1990) work. Campbell described job performance as an individual level variable, that is, performance is something a single person does. This differentiates job performance from more encompassing constructs such as organisational performance or national performance, which are higher level variables. Job performance consequently is the total expected value to the organisation of the individual behavioural episodes over a standard period of time (Motowidlo, 2003).

Motowildo, Borman and Schmit (1997) described job performance as a behavioural construct and state that behaviour, job performance, and results are not the same. Behaviour is what people do while at work. Performance is behaviour with an evaluative component; it is viewed as behaviour that can be evaluated as positive or negative for individual or organisational effectiveness. Results are states or conditions of people or things that are changed by performance and consequently either contribute to or detract from organisational goal accomplishment. Results are the route through which an individual's performance helps or hinders an organisation in reaching its goals, and this is what makes it appealing to focus on results when considering individual performance (Motowildo et al., 1997).

Santrock (2008) considered personality (the independent variable in this research study) to be a dynamic and organised set of characteristics possessed by a person that uniquely influences his or her cognitions, motivations, and behaviours in various situations. Personality arises from within the individual and remains fairly consistent throughout life.

Personality psychology consists of two related activities. The first activity relates to personality theories that are semi-philosophical attempts to conceptualise human nature. The second activity relates to personality assessments that are practical exercises that uses psychometric procedures to predict significant life outcomes (job performance), and provide people with feedback to assist their personal and professional development (Gregory, 2004).

There are a number of different theories about how personality develops. Different schools of thought in psychology influence many of these theories. The major perspectives on personality include Type theories, Behavioural genetics and Trait theories, Psychoanalytic theory, Behavioural theories, Developmental theories and Humanist theories.

One of the activities of personality psychology is personality assessments, which are practical exercises that use psychometric procedures to predict significant life outcomes (job performance). Various selection instruments currently exist ranging from structured interviews and assessment centres to psychological tests. A psychological test is a measure or procedure in which a sample of an examinee's behaviour in a specific domain is obtained, evaluated and scored using a standardised process (SIOPSA, 2005). Psychological tests also serve as a technique or measuring device to quantify behaviour or to understand the prediction thereof (Kaplan & Saccuzzo, 2001).

Concerns about the role of personality measures in predicting job performance

Research on the role of personality in predicting job performance has been motivated largely by practical objectives such as discovering traits related to performance in particular jobs (Tett & Burnett, 2003). Industrial psychologists, however, have been questioning the usefulness of personality measures in predicting job-related criteria such as job performance and job satisfaction for a considerable time. Their concerns are based mainly on pessimistic conclusions of early reviews of this relationship, and that respondents tend to provide biased or fake responses on personality measures (Borman, Hedge, Ferstl, Kaufman, Farmer & Bearden, 2003). However, a meta-analysis of research in this area suggested that personality measures are valid predictors of diverse job-related criteria and typically do not have adverse impact on disadvantaged employees who may not be testwise/familiar with assessment situations (Barrick et al., 1991; Barrick et al., 2001; Salgado, 1997; Hogan, Hogan & Roberts, 1996). Tett and Christiansen (2007) and Ones, Dilchert, Viswesvaran and Judge (2007), further emphasised that personality measures may enhance fairness in personnel decisions.

Research findings on the role of personality in predicting job performance will now be briefly discussed.

Research findings

Considerable research found that the Five-Factor Model (FFM) personality dimension of Conscientiousness is one of the best predictors of job performance (Salgado, 1997). Conscientiousness tends to be the only personality trait that correlates with performance across all categories of jobs, including customer service centres. However, other FFM personality dimensions such as Agreeableness and Emotional Stability may also be important, particularly in jobs that involve a significant amount of social interaction (Mount, Barrick & Stewart, 1998). Given the nature of CSC work with its emphasis on providing quality customer service, it is likely that the characteristics associated with conscientious individuals (as pointed out earlier) should serve them well when engaging in this type of work.

Skyrme, et al. (2005) found that the FFM personality dimensions of Conscientiousness, Agreeableness and Emotional stability were positively related to employee performance. The FFM personality dimension of Agreeable is associated with behaviours such as tolerance, good nature and flexibility (Judge, Higgins, Thoresen & Barrick, 1999).

Taylor (1998) terms the demands made on call centre staff as "emotional labour" because call agents have to both manage their feelings and attitudes, and possess product knowledge. Managing their feelings and attitudes is particularly important in providing suitable levels of service (both in terms of quality and quantity) to enhance customer satisfaction. Skills such as controlling one's feelings are associated with Emotional stability, and the FFM personality dimension of Emotional stability has been positively related to job performance (Mount et al., 1998; Skyrme et al., 2005).

In terms of the FFM personality dimension of Extraversion, Sawyer, Srinivas and Wang (2009) found that whether or not staff members are characterised as being Extraverted or Intraverted does not seem to have any bearing on their performance in call centres. Emotionally stable individuals appear to function well in a call centre environment because they are able to cope with high levels of emotional exhaustion and particularly because they tend not to leave the job. Furthermore, given the restrictive nature of call centres with scripts and work monitoring, call centre agents who are creative and who seek new experiences (the

FFM personality dimension of Openness to new experience) may not be well-suited to call centre work.

Fort (2010) found facets of Conscientiousness, Self-Reported Achievement and Dependability to be predictors of job performance, which would be expected since they are components of one broader domain. Likewise, Implicit Achievement and Dependability were also found to be predictors of job performance, indicating that these two measures may be components of Implicit Conscientiousness which relates to the FFM personality dimension of Conscientiousness. The participants were employees of a contact centre company that provides services to the education industry. Both Achievement and Dependability have been shown to be related to performance numerous in numerous studies (Dudley, Orvis, Lebiecki & Cortina, 2006).

Nicholls, Viviers and Visser (2009) found Structured and Results oriented as moderately strong predictors of performance. Baron, Hill, Janman and Schmidt (1997) reported principal component analysis which showed that Structured, Results Oriented, Analytical, Detail Conscious and Conscientious loaded onto the FFM personality dimension of Conscientiousness.

Little academic research has been conducted on South African contact centres, with most of it focused on agent behaviour. Nel and de Villiers (2004) found that the job performance of call centre agents was significantly positively related to their emotional intelligence scores. Moller, Crous and Schepers (2004) investigated the personality traits of agents satisfied with call centre work, and identified a self-assertive personality type that was dissatisfied with the variety of work available.

Measurement

Several psychometric measurement tools that measure personality have been tested for their effectiveness in predicting job performance. In 2001, SHL investigated the effectiveness of using the Occupational Personality Questionnaire 32 for the selection of supervisors in a large food production company. The instrument was found to be an acceptable predictor of job

performance.

Although significant relationships between personality traits and job performance have been found in most published research, limited research on these relationships has been conducted within the call centre environment. No relevant published research on these relationships could be found for CSCs within the South African banking industry, pointing to a need for the current study.

The general aim of this study was therefore to determine whether personality traits of CSC agents are related to their job performance, and consequently, whether these personality traits can be used to predict job performance in this context. The following research hypothesis was subsequently formulated:

The personality traits of CSC agents are predictors of their job performance.

The research hypothesis led to the formulation of the following statistical hypothesis:

H_0: There are no statistically significant relationships between personality traits and job performance.

H_1: There are statistically significant relationships between personality traits and job performance.

The potential contribution of the study

This study should contribute to addressing the need identified by Sawyer et al. (2009) that further research is needed to establish the relationship between personality factors and performance in the context of a customer relations management call centre environment. The study will further contribute to ongoing research on assessment tools within the South African context, a need indentified by Huysamen (2002).

An additional application of the results will be in an area of research related to call centre work that has received minimal research attention, namely the relationship between the individual characteristics of call centre employees (for instance, their personality

characteristics) and their job performance (Sawyer et al., 2009). The research results should contribute to addressing a gap identified by Bain and Taylor (2000), namely that minimal attention has been paid in existing research to developing selection criteria for employing suitable call centre agents. The selection of suitable staff or staff whose personality types meet the job requirements can potentially reduce absenteeism and turnover and have a positive link to customer service delivery (O'Hara, 2001).

This study should also contribute to addressing the need identified by Tett et al. *(2007)* that evidence supports self-report personality tests as valid predictors of job performance and that such tests probably have untapped potential in this regard, calling for further research. Ones et al. (2007) also indicated that future research should continue to explore the potential for self-report ratings of personality in personnel selection, placement, and promotion decisions.

RESEARCH DESIGN

Research approach

The study followed the quantitative tradition and was a non-experimental study. A non-experimental research design was chosen for this research as it involves research in which the researcher neither alters nor controls the research setting. Primary data was used as the researcher gathered all data first hand. A correlation approach was followed in the data analyses.

Research method

The research participants, measuring instruments, research procedure, and statistical analysis will be discussed in this section.

Research participants

This research focused on the individual as the unit of analysis. Purposive sampling was used because the organisation's entire CSC agent base, consisting of 89 CSC agents, served as the

sample.

The ages of the participants ranged between 20 and 57 years with the mean age of 27 years and a standard deviation of 5.80 years. All the participants in the total sample were English proficient and 36% reported English as their home language. Ninety-eight percent (98%) of the participants had obtained a Grade 12 or higher qualification and females made up 57% of the sample. The majority of the participants were African (52%) and the rest Coloured (14%), Indian (21%) and White (2%). The mean total work experience of the sample was 5.91 years and their mean length of service in their current role was 1.66 years. Upon joining the CSC, agents are required to have basic computer literacy, some experience in using the Internet to assist with web-based product solution generation and some call centre experience. The descriptive statistics discussed above is reflected in Tables 1 and 2.

Measuring instruments

The OPQ32r scores were used as a measure of personality, the independent variable. The following sources were used to obtain ratings of job performance, the dependent variable, in the bi-annual performance assessment discussion:

- The customer-interaction quality inspection results. The team leader and agent randomly chose calls and e-mails on a monthly basis and together analysed them according to certain agreed steps and standards as specified by the checklists used in the organisation. Each CSC agent's bi-annual performance rating on customer-interaction quality consisted of the average of these ratings for the particular six month period.
- 360 Degree feedback. This type of feedback is used to assess agents' personal, inter-personal and team behaviour. This rating was based on bi-annual feedback from colleagues, customers and supervisors to ensure objectivity in the measurement and to avoid rater errors.
- Balance scorecard (BSC) performance ratings. These ratings were based on CSA agents' monthly performances based on the BSC measurements. This performance measurement

Table 1

Biographical Information of CSC Agents

	Total Group (N 89)		Desk 2 (N 48)		Desk 1 (N 41)	
Home Language	N	Percent	N	Percent	N	Percent
Afrikaans	3	3.4	2	4.2	1	2.4
English	36	40.4	17	35.4	19	46.3
Northern Sotho	9	10.1	6	12.5	3	7.3
Ndebele	1	1.1	1	2.1	0	0
South Sotho	7	7.9	1	2.1	6	14.6
Tsonga	1	1.1	0	0	1	2.4
Tswana	8	9.0	6	12.5	2	4.9
Venda	2	2.2	1	2.1	1	2.4
Xhosa	4	4.5	2	4.2	2	4.9
Zulu	18	20.2	12	25.0	6	14.6
Total	89	100.0	48	100.0	41	100.0
Education	N	Percent	N	Percent	N	Percent
Grade 10	2	2.2	2	4.2	0	0
Grade 12	55	61.8	25	52.1	30	73.2
Post Matric Certificate	17	19.1	11	22.9	6	14.6
Degree	14	15.7	10	20.8	4	9.8
Post Graduate	1	1.1	0	0	1	2.4
Total	89	100.0	48	100.0	41	100.0
Gender	N	Percent	N	Percent	N	Percent
Female	57	64.0	32	66.7	25	61.0
Male	32	36.0	16	33.3	16	39.0
Total	89	100.0	48	100.0	41	100.0
Race	N	Percent	N	Percent	N	Percent
African	52	58.4	30	62.5	22	53.7
Coloured	14	15.7	4	8.3	10	24.4
Indian	21	23.6	12	25.0	9	22.0
White	2	2.2	2	4.2	41	100.0
Total	89	100.0	48	100.0		

Table 2

Descriptive Statistics of Age and Job Experience

	Total Group (N 89)		Desk 2 (N 48)		Desk 1 (N 41)	
	Mean	SD	Mean	SD	Mean	SD
Years total work experience	5.91	6.71	6.92	7.89	4.73	4.82
Years in current job	1.66	1.45	2.04	1.52	1.22	1.26
Months in current job	4.49	4.06	4.60	4.13	4.37	4.02
Age	27.70	7.30	29.10	8.17	26.05	5.81

incorporated the customer-interaction quality inspection results (mentioned above) to determine the overall performance rating scale for the individual during the month. The BSC measurement also included financial losses due to agents' negligence, lack of process adherence, and actual call case logging procedures. Each agent's bi-annual performance rating consisted of the average rating that the person obtained during the six month period that was measured.

Occupational Personality Questionnaire 32r

The measuring instrument used in this study, the Occupational Personality Questionnaire 32r (OPQ32r), was developed based on the trait theory of personality. The OPQ32r uses an occupational model of personality, which describes 32 dimensions or factors of the individual's preferred style of behaviour at work such as Innovative, Controlling and Socially Confident. Innovation, for instance, is described as preferring to create new and imaginative approaches to work-related issues, identifying fresh approaches and showing a willingness to question traditional assumptions (SHL, 2009). The OPQ32r results describe personality across four domains or factors: Relationships with People, Thinking Styles, Feelings and Emotions, and Dynamism, which is related to sources of energy. The OPQ32r results provides users with a clear framework for interpreting complex patterns of personality utilising collections of scales which relate to different aspects of behaviour and work-relevant dimensions that predict workplace competence (SHL, 2009). The OPQ32r utilises the forced-choice format that has been shown to successfully reduce uniform response biases, produce greater operational validity coefficients and provide an accurate indication of absolute trait standing (Bartram, 2007; Christiansen et al., 2005). The OPQ32r, however, delivers normative results (SHL, 2009) using a multi-dimensional IRT modelling (Brown & Maydeu-Olivares, 2011).

This measuring instrument enables the recovery of the latent traits underlying the responses through probabilistic estimation, rather than operating on the scale-by-scale basis as well as on the relationships between scales (SHL, 2009). One of the advantages of the OPQ32r is that it provides a fine-grained analysis of occupationally relevant personality traits. Evidence supporting the job-related validity of the OPQ instruments has been reported in a number of studies across a range of industry sectors and job types (Bartram, 2005).

Even though the OPQ was not developed specifically to fit the FFM model a subset of the 32 narrowband scales map onto the FFM of personality. Extensive construct validation research has found that the FFM can be measured using specification equations based on a subset of OPQ scales (SHL, 2005). The OPQ32r, however, measures a broader personality domain than the FFM. The OPQ32r further measures elements that are not apparent in the big five classification such as Energy, Drive and Interests. Applying the FFM allows for validity generalisation and comparison with other personality instruments and previous research findings (Bartram, 2005).

The OPQ32r consists of 104 blocks of three statements measuring different traits. For each block respondents have to choose one statement that is most like them and one that is least like them. The following is an example of such a block and answer.

A. I like to do things my own way   x most like me

B. I recognise weak arguments

C. I take care to follow procedures   x least like me

Two further questionnaires based on the OPQ model are also available, namely the OPQ32n (normative scales, using single-stimulus format) and OPQ32i (ipsative scales, using forced-choice format). The OPQ32r is a shortened version of the OPQ32i (a precursor of the OPQ32r). It is easier and faster to complete and will soon replace the QPQ32i version completely (SHL, 2009).

Standardisation of the OPQ32r

According to SHL (2009), all previously available OPQ32i population, user and local norms can be used with the OPQ32r. This is because the rank ordering of items performed are expected to be unchanged when one of the items is removed.

An international concurrent validity study (N = 853) was conducted across Europe, Asia Pacific, and North, Central and South America, using the OPQ32i as a predictor of

performance in terms of managerial competencies. The SHL Inventory of Management Competencies (IMC) was used as the 360-degree tool to obtain performance ratings. The appropriate language version of the IMC was completed by the respondent and the respondent's managers, colleagues and direct reports. In all analyses, comparisons were made between the short IRT-scored OPQ32r and the OPQ32i. The OPQ32 traits that were hypothesised to be predictive of certain types of behaviour were combined to predict each IMC competency.

The scales were identified a priori and added up, without weightings, to arrive at a composite score. Two composite prediction scores were produced for each of the competencies, based on the IRT-scored shortened OPQ32r and on the traditionally scored OPQ32i. The median correlation of composite personality predictors was 0.32 for the OPQ32r and 0.35 for the OPQ32i. Best validities for OPQ32 predictions reach as high as 0.29 (short IRT-scored) and 0.30 (full ipsative) for manager, 0.30 (short IRT-scored) and 0.33 (full ipsative) for colleagues, 0.27 (short IRT-scored) and 0.30 (full ipsative) for direct reports. Observable competencies, such as Action Orientation, Personal Motivation, Leadership, Creativity and Innovation, Interpersonal Sensitivity and Persuasiveness, displayed high validities for all rater categories. Validities of composite personality predictors based on the shortened IRT-scored OPQ32r in relation to the sixteen (16) different competencies as assessed by managers, colleagues and direct reports show no statistically significant difference to the validities for the composite predictors based on the full OPQ32i. This confirms that the OPQ32r version preserved the validity of the full OPQ32i (SHL, 2009).

SHL (SHL, 2004b) developed South African norms for the OPQ32i for two occupational groups, namely the managerial and professional group (N = 8234), and a mixed occupational group (N = 17 368). Using the existing OPQ32i languages and norms, 92 norms were updated for the OPQ32r, spanning 24 languages and 37 countries or regions in the United Kingdom, United States, China, Europe and South Africa. Twenty one completely new norms were created, including South African norms for General Population; and Professional and Managerial. For general work population norms, a sample size of 600 or more was set and 300 or more for specific user norms such as managerial and professional and graduates. Industry sectors were grouped into six overarching industry clusters: Consulting and

Professional Services; Finance and Insurance; Technology and Telecoms; Education, Government, Health, Non-profit (NPO); Consumer Services, and Manufacturing, Construction, Transportation and Utilities (SHL, 2011).

In a study of bias (N = 6058), no practically significant differences were found between cultural and gender groups in South Africa in terms of cultural and gender biasness (SHL, 2002). No practical differences were found between the means for black and white participants in terms of race bias. Only two scales approached a medium effect size between the means for black and white participants in terms of race biasness. The effect sizes ranged between 0.01 and 0.46. Only the scales Rule Following ($d = 0.43$) and Decisive ($d = 0.46$) obtained effect sizes of higher than 0.40. The black respondent group scored higher on Rule Following and lower on Decisive than the white respondent group. Investigating the practical significant differences on the various personality attributes between male and female participants, Competitive ($d = 0.42$) obtained an effect size of higher than 0.40 where the males obtained a slightly higher score. The effect sizes in this case ranged between 0.01 and 0.42.

In an international study in the USA, the UK and the West Indies, the internal consistency of each OPQ scale was determined by calculating Cronbach's coefficient alpha (N = 518). The participant group consisted of 68.9% females and 30.3% males (0.8% did not indicate their gender). Their ages ranged between 18 and 55 years. Only 57% of the participants indicated their ethnicity. Of these, 36% were white and 48% were black. The alpha coefficients ranged between 0.74 and 0.91 (SHL, 2009).

Criterion measures

The ratings CSC agents obtained in their performance appraisal served as the criterion measure for job performance in this research. This performance appraisal consisted of the rating each individual obtained on his/her key result areas (KRAs). KRAs are determined from the CSC agents' outputs as derived from the job description. Ratings on the KRAs are determined by the employee and their supervisor during their bi-annual performance appraisal discussion. The following KRAs were used:

- E-mail/Call Quality. Call answered immediately on beep, appropriate greeting used, self-introduction done, client's details captured, customer addressed by introduced name or surname, mistakes acknowledged, client listened to, acknowledged and not placed on hold, appropriate questions asked, understanding ensured, actual problem identified, client informed of actions taken, took ownership of query, answers correct and complete, additional assistance offered, possible complaint or unhappy client identified and escalated and client acknowledged and thanked for calling.

- Deliver a world-class service and adhere to internal processes and decision tree. Utilised Siebel (data management system) and resources effectively, followed internal system and decisions tree process correctly, provided all pertinent reasons to customer for process being followed, Service Level Agreement clearly communicated to the client and multiple issues addressed.

- Emails/Calls vs cases ratio. Number of calls received and number of reference numbers on Siebel match.

- Active team participation. Attended and participated in recognition, team meetings and training.

- Self development. Signed off development plan in place, progress on development plan and other achievements indicated on development plan.

- Adhere and live values. Adhered to company values and rules pertaining to absenteeism, late coming and time management and no disciplinary actions recorded.

Table 3 provides the rating scale used in the measurements/ratings.

Research procedure

The research purpose and intended use of the data were explained to all the participating agents and managers. Prior to starting the assessments, all the participating CSC agents were provided with an informed consent form to be completed on a voluntary basis. The CSC agents completed the assessment instrument (OPQ32r) in paper-and-pencil format. To ensure

Table 3

Performance Management Rating Scale

Performance Rating	Descriptors
1-1.5	Most agreed outcomes/standards have not been met: Performing at a consistently low level which impacts both on the team and the clients. Performance must improve.
1.6-2.4	Some agreed outcomes/standards have been met: Performing below what was agreed to/expected relative to agreed outcomes or standards. Performance standard is inconsistent.
2.5-3.4	Most agreed outcomes/standards have been met: Performing almost at the required competence/standards level. Some outcomes may have been met, but on balance, overall performance is below target.
3.5-4.0	All outcomes/standards have been met and some have been exceeded: Performing at the required competence/standards level. The person has achieved all of what was expected and exceeded some standards/outcomes.
4.1-4.5	Performance exceeds all agreed outcomes/standards: Performance exceeds outcomes/standards, consistently delivering above average performance. There is excellent feedback from both internal and external clients, and high levels of expertise and initiative are demonstrated.
4.6-5.0	Exceptional performance against agreed outcomes/standards Exceptional performance: significantly exceeds all outcomes/standards by consistently delivering outstanding performance. Excellent client feedback and the person make a significant contribution or impact outside of the normal job requirements, to the benefit of the division.

consistency the guidelines on the OPQ32r administration card was followed strictly during each test administration session and all participants completed the questionnaire in the same venue, in equally sized groups over 15 consecutive days. In terms of the criterion measure for the research, the CSC agents' supervisors were requested to provide the most recent bi-annual performance rating details for each participant.

Statistical analysis

In this study descriptive and correlational statistics were used. Non-parametric and parametric

statistical procedures were employed in the data analysis to cater for the small sample size and data that might not be distributed normally. Specifically, the Pearson chi-square test was used as the non-parametric procedure and the Independent samples T-test as the parametric procedure. The Pearson Product Moment Correlations test was used as a measure of dependence between the two variables. In order to investigate the normal distribution of the sample data, measures of skewness and kurtosis were included in this study by means of the Pearson skewness coefficients test.

RESULTS

As mentioned earlier, the outputs of the two CSC help desks are the similar, but help desk 2 services the top 50 clients of the bank and are regarded as the senior CSC agents. Agents are promoted from desk 1 to desk 2. To ensure that there were no major differences between participants from the two help desks in CSC, the differences between the descriptive statistics of the two groups were analysed. Differences between the independent and dependent variables as well as the biographical variables were examined.

Using Pearson Chi-square, no significant difference were found between the groups on education ($p = .14$), gender ($p = .58$) and race ($p = .13$). Using the t-test, no significant differences were found between the two groups' years of experience ($p = .13$). However, there were significant differences between their ages ($p = .05$) and years in current job ($p = .00$). The CSC agents working on help desk 2 are older and have more experience in the job than the agents working a help desk 1.

Table 4 contains the means, standard deviations, skewness and kurtosis for the entire sample of the OPQ32r scales and performance criteria. The OPQ32r personality scales results indicate that the distributions do not deviate substantially from the normal distribution. The absolute values of the skewness and kurtosis statistics were less than 1 in all instances. The performance criteria results indicate that the distributions do deviate substantially from the normal distribution. The absolute values of the kurtosis statistics was more than 1 in all instances. These performance criteria results would normally warrant the investigation of

Table 4
Descriptives Statistics of the OPQ32r and Performance Criteria (N=89)

OPQ32r Scales	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Persuasive	89	-1.47	2.03	0.23	0.75	-0.04	-0.43
Controlling	89	-1.02	2.10	0.37	0.65	0.39	-0.15
Outspoken	89	-1.67	1.82	0.19	0.68	-0.02	0.05
Independent minded	89	-1.38	2.00	0.11	0.70	0.11	-0.17
Outgoing	89	-1.50	1.77	0.28	0.73	-0.05	-0.16
Affiliative	89	-1.82	1.23	-0.35	0.67	0.03	-0.56
Socially Confident	89	-1.00	2.07	0.37	0.64	0.45	0.36
Modest	89	-1.56	1.52	-0.04	0.64	-0.16	0.17
Democratic	89	-1.79	1.32	-0.16	0.72	-0.41	-0.13
Caring	89	-2.29	1.90	-0.25	0.77	0.17	0.07
Data Rational	89	-1.67	2.05	0.34	0.80	0.10	-0.16
Evaluative	89	-1.26	1.85	0.13	0.66	0.22	-0.02
Behavioural	89	-2.32	1.98	-0.22	0.78	0.10	0.31
Conventional	89	-1.77	1.74	0.03	0.66	-0.10	0.00
Conceptual	89	-1.29	1.99	0.20	0.65	0.25	0.03
Innovative	89	-1.91	2.01	0.38	0.74	-0.32	0.27
Variety Seeking	89	-1.13	1.50	0.02	0.63	0.38	-0.57
Adaptable	89	-1.90	1.56	-0.24	0.77	-0.19	-0.61
Forward thinking	89	-1.75	1.29	0.10	0.58	-0.29	0.04
Detail Conscious	89	-1.54	1.89	0.11	0.76	0.09	-0.61
Conscientious	89	-1.63	1.60	-0.04	0.69	0.04	-0.43
Rule Following	89	-1.87	2.00	-0.08	0.80	-0.04	-0.14
Relaxed	89	-1.55	1.83	0.32	0.61	-0.03	0.67
Worrying	89	-2.21	0.59	-0.69	0.63	-0.12	-0.51
Tough Minded	89	-1.29	2.40	0.15	0.71	0.51	0.49
Optimistic	89	-2.20	1.60	0.19	0.67	-0.34	0.83
Trusting	89	-1.44	1.37	-0.03	0.54	0.11	0.20
Emotionally Controlled	89	-1.33	1.23	-0.16	0.50	0.58	0.42
Vigorous	89	-1.91	1.47	0.14	0.65	-0.48	0.70
Competitive	89	-1.29	2.23	0.20	0.69	0.04	0.21
Achieving	89	-1.69	1.72	0.34	0.66	-0.27	0.10
Decisive	89	-1.31	2.68	0.44	0.69	0.17	0.42
Consistency	89	0.65	0.89	0.77	0.05	-0.25	-0.72
Performance Criteria							
Email and Call Quality Deliver a World Class Service, and Adhere to Internal Processes and	89	1.50	4.60	3.57	0.63	-0.87	1.32
Decision Tree	89	2.80	4.50	3.54	0.26	0.24	4.51
Emails/Calls vs Cases Ratio	89	1.20	4.70	3.24	0.70	-0.92	1.02
Team Participation	89	2.90	4.70	3.59	0.24	1.65	6.01
Self Development	89	1.05	4.40	3.44	0.46	-3.18	13.30
Adhere and Live Values	89	2.91	4.40	3.44	0.24	0.79	2.82

outliers, but the samples were so small that if outliers were to be deleted, the data would become unusable. The standard deviations for the OPQ32r scales were between 0.50 and 0.80 for the total group. The standard deviations for the total group on the performance criteria were between 0.24 and 0.70.

Table 5 contains the descriptive statistics of Desk 1 and Desk 2 for the OPQ32r scales and performance criteria. The descriptive statistics were used to investigate whether there are substantial differences between the results of the participants from Desk 1 and Desk 2 that would prevent the combination of the results of the two desks into one group. The standard deviation for the OPQ32r scales was between 0.46 and 0.75 for Desk 1. The mean scores for Desk 1 on the performance criteria were between 3.05 and 3.57 and standard deviations were between 0.17 and 0.63. The standard deviations for the OPQ scales were between 0.49 and 0.88 for Desk 2. The mean scores for Desk 2 on the performance criteria were between 3.39 and 3.91 and the standard deviations between 0.19 and 0.72.

Estimated effect sizes (d-statistics) were used to assess the magnitudes of the differences between the OPQ32r scale means and the performance criteria means when Desk 1 was compared with Desk 2. Mean differences were assessed in practical terms by expressing them in pooled standard deviation units using the d-statistic. The d-statistic or pooled standard deviation results indicated medium effect sizes for the OPQ32r personality traits of Outgoing ($d = .53$), Behavioural ($d = .44$) and Optimistic ($d = .44$) between the two desks. The results of the independent T-test for equality of means, also showed a statistically significant difference between the OPQ32r personality traits of Outgoing ($p = .01$), Behavioural ($p = .04$) and Optimistic ($p = .04$). No statistically significant differences were found between the mean of Desk 1 and Desk 2 for the remaining 29 of the OPQ32r personality traits.

Table 5

Descriptives Statistics of the OPQ32r and Performance Criteria

OPQ Scales	Desk 1 (N=41)		Desk 2 (N=48)		df	t	p	d
	Mean	SD	Mean	SD				
Persuasive	0.24	0.69	0.22	0.81	87	0.12	0.91	0.03
Controlling	0.32	0.64	0.41	0.67	87	-0.65	0.52	-0.14
Outspoken	0.20	0.72	0.17	0.66	87	0.20	0.84	0.04
Independent minded	0.15	0.70	0.08	0.71	87	0.48	0.63	0.10
Outgoing	0.49	0.66	0.10	0.75	87	2.59	0.01	0.53
Affiliative	-0.30	0.64	-0.39	0.70	87	0.69	0.49	0.15
Socially Confident	0.39	0.61	0.36	0.67	87	0.22	0.83	0.05
Modest	-0.07	0.64	0.00	0.65	87	-0.49	0.63	-0.10
Democratic	-0.04	0.69	-0.27	0.75	87	1.53	0.13	0.32
Caring	-0.12	0.66	-0.37	0.84	87	1.54	0.13	0.33
Data Rational	0.22	0.70	0.44	0.87	87	-1.32	0.19	-0.28
Evaluative	0.07	0.62	0.18	0.70	87	-0.77	0.45	-0.16
Behavioural	-0.03	0.70	-0.37	0.82	87	2.10	0.04	0.44
Conventional	0.00	0.61	0.05	0.71	87	-0.33	0.74	-0.07
Conceptual	0.26	0.57	0.15	0.71	87	0.82	0.41	0.18
Innovative	0.29	0.75	0.46	0.72	87	-1.07	0.29	-0.23
Variety Seeking	0.04	0.58	0.00	0.67	87	0.29	0.77	0.06
Adaptable	-0.19	0.81	-0.29	0.75	87	0.58	0.56	0.12
Forward thinking	0.18	0.54	0.04	0.62	87	1.09	0.28	0.23
Detail Conscious	0.14	0.68	0.09	0.82	87	0.32	0.75	0.07
Conscientious	-0.07	0.68	-0.02	0.70	87	-0.36	0.72	-0.08
Rule Following	-0.03	0.71	-0.13	0.88	87	0.61	0.55	0.13
Relaxed	0.39	0.52	0.26	0.67	87	0.94	0.35	0.20
Worrying	-0.70	0.57	-0.68	0.68	87	-0.11	0.91	-0.02
Tough Minded	0.14	0.75	0.17	0.68	87	-0.19	0.85	-0.04
Optimistic	0.35	0.67	0.06	0.64	87	2.10	0.04	0.44
Trusting	-0.01	0.46	-0.05	0.61	87	0.36	0.72	0.08
Emotionally Controlled	-0.20	0.52	-0.13	0.49	87	-0.63	0.53	-0.14
Vigorous	0.21	0.65	0.09	0.64	87	0.87	0.39	0.18
Competitive	0.17	0.73	0.22	0.65	87	-0.32	0.75	-0.07
Achieving	0.42	0.66	0.28	0.66	87	1.01	0.31	0.22
Decisive	0.38	0.59	0.50	0.78	87	-0.77	0.44	-0.16

Performance Criteria

Email and Call Quality Deliver a World Class Service, and Adhere to Internal Processes and Decision Tree	3.18	0.63	3.91	0.37	87	-6.78	0.00	-1.17
Emails/Calls vs Cases Ratio	3.45	0.24	3.61	0.25	87	-3.20	0.00	-0.65
Team Participation	3.05	0.62	3.39	0.72	87	-2.39	0.02	-0.49
Self Development	3.57	0.17	3.61	0.29	87	-0.72	0.47	-0.15
Adhere and Live Values	3.27	0.60	3.58	0.19	87	-3.39	0.00	-0.68
	3.35	0.21	3.53	0.25	87	-3.58	0.00	-0.72

In Table 5 it can also be seen that medium to large effect sizes were obtained for the performance criteria of Email and call quality ($d = 1.17$), Deliver a world-class service and Adhere to internal processes and decision tree ($d = .65$), Self development ($d = .68$), Adhere and live values ($d = .72$), and Emails/Calls vs. cases ratio ($d = .49$). The results of the independent T-test for equality of means, also showed a statistically significant difference between the job performance measurement variables of Email and call quality ($p = .00$), Deliver a world-class service and Adhere to internal processes and decision tree ($p = .00$), Emails/Calls vs. cases ratio ($p = .02$), Self development ($p = .00$) and Adhere and live values ($p = .00$) of the participants between help desk 1 and help desk 2. The only performance criteria with no statistically significant differences found between the mean of Desk 1 and Desk 2 was Team Participation.

The practical and significant differences found between the job performance variables of the two Desks indicated that the job performance level of the help desks differ. The differences between the means for Desk 1 and Desk 2 are all less than 1 and all means are above 3. Considering the differences between the means in the context of the rating scale used (2.5 to 3.4: Most agreed outcomes/standards have been met, and 3.5 to 4.0: All outcomes/standards have been met and some have been exceeded) (Table 3). These differences do not equate to very large performance differences. The performance of Desk 1 can also be expected to be lower than Desk 2 as agents are initially employed at Desk 1.

No substantial differences were found between Desk 1 and Desk 2 that would prevent the combination of the two Desks into one group for further analysis.

The relationship between the predictors and the criteria scores for the total sample (Table 6) was investigated by means of Pearson Product Moment Correlations. It should be noted that the sample size was too small to conduct regression analysis. The personality trait of Variety Seeking ($r = –.22$), as identified by the OPQ32r, correlated significantly and with a moderate effect size with the criteria, Email and call quality. Deliver a world-class service and adhere to internal processes and decision tree correlated significantly with Outgoing ($r = –.23$), Modest ($r = .23$) and Data Rational ($r = .26$). Emails/Cases vs. calls ratio correlated with Outgoing ($r = –.24$), Conceptual ($r = .22$) and Competitive ($r = –.32$). The personality traits, as

Table 6

Correlations Between Predictors and Criteria for the Total Group (N=89)

OPQ32 scales	Email and Call Quality	Deliver a World Class Service, and Adhere to Internal Processes and Decision Tree	Emails/Calls vs Cases Ratio	Team Participation	Self Development	Adhere and Live Values
Persuasive	r=0.08	r=-0.01	r=-0.19	r=0.04	r=0.01	r=0.09
Controlling	r=0.08	r=0.09	r=-0.05	r=0.22*	r=0.12	r=0.04
Outspoken	r=0.10	r=-0.07	r=-0.09	r=0.06	r=-0.06	r=-0.09
Independent minded	r=-0.10	r=-0.01	r=-0.17	r=-0.10	r=-0.04	r=-0.07
Outgoing	r=-0.15	r=-0.23*	r=-0.24*	r=-0.01	r=-0.15	r=-0.22*
Affiliative	r=-0.00	r=-0.03	r=-0.01	r=0.08	r=0.09	r=0.00
Socially Confident	r=0.03	r=0.03	r=0.00	r=0.18	r=0.00	r=0.05
Modest	r=0.18	r=0.23*	r=0.14	r=0.04	r=-0.04	r=-0.01
Democratic	r=0.02	r=-0.02	r=0.19	r=0.02	r=0.04	r=0.03
Caring	r=0.09	r=0.01	r=0.16	r=0.07	r=0.00	r=0.01
Data Rational	r=0.10	r=0.26*	r=0.09	r=0.28**	r=0.13	r=0.21
Evaluative	r=-0.01	r=0.15	r=0.10	r=0.07	r=-0.03	r=0.12
Behavioural	r=-0.16	r=0.04	r=0.18	r=0.11	r=0.05	r=0.11
Conventional	r=0.03	r=-0.10	r=-0.04	r=-0.14	r=-0.08	r=-0.03
Conceptual	r=-0.14	r=0.21	r=0.22*	r=0.16	r=0.04	r=0.23*
Innovative	r=-0.02	r=0.21	r=0.00	r=0.04	r=0.07	r=0.17
Variety Seeking	r=-0.22*	r=-0.00	r=-0.05	r=0.06	r=0.04	r=0.11
Adaptable	r=-0.04	r=-0.13	r=-0.06	r=-0.19	r=-0.01	r=-0.21
Forward thinking	r=-0.15	r=-0.05	r=-0.10	r=0.11	r=0.01	r=-0.06
Detail Conscious	r=0.07	r=-0.06	r=0.01	r=0.00	r=0.02	r=0.05
Conscientious	r=0.11	r=0.03	r=0.03	r=0.04	r=0.03	r=0.01
Rule Following	r=0.08	r=-0.09	r=-0.02	r=-0.18	r=0.03	r=-0.06
Relaxed	r=-0.03	r=0.06	r=-0.07	r=0.03	r=-0.02	r=0.00
Worrying	r=-0.06	r=-0.15	r=-0.06	r=-0.17	r=0.04	r=-0.08
Tough Minded	r=0.08	r=0.07	r=0.05	r=0.06	r=-0.06	r=0.10
Optimistic	r=-0.19	r=-0.09	r=0.06	r=-0.05	r=-0.09	r=-0.02
Trusting	r=0.10	r=0.08	r=0.15	r=0.11	r=0.08	r=0.10
Emotionally Controlled	r=0.15	r=0.08	r=0.02	r=0.01	r=0.10	r=-0.03
Vigorous	r=0.03	r=0.00	r=0.19	r=-0.04	r=-0.05	r=0.03
Competitive	r=-0.12	r=-0.11	r=-0.32**	r=0.09	r=-0.08	r=-0.11
Achieving	r=-0.07	r=0.00	r=-0.06	r=-0.02	r=0.04	r=-0.02
Decisive	r=-0.03	r=0.05	r=-0.05	r=0.16	r=0.06	r=-0.03

* p≤ 0.05

** p≤ 0.01

identified by the OPQ32r, which correlate significantly and with a moderate effect size with the criteria Team participation, were Controlling (r = .22) and Data Rational (r = .28). Adhere and live values correlated with Outgoing (r = –.22) and Conceptual (r = .23). The result for Self development did not show any significant correlations with the criteria.

The personality traits, as identified by the OPQ32r, which correlate with the job performance of CSC agents were found to be: Conceptual (+), Controlling (+), Competitive (-) Data Rational (+), Modest (+), Outgoing (-) and Variety Seeking (-).

As indicated above, Tett and Burnett (2003) state that most meta-analyses utilise a construct-orientated approach to the study of the relationship between specific personality traits and performance in various jobs and that the FFM is the most frequently used taxonomy in these meta-analyses. By means of factor analysis, validity coefficients and construct validity, the Big Five can typically be extracted from the OPQ32r measurement results (Table 7). Additional factors such as Achievement can also be extracted (Brown & Bartham, 2009).

The OPQ32, however, measures a broader personality domain than the FFM. The OPQ32r further measures elements are not apparent in the Big Five classification, such as Energy, Drive and Interests Elements.

To determine the results the FFM would produce in this study, by means of the techniques mentioned above, the relationship between the FFM factors and the criteria scores of the total group was investigated (Table 8). The performance criteria Emails/calls vs. cases ratios correlated significantly with the FFM factor of Agreeableness (r = .31). Adhere to and live values correlated with Openness (r = .22).

A comparison between the OPQ and FFM correlations was conducted and the results found a loss of important information for the FFM factor of Extraversion. The OPQ32r scales that are mapped to the FFM factor of Extraversion are Outgoing, Emotionally controlled, Outspoken, Modest, Affiliative, Socially confident, Controlling and Persuasive (Table 7). In the correlations between predictors and criteria for the Total group (Table 6), the OPQ32r scale of Outgoing correlated with Deliver a world-class service and adhere to internal processes and

Table 7

The OPQ32r Traits Mapping to the Big Five Factors of Personality

Big Five Factors	OPQ32 scales
Extraversion	Outgoing
	Emotionally Controlled
	Outspoken
	Modest
	Affiliative
	Socially Confident
	Controlling
	Persuasive
Agreeableness	Caring
	Democratic
	Behavioural
	Competitive
	Trusting
	Decisive
	Affiliative
	Independent Minded
Conscientiousness	Conscientious
	Detail Conscious
	Vigorous
	Forward Thinking
	Achieving
Emotional Stability	Relaxed
	Worrying
	Tough Minded
	Optimistic
	Socially Confident
Openness (unconventionality)	Conventional
	Variety Seeking
	Rule Following
	Innovative
	Independent Minded
Openness (critical thinking)	Evaluative
	Data Rational
	Conceptual

source: SHL, 2009

Table 8

Correlations Between the Performance Criteria and the Big Five Factors for the Total Group

FFM factors	Email and Call Quality	Deliver a World Class Service, and Adhere to Internal Processes and Decision Tree	Emails/ Calls vs Cases ratio	Team Participation	Self Development	Adhere and Live Values
Extraversion	r=-0.07	r=-0.10	r=-0.14	r=0.11	r=-0.03	r=-0.07
Openness	r=-0.18	r=0.19	r=0.075	r=0.18	r=0.11	r=0.22*
Emotional Stability	r=-0.02	r=0.10	r=0.03	r=0.13	r=-0.04	r=0.09
Agreeableness	r=0.12	r=0.05	r=0.31**	r=0.06	r=0.07	r=0.08
Conscientiousness	r=0.04	r=-0.01	r=0.018	r=0.02	r=0.00	r=-0.00

* $p \leq 0.05$

** $p \leq 0.01$

decision tree ($r = -.23$), Emails/Calls vs Cases Ratio ($r = -.24$) and Adhere and Live Values ($r = -.22$). The OPQ32r scale of Modest correlated ($r = -.23$) with Deliver a world-class service while Controlling correlated with Team participation ($r = .31$).

The hypothesis can therefore be accepted as there is a statistically significant relationship between the personality traits of Conceptual, Controlling, Data Rational, Modest and Competitive, Outgoing and Variety Seeking and the job performance of CSC agents.

DISCUSSION

The aim of this study was to determine whether there were relationships between certain personality traits of CSC agents and their job performance, and if these personality traits can be used to predict job performance in the CSC context.

No research had yet been done within this organisation and specifically within its CSC to establish whether there is a relationship between the dimensions measured by the OPQ32r and the job performance of call centre agents. Identifying the personality characteristics of individuals who are successful in its CSC environment may assist the organisation to create a better fit between employees and the requirements of this type of environment. This, in turn,

may improve organisational outcomes through improving the quality of the organisation's customer service and reducing the financial and human costs associated with poor service performance, poor attendance rates, high turnover rates and the cost of ineffective assessments. Using a personality assessment instrument that has been proven to validly predict performance may particularly provide a positive and measurable return on investment to the organisation.

Skyrme, Wilkinson, Abraham and Morrison (2005); Salgado (1997); Fort (2010) and Nicholls, Viviers and Visser (2009), found that the FFM personality dimension of Conscientiousness is one of the best predictors of job performance. This finding was not replicated in the current study.

As indicated earlier, Sawyer et al (2009) found that the fact whether an individual is Extraverted or Intraverted did not have any bearing on performance in call centres. This finding was replicated in the current study as no significant correlations for the FFM personality dimension of Extraverted was found. However, correlations were found with the OPQ32r facets of Modest and Controlling. A negative correlation was also found for the OPQ32r facet of Outgoing. These results concur with Warr, Bartram and Martin's (2005) findings that the aggregation of scales to the level of the Big Five can sometimes result in a loss of important information and in that the for Extraversion the separate examination of facets revealed patterns that were concealed by the overall composite.

Sawyer et al (2009) found that emotionally stable individuals appear to function well in a call centre environment because they are able to cope with high levels of emotional exhaustion and seem to have lower turnover rates. Skyrme et al (2005) found the FFM personality dimension of Emotional Stability to be a significant predictor of job performance. This finding was not replicated in the current study.

Skyrme et al (2005) and Judge et al (1999) found that the FFM personality dimension of Agreeableness was positively related to employee performance. This finding was replicated in the current study.

Sawyer et al. (2009) also found that given the restrictive nature of call centres with scripts and work monitoring, those individuals who are creative and who seek new experiences (the FFM personality dimension of Openness to new experience) may not be suited for call centre work. This finding was not replicated in the current study as significant correlations were found for Openness. Correlations were also found with the OPQ32r facets of Data Rational and Conceptual. Only the negative statistical correlation with Variety Seeking replicated the findings of Sawyer et al.

The results of the present study in terms of the OPQ32r related traits that correlate with CSC agent's job performance are Conceptual, Controlling, Data Rational, Modest and less Competitive, less Outgoing and less Variety Seeking. These personality traits can be described as:

- Conceptual - interested in theories and enjoy discussing abstract concepts.
- Controlling - be in charge, take the lead, tell others what to do and take control.
- Data Rational – likes working with numbers and enjoys analysing statistical information, bases decisions on facts and figures.
- Modest – dislikes discussing achievement and keeps quite about personal success.
- Less Competitive - dislike competing with others and feel that taking part is more important than winning.
- Less Outgoing – quiet and reserved in groups, dislikes being the centre of attention.
- Less Variety Seeking – prefers routine, is prepared to do repetitive work and do not seek variety.

A few unexpected results were found in this study that can mostly be explained by the distinct differences in the nature of a CSC versus conventional call centres, as explained earlier. The distinct differences in the nature of a CSC versus conventional call centres, for instance, in how employees' performance is monitored, and differences in typical client-agent interaction, could again explain this study's finding of Conceptual. Agents are not measured on the length of their calls, but the quality of the call and also in terms of how the client experienced it. This allows for the agent to be able to have some discussion with the client. The nature of the calls is normally concerning clients seeking assistance or advice and not complaints based. This could explain the lack of findings regarding Emotional Stability as it seems that agents do not

have to be Worrying, Tough Minded, Optimistic or Socially Confident to succeed in this job. The correlations found with the OPQ32r facets of Data Rational can mostly be explained by the fact that agents are also expected to conduct investigations and analysis of data and figures as part of finding resolution to customer requests and this requires a preference for working with numbers and enjoying analysing of statistical information.

Conclusions

There appear to be statistically significant relationships between the personality traits of CSC agents and their job performance. Using personality traits as identified by means of the OPQ32r, successful CSC agents can be described as being Conceptual, Controlling, Data Rational, Modest, less Competitive, less Outgoing and less Variety Seeking. The relationship between the FFM factors and the performance criteria scores was investigated by statistically mapping the OPQ32r factors to the FFM factors. The FFM factors that correlated with job performance were Openness and Agreeableness. Comparison of the OPQ and FFM correlation results found a loss of important information for the FFM factor of Extraversion.

The personality traits identified in this study can be included in the recruitment process for CSC agents and the OPQ32r can be used to measure these traits.

Limitations

The fact that such a limited sample was used may impact on the generalisability of findings. The CSC approach, however, still appears to be rather unique in the South African banking industry, and the results may be of interest to any company wishing to transform their call centres into a CSC or creating a CSC. In addition, the sample was chosen from the banking sector in a developing country. It is therefore not possible to generalise the findings to other banking sectors within developed countries like the UK. The CSC agents who participated in this study further comprised only one job family and, thus, generalising results beyond this population would be questionable. Performance measures specific to the particular organisation and industry was used. Generalisability of any findings can therefore pertain to a population of CSC agents in similar situations as well as to the class of performance measures

used in this study.

An implicit assumption in research using self-report surveys, as in the current study, is that respondents provide accurate responses. An inherent limitation of self-report surveys, however, is that this may not be the case. Although every effort was made to prevent Type II errors (also known as a false positive, which occurs when a statistical test rejects a true null hypothesis) by using non-parametric and parametric statistical techniques, in using the Chi square test on a small sample the researcher might have committed a Type II error. The small sample size and the weak criteria could potentially also have influenced the correlations and the data should therefore be interpreted with caution.

Recommendations for future research

Further research on the relationship between personality traits and job performance in the context of a customer relations management call centre environment appears warranted. Further investigation of personality traits (as measured by the OPQ32r) that may act as job performance predictors for CSC agents in the banking industry is recommended. Finally, it may be useful to employ the OPQ32r to investigate the return on investment in terms of whether there is a difference in the job performance and staff turnover rates of candidates recruited according to the personality traits identified in this study compared to those who are not.

CHAPTER 4

CONCLUSIONS, LIMITATION AND RECOMMENDATIONS

Chapter 4 contains the conclusions, limitations and recommendations.

4.1   CONCLUSIONS REGARDING THE LITERATURE REVIEW

The general aim of this research was to determine whether certain personality traits of CSC agents are related to their job performance, and consequently, whether these personality traits can be used to predict job performance in this context. In order to achieve this aim, the study aimed to answer the following question: Which personality traits can predict job performance among CSC agents?

The study also aimed to conceptualise

- The variables and the relationships between the variables (personality traits and job performance in a CSC environment) from the literature
- The role of personality in predicting work performance

These general aims were achieved by addressing and achieving the specific aims of the study.

In the following sections conclusions are drawn about each of the specific aims.

4.1.1. The first aim: To conceptualise the variables and the relationships between the variables (personality traits and job performance in a CSC environment) from the literature

This aim was addressed in chapter 2. The following conclusions are drawn regarding the relationship between job performance and personality.

a   Conclusions regarding job performance

Campbell (1990) describes job performance as an individual level variable; that is, performance is something a single person does. Performance measures can be characterised as either objective (measures that require few judgments, such as production counts) or subjective (measures that rely on the evaluative judgment of raters). Although in principle, objective measures might be preferable they may not be feasible in all settings (Landy & Farr, 1983; Murphy, 2008). Due to the limitations of objective performance measures, most systems for measuring job performance depend partly on the evaluative judgments of supervisors or other stakeholders in organisations (Murphy & Cleveland, 1995). Dreher and Dougherty (2001) maintain that rating systems that combine information from many sources might overcome many of the barriers to the accuracy and credibility of performance measures, like rater errors and perceptual biases (Bracken, Timmreck & Church, 2001).

b   Conclusions regarding personality

Santrock (2008) describes personality (the independent variable in this research study) as a dynamic and organised set of characteristics possessed by a person that uniquely influences his or her cognitions, motivations, and behaviours in various situations. Personality arises from within the individual and remains fairly consistent throughout life. There are a number of different theories about how personality develops. Different schools of thought in psychology influence many of these theories. Some of the major perspectives on personality include Type theories, Behavioural genetics and Trait theories, Psychoanalytic theory, Behavioural theories, Developmental theories, and Humanist theories. The dependent variable in this study, job performance is viewed as a behavioural construct. The measuring instrument used in this study, the OPQ32r, was developed on the trait theory of personality and measures 32 personality traits.

4.1.2 The second aim: To conceptualise the role of personality in predicting job performance

a   Conclusions regarding the role of personality in predicting job performance

The activities of personality psychology include personality assessments, the results of which are also used to predict significant life outcomes, such as job performance. There would appear to be a significant relationship between people's personality traits and their job performance. Although some research has been conducted within the call centre environment, no published research on this relationship could be found for CSCs in the banking industry in South Africa. Sawyer et al (2009) emphasise that further research is required to establish the relationship between personality factors and performance in the context of a customer relations management call centre environment. It is envisaged that this study will contribute to this field of investigation.

4.2   CONCLUSIONS REGARDING THE EMPIRICAL STUDY

The empirical study was designed to answer three research questions, which were restated in the form of a hypothesis:

$H_{1:}$ There are statistically significant relationships between personality traits and job performance.

The research aims of the empirical study were as follows:
- Determine the relationship between personality traits and job performance.
- Determine whether it is justified to combine the data obtained from help desk 1 and help desk 2 in order to determine the relationship between personality and the performance variables.
- To evaluate the use of personality as a predictor of job performance.

The empirical findings provided support for H_1 (there are statistically significant relationships between personality traits and job performance) and the hypothesis is partially accepted.

4.2.1 The first empirical aim: To determine the relationship between personality and job performance

This aim was addressed in chapter 3. The first empirical research aim involved non-experimental research and entailed a quantitative empirical study in which the relationship between the independent variable (personality) and dependent variable (job performance) was investigated. The OPQ32r was used as a measure of personality, the independent variable. The ratings CSC agents obtained in their performance appraisal served as the criterion measure for job performance in this research. This performance appraisal consisted of the rating each individual obtained on his/her key result areas (KRAs) and these criteria consisted of Email and Call Quality; Deliver a World Class Service, and Adhere to Internal Processes and Decision Tree; Emails/Calls vs. Cases Ratio; Team Participation; Self Development and Adhere and Live Values.

Using personality traits as identified by means of the OPQ32r, successful CSC agents can be described as being Conceptual, Controlling, Data Rational, Modest, less Competitive, less Outgoing and less Variety Seeking.

To determine the results the FFM may produce in this study the relationship between the FFM factors and the criteria scores was investigated by statistically mapping the OPQ32r factors to the FFM factors. The FFM factors that showed a relationship to job performance was Openness and Agreeableness. Comparison of the OPQ and FFM correlation results found a loss of important information for the FFM factor of Extraversion.

4.2.2 The second empirical aim: Determine whether it is justified to combine the data from Desk 1 and Desk 2 in order to determine the relationship between personality and the performance variables

This aim was addressed in chapter 3. The second empirical research aim involved non-experimental research and entailed a quantitative empirical study in which a comparison of the descriptive statistics of the groups in help desk 1 and help desk 2 was conducted. No significant differences were found between the two groups' years of experience. However,

there were significant differences between their ages and years in the current job. The CSC agents working at help desk 2 are older and have more experience in the job than the agents working at help desk 1. A statistically significant difference was found between Desk 1 and 2 on the OPQ32r personality traits of Outgoing, Behavioural and Optimistic. No statistically significant differences were found between the mean of Desk 1 and Desk 2 for the remaining 29 of the OPQ32r personality traits. The only performance criterion with no statistically significant differences found between the mean of Desk 1 and Desk 2 was team participation.

The practical and significant differences found between the job performance variables of the two desks indicated that the job performance level of the help desks differ. The differences between the means for Desk 1 and Desk 2 are all less than 1 and all means are above 3. Considering the differences between the means in the context of the rating scale used (2.5 to 3.4: Most agreed outcomes/standards have been met; and 3.5 to 4.0: All outcomes/standards have been met and some have been exceeded, Table 3), these differences do not equate to very large performance differences. The performance of help desk 1 can also be expected to be lower than that of help desk 2 due to help desk 1 being where agents are initially employed. No substantial differences were found between the data of help desk 1 and 2 that would prevent the combination of the data of the two help desks into one group for further analysis.

4.2.3 The third empirical aim: To evaluate the use of personality as a predictor of job performance

This aim was addressed in chapter 3. Several conclusions were drawn regarding the use of personality as a predictor of job performance. The empirical findings were compared to trends in the literature review and most of the present study's findings corresponded to those of previous studies. The results of the present study differed from trends in the literature review in that no significant correlations were found for the FFM personality dimension of Conscientiousness and Emotional stability.

There appear to be statistically significant relationships between the personality traits of CSC agents and their job performance. Using personality traits as identified by means of the

OPQ32r, successful CSC agents can be described as being Conceptual, Controlling, Data Rational, Modest, less Competitive, less Outgoing and less Variety Seeking.

The personality traits identified in this study can therefore be included in the recruitment process for CSC agents and the OPQ32r can be used to measure these traits.

4.3 CONCLUSIONS REGARDING THE CENTRAL HYPOTHESIS

Based on the findings of the present study, the hypothesis is herewith accepted. There are statistically significant relationships between personality traits and job performance.

4.4 LIMITATIONS

The limitations of the literature review and empirical study are outlined in the sections below.

4.4.1 Limitations of the literature review

As far as could be determined, little research has been done on the relationship between agents' personality traits and their job performance in the context of a customer relations management call centre environment. Furthermore, no published research on this relationship could be determined for CSC in the banking industry in South Africa. It was therefore difficult to support and integrate findings from different researchers.

4.4.2 Limitations of the empirical study

The fact that such a limited sample was used may impact on the generalisability of findings, but, as indicated earlier, the CSC approach still appears to be rather unique in the South African banking industry. The results should therefore be of interest to any company wishing to transform their call centres into a CSC or create a CSC. In addition, the sample was chosen from the banking sector in a developing country. It is therefore not possible to generalise the findings to other banking sectors in developed countries like the UK. The CSC agents who participated in this study comprised only one job family, thus generalising results beyond this

population would be questionable. Performance measures specific to the particular organisation and industry was used. Generalisability of any findings can only pertain to a population of CSC agents in similar situations as well as to the class of performance measures used in this study.

An implicit assumption in research using self-report surveys, as in the current study, is that respondents provide accurate responses. An inherent limitation of self-report surveys however, is that this may not be the case. Although every effort was made to prevent Type II errors by using non-parametric and parametric statistical techniques, in using the Chi square test on a small sample the researcher might have committed a Type II error also known as a false positive, which occurs when a statistical test rejects a true null hypothesis. The sample size was too small for regression analysis and the small sample size could have influenced the correlations and the data should therefore be interpreted with caution.

4.5   RECOMMENDATIONS

Based on the findings, conclusions and limitations of this study, the researcher makes the following recommendations for future research:

- An investigation of the relationship between personality traits and job performance in the context of a customer relations management call centre environment
- An examination/exploration of personality traits (as measured by the OPQ32r) that may act as job performance predictors for CSC agents in the banking industry
- The use of the OPQ32r to investigate the return on investment in terms of whether there is a difference in the job performance and staff turnover rates of candidates recruited according to the personality traits identified in this study compared to those who are not.

4.6   INTEGRATION OF RESEARCH

The empirical study explored the relationship between personality traits and job performance in the context of a customer relations management call centre environment. The study

provided statistically significant evidence to support the hypothesis on the existence of a relationship between the relationships between the personality traits of CSC agents and their job performance.

The literature review indicated the existence of relationships between personality traits and job performance. It further indicated that limited literature is available on this relationship in a customer relations management call centre environment or contact centres.

In conclusion it is hoped that the findings of this study have provided insight into the relationship between personality traits and job performance of CSC agents in the context of the relatively new field of customer relations management call centre environment and will initiate further research on this relationship in South Africa.

4.7   CHAPTER SUMMARY

In chapter 4 the conclusions, limitations and recommendations were formulated.

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