PERSONALITY AND THE PERFORMANCE OF SALES STAFF IN A CALL CENTRE ENVIRONMENT

by

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DECLARATION

I, Cecilia Denton, student number 31587437, declare that this dissertation of limited scope, entitled **Personality and the Performance of Sales Staff in a Call Centre Environment**, is my work and that all the sources and quotes have been identified and acknowledged by means of complete references.

I further declare that ethical clearance to conduct the research has been obtained from the Department of Industrial and Organisational Psychology, University of South Africa, as well as from the participating organisation.

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SUMMARY

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DEPARTMENT   :   Industrial and Organisational Psychology

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The objective of the study was to determine whether any relationships exist between personality and the performance of sales staff in a call centre environment. Personality type (measured by the Jung Type Indicator [JTI]) and sales personality type (measured by the Sales Preference Indicator [SPI]) were correlated with sales staff performance in an insurance call centre environment. A quantitative survey was conducted using a sample of $N = 146$.

Correlational and inferential statistical analyses revealed statistically significant positive, although weak, relationships between personality type and the performance of call centre sales staff while statistically significant positive and negative correlations, although weak, were found between sales personality type and the performance of call centre sales staff. More female and black sales staff members were found in the higher performing clusters than in the average and poorer performing clusters. The best subset of personality scales from the JTI that predicted univariate measures of performance were the extroversion-introversion scale and the judging-perceiving scale while the best subset of predictors from the SPI personality scale were the consistent-adaptive scale and the cooperative-competitive scale.

Call centre performance criteria are based mainly on quantitative performance criteria. It emerged from the literature review that the call centre sales position is synonymous with emotional labour and it is, thus, recommended that future research should emphasise the importance of emotionally intensive labour and its measurement combined with quantitative performance measures.

Key words: personality type; sales personality type; sales performance; individual performance; organisational performance; call centre.

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CHAPTER 1
SCIENTIFIC OVERVIEW OF THE STUDY

This study explores the relationships between personality and the performance of sales staff in a call centre sales environment. In the study personality will be explored as "personality type" and "sales personality type". Call centre sales staff performance is measured based on the time spent on the telephone with customers, sales volumes generated and the quality of the sales process. Chapter 1 outlines the background, motivation and problem statement for the study. The aims and paradigm perspective of the study are also outlined, while the research design and method are explained and the chapter layout presented.

1.1   BACKGROUND AND MOTIVATION

The focus of this study is an investigation into whether relationships exist between personality and the performance of sales staff in a call centre insurance sales role. The context of this study is the identification of suitable call centre sales staff during the hiring process so as to enhance an optimal person–environment fit in an environment that is characterised by both extreme pressure and emotional labour.

If organisations are to survive and flourish, it is essential that they adapt to global changes, particularly in view of the fact that they face more foreign competition than ever before, political transformations and the increasing advancement of technological markets (Abed & Haghighi, 2009; Greenhaus, Callanan, & Godshalk, 2000; Greenberg & Baron, 2008). Overall, the highly competitive environment in most industries is constantly creating pressure to optimise the efficiency and effectiveness of business processes (Abed & Haghighi, 2009) and organisational survival has become centred on effective, high quality sales based on a customer-centred approach (Nel & De Villiers, 2004). Changes in the world of sales and an increased demand for customer-centredness gave rise to the introduction of call centres that enable organisations to provide customers with immediate, interactive customer service and offering a wider range of products (Nash, 1994).

According to the South African Insurance Report (Business Monitor International, 2011; Metcalfe, 2006), a concern in South Africa is the sluggish economic growth as a result of weak confidence in business and high unemployment. However, call centres have significantly boosted both job creation and foreign investment in South Africa (Pritchard, 2011) with the South African insurance industry, in particular, showing overall positive growth as well as overall higher profitability (Business Monitor International, 2011). This, in turn, has

facilitated the introduction of new insurance products in South Africa and possible expansion into Sub-Saharan African markets, thus creating more job opportunities.

A call centre serves as a customer support and sales channel by means of telephonic communication either to generate more business through sales or to retain current business (The Telephone comes to life, 1995). An increasing number of organisations are becoming interested in sales focused call centres and approximately two-thirds of interactions with customers currently are established through call centres (Bakker, Demerouti, & Schaufeli, 2003; Batt & Moynihan, 2002).

The premise of call centre sales is based on improved quality customer service and the maintenance of lower costs, thus endeavouring to find a balance between quantitative and qualitative sales (Banks & Roodt, 2011; Deery & Kinnie, 2002; Korczynski, 2002; Russell, 2009). This, in turn, has influenced and changed the definition of the performance of sales staff significantly.

Companies within the financial insurance sectors are relying specifically on call centres to optimise the quality of service delivery (Visser & Rothmann, 2009). The constant evolution of call centres has resulted in continuous changes in technological advancement, employee workload and the nature of the call centre sales role. Sales objectives in general have become standardised and target-driven, resulting in more stress for sales staff (Russell, 2009). The call centre sales position, in particular, has become more multifaceted (Russell, 2009) and includes various responsibilities such as the generation of high sales volumes, whilst delivering high quality customer service in an efficient manner (Dean & Rainnie, 2009).

Despite the fact that the main goal of a call centre is maintaining low costs and ensuring high performance, delivering high quality customer service is essential (Taylor, Mulvey, Hyman & Bain, 2002). The organisational and occupational transformations in these work processes have led to call centre sales staff becoming increasingly isolated and enjoying very little moral support (Russell, 2009). The call centre sales position has developed into a challenging and multi-layered role which impacts on call centre sales agent performance. In particular, absenteeism, turnover, tardiness and employee burnout have further been increasing the challenges in the call centre sales environment in a way that is impacting significantly on organisational performance (Deery, Iverson & Walsh, 2002; Russell, 2009; Visser & Rothmann, 2009).

This study will focus on staff members who fulfil the dual responsibility of providing excellent

customer service while delivering high volumes of insurance sales within a call centre environment. People in these positions are often required to perform under pressure and to act in a manner which is contradictory to their own personality types. This, in turn, constitutes emotional labour. Hochschild (1983) defines emotional labour as the interpersonal interaction during the social exchange between employee and customer. It is considered as a type of labour as the employee is required to perform a specific task, the employee is expected to complete this task successfully and the task is sold for a wage (Hochschild, 1983). Thus, emotional labour may also refer to the management of one's feeling in order to elicit a reaction in others (Hochschild, 1983). The emotional labour that is expected of call centre sales staff goes hand-in-hand with the expected display rules of a call centre sales organisation. The display rules defined by an organisation often require sales staff to act in a sociable and concerned manner which then increases the emotional demands on the salespeople concerned (Diefendorff & Richard, 2003). The emotional labour inherent in call centre sales performance has an impact on organisational performance, including absenteeism, turnover and employee burnout.

One of the major consequences of emotional labour is absenteeism and this is one of the key challenges in the call centre sales role (Barrick & Mount, 2005; Deery *et al.*, 2002). Absenteeism may be linked to poor individual performance but it also has an effect on organisational performance (Muchinsky, Kriek & Schreuder, 1998). If 1% of the employees in an organisation are absent, then the productivity of that organisation falls by 2,5% (Soma initiative: Enhancing employee productivity, 2011). Currently 17% of an organisation's annual payroll and 20% of the annual working days are lost as a result of absenteeism while the call centre sales environment is experiencing its highest level of absenteeism at a rate of 3,67% per year in 2011 as compared to previous years (Soma initiative: Enhancing employee productivity, 2011).

Another major impact of emotional labour on the call centre sales environment is staff turnover. Despite the fact that the mass production strategy of the sales call centre was designed to combat staff turnover (Batt & Moynihan, 2002), staff turnover remains a critical problem within the call centre sales environment (Barrick & Mount, 2005; Deery *et al.*, 2002). However, the effects of high staff turnover extend further than merely the burden of replacing employees and, according to recent findings, high staff turnover has a significant impact on an organisation's overall performance (Flex execs management solutions, n.d.). This includes not only the selection, hiring and training of new staff members but may also affect productivity and lead to customer dissatisfaction as a result of a lower quality service. Customer satisfaction is critical because it may cost an organisation between 5 to 11 times

more to generate new business rather than expand existing business (Ferrell, Hirt & Ferrell, 2008).

Emotional exhaustion and burnout appear to be characteristic of the call centre sales position but have also been linked to poor performance (Brotheridge & Lee, 2003; Russell, 2009; Visser & Rothmann, 2009). Barrick and Mount (2005) argue that it is necessary to study people and not merely their traits to understand the role of personality and its relationship with job performance. It is not sufficient simply to measure personality, but researchers need to understand the challenges and uniqueness of certain work environments in which individuals are required to perform. The call centre sales environment is often associated with emotional exhaustion because employees may have to behave in a manner which is inconsistent with their real personality types and they are often caught between the expression of false feelings and the suppression of true feelings (Zapf, 2002).

Wallace, Eagleson and Waldersee (2000) found that sales organisations often drive the pressures that create emotional labour in call centre sales staff by means of both a sacrificial human resource strategy and a focus on sales output. In order to sustain efficiency and excellent service, the organisation depends on the friendliness, enthusiasm and endurance of the employee and this, in turn, creates immense pressure. The call centre sales strategy was originally designed to combat employee turnover and organisations anticipated that it would also mitigate employee stress and burnout (Batt & Moynihan, 2002). However, absenteeism, turnover and burnout remain major challenges and affect employee performance.

According to Guy, Newman and Mastracci (2008), some employees are energised through an emotional exchange with customers, whereas others find it exhausting. They believe that emotional labour is a unique skill that depends on individual differences in personality. Despite the fact that the call centre sales position is characterised by emotional labour and emotional exchanges with customers, call centre sales performance is still measured in terms of "hard" performance criteria such as calls waiting, calls answered, call duration and customer waiting times (Banks & Roodt, 2011).

According to Hough and Oswald (2008), it is critical that the role of personality in the prediction of job performance be taken into account because, fundamentally, most job performance dimensions reflect discretionary behaviours that are closely associated with personality constructs. Hogan and Hogan (2007) further argue that assessing personality in the workplace may successfully predict job performance if the personality characteristics that

underlie job performance are suitably investigated and explored. For example, if a job role requires attention to detail, personality assessment may identify a "sensing personality type" as a possible high performer. Various studies support the notion that personality predicts overall job performance, including objective performance, task performance, contextual performance (Dudley, Orvis, Lebiecki & Cortina, 2006) and sales performance (De Mascio, 2010; Foster, 2009; Kahle, 2008). Personality also tends to be related to the prediction of various behaviours such as goal setting and procrastination (Steel, 2007), creativity and innovation (Hough & Dilchert, 2007) and employee wellbeing (Steel, Schmidt & Shulz, 2008). It is significant that all these behaviours are important in a sales environment.

Personality has also been linked to the prediction of counter productive work behaviours (Berry, Ones & Sackett, 2007), absenteeism, turnover and tardiness (Barrick & Mount, 2005) as well as team performance (Peeters, Van Tuijl, Rutte & Reymen, 2006). There does, indeed, appear to be a clear relationship between organisational outcomes such as sales performance, absenteeism and turnover and the personality characteristics of call centre sales staff (Sawyer, Srinivas & Wang, 2009). It is, therefore, essential to identify which personality attributes are suitable for the call centre sales environment in order to reduce the risk of employing poor performers (Deeter-Schmelz & Sojka, 2007) and to minimise counterproductive behaviours.

In the light of both the high turnover rate and the high level of employee burnout in sales departments it has become essential that some of the hiring criteria, for example, personality attributes of call centre sales staff, be reviewed as a matter of urgency (Banks & Roodt, 2011; Nel & De Villiers, 2004; Russell, 2009). Dramatic changes in the sales process, accompanied by the challenges which call centre sales staff face, have led to additional complications such as limited career advancement and decreasing levels of solidarity (Deery *et al.*, 2002; Russell, 2009; Visser & Rothmann, 2009). However, it is possible that, if personality-congruency within a demanding sales environment could be established, stressful experiences may be reduced.

Metcalfe (2006) maintains that the recruitment of competent and suitable staff should be a priority if the effectiveness of the sales function is optimised. However, in order to develop effective selection criteria, it is essential to understand the type of individual who will be successful within the call centre sales environment (Sawyer *et al.*, 2009). Various methods are used to select call centre staff, including interviews, psychometric assessment and assessment centres (Nankervis, Compton & Baird, 2005). In addition, research has also made a considerable contribution to the understanding of the structure and make-up of

personality and, as a result, various instruments are available with which to assess the personality types of new recruits (Barrick & Mount, 2005).

However, despite the increasing focus on call centres in South Africa, there is little research available on this industry (Banks & Roodt, 2011). According to Moller, Crous and Schepers (2004), most service organisations make use of call centres and yet there is limited research available on the high levels of staff turnover currently being experienced in these organisations. Thus, it would appear that further research relating to personality and sales performance in the call centre sales environment, in particular to identify suitable sales staff during the hiring process and increase the person–environment fit, is warranted.

The objective of this study is to examine whether a relationship exists between the personality of sales staff and their sales performance in a call centre sales environment. Accordingly, personality types will be investigated in an effort to optimise person–environment fit. The main goal of a sales organisation is the generation of sales (Dannenburg & Zupancic, 2009) and, thus, this study will investigate sales personality types in order to identify the most suitable sales staff for the call centre environment. The results from this study may benefit the sales organisation's understanding of the personality attributes which are necessary for effective call centre sales performance.

1.2 PROBLEM STATEMENT

The call centre sales role differs somewhat from the traditional sales role. Originally customer interactions and sales were personalised and local but have now been influenced by the affordable national and international technological advances (Batt & Moynihan, 2002) with the call centre providing a more cost-effective service sales strategy than the traditional sales role (Taylor & Bain, 1999). The traditional sales role includes physical meetings with the customer whereas the call centre sales role requires contact through the medium of technology (Batt & Moynihan, 2002). The quantitative Tayloristic approach to call centres was originally characterised according to the scripted, routinised and close monitoring of sales staff with rigid performance objectives (Taylor & Bain, 2001). However, call centre sales performance has become even more repetitive, monotonous and predictable (Russell, 2009) with an increased focus on improved service efficiency and enhanced quality delivery (Aksin, Armony & Mehrotra, 2007). The improved efficiency of the interactions between call centre sales staff and customers has resulted in the call centre becoming extremely labour intensive (Aksin *et al.*, 2007; Wallace *et al.*, 2000). The call centre sales position was originally developed as a customer contact point but has developed into a more sales

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orientated role that requires relationship building between sales agent and customer (Aksin & Harker, 1999; Strandberg, 2003). Wood, Holmen and Stride (2006) identified adaptability and innovation as important behavioural strategies with which to cope with the demands of the call centre sales position. They also identified the importance of the call centre sales agent in delivering a variety of services and products to the customer. As a result, a challenge was identified in the call centre where the focus is still mechanised and is on routine sales. However, a shift to relationship building should result in improved sales.

Deery, Iverson and Walsh (2004, p. 8) describe call centre sales staff as representing "the personality of the firm to the customer over the telephone". The specific personality attributes of call centre sales staff that are necessary to ensure the successful execution of tasks include maintaining good customer relations as well as dealing with constant change and customer complaints (Carrim, Basson & Coetzee, 2006; Nel & De Villiers, 2004). In fact, the behaviour of sales staff should reflect exceptional customer service (Korczynski, 2002) while being characterised by an appropriate social demeanour when interacting with customers (Russell, 2009). In order to meet the emotional demands of their position, call centre sales staff are required to build rapport with customers, support and nurture these relationships and be both gregarious and empathic (Bolton, 2005).

The call centre sales agent should have the appropriate personality attributes to solve problems competently and to assist customers knowledgeably through an innovative perspective of the organisation's greater goals (Korczynksi, 2002). It is evident that the growing demands of the call centre sales role require salespeople to deal with multifaceted issues such as handling difficult customers and upholding the organisation's quality of service (Lewig & Dollard, 2003). In addition, sales staff may also have to deal with unfriendly and verbally abusive customers. This, in turn, requires that they suppress their emotions and they often have to behave in a manner that is inconsistent with their true self.

More specifically, the call centre sales position may be described as emotional labour, particularly while demonstrating social skills during customer interactions (Van den Broek, Callaghan & Thomson, 2004). Many sales service-related positions require sales staff members either to act in a fake positive manner towards the customer, showing insincere interest and friendliness, or to suppress negative feelings, such as anger or frustration, that may arise towards the customer (Diefendorff & Richard, 2003). Morris and Feldman (1996, p. 987) define emotional labour as the "effort, planning and control needed to express organisationally desired emotions during interpersonal transactions". In other words, emotional labour requires the management of either the feelings (Hochschild, 1983) and/or

the behaviour (Ashforth & Humphrey, 1993) required in the organisation as part of the specific job role. It is incumbent on call centre sales staff to adhere to specific organisational display rules in order to regulate their emotions and behaviours and, thus, to attain set work goals (Cropanzano, Weiss & Elias, 2004). Brotheridge and Lee (2003) describe organisational display rules as the use of emotional strategies in order to complete work tasks successfully. Organisational display rules are synonymous with call centre sales staff performance and the type of work objective that sales staff endeavour to realise (Diefendorff & Gosserand, 2003).

However, despite the fact that the call centre sales position may be described as emotionally intensive, performance criteria are still described in quantitative measures. Benner, Lewis and Omar (2007) define call centre sales performance criteria according to call handling times, monitored task times, call waiting time and subjective supervisory ratings. The insurance call centre sales position, for instance, requires sales staff to talk to hundreds of customers daily in a scripted manner in an attempt to sell insurance policies and reach monthly targets (Holman, 2003; Totterdell & Holman, 2003).

Bono and Vey (2007) found that personality plays a significant role in the effective management of emotional regulation, as is expected of call centre sales staff. Sales organisations may benefit from the identification of employees who are able to manage their emotions optimally in order to produce the required emotional expression with the necessary sincerity and with low stress (Bono & Vey, 2007). Bono and Vey (2007) also found that personality-congruent or incongruent emotions may stimulate different reactions in individuals in terms of either the stress experienced or performance delivered. It was further found that individuals often behave in manners inconsistent with their personality in the pursuit of career or personal goals and, as a result, they remain in positions to which they are not suited (Little, 2000). In addition, individuals behave in ways that are consistent with their personality in order to comply with organisational expectations and to display rules which may make them appear more suitable for a given position (Little, 2000).

The sales personality type that is aligned with deep acting may be expected to result in effectiveness, as it is related to emotional performance (Grandey, 2003; Tsai & Huang, 2002). Deep acting is related to higher motivation, higher quality service and the authentic display of expressions which are assumed to have a positive effect on customer expectations (Bettencourt, Gwinner & Meuter, 2001; Groth, Hennig-Thurau & Walsh, 2009; Hennig-Thurau, Groth, Paul & Gremler, 2006). In addition, the positive mood helps to preserve the energy and social resources of the sales staff (Brotheridge & Lee, 2003). Groth *et al.* (2009)

related deep acting to prioritising the needs of the customer which should, in turn, also increase the financial compensation which sales staff receive (Lynn & Simons, 2000).

Russell (2009) believes that there is disagreement about the essential personality attributes which are required for effective performance in the call centre sales role. According to Furnham and Fudge (2008), a salesperson's personality has a definite impact on his/her sales performance. Accordingly, the identification of suitable personality attributes to predict call centre sales staff behaviour is critical (Carr, De la Garza & Vorster, 2002; Du Toit, Coetzee & Visser, 2005; Nicholls, Viviers & Visser, 2009).

The benefits of identifying a suitable personality type for the call centre sales environment may include enhanced customer service quality as well as an increase in the earnings of the sales staff (Grandey, 2000). However, a mismatch resulting from a poor person–environment fit because of emotional dissonance may lead to strain and, therefore, poor performance (Grandey, 2000). In light of the demanding nature of the call centre sales position, it is, thus, critical to investigate both the type of personality that will perform optimally in the call centre sales position and also ways in which to enhance the person–environment fit.

1.2.1 Research questions with regards to the literature review

The general research question of this study is to investigate whether there is a relationship between personality type and the performance of sales staff in a call centre environment. Personality is investigated in terms of personality type and sales personality type.

1.2.2 Specific research questions with regards to the study

The literature study will address the following research questions:
- How is "personality type" conceptualised in the literature?
- How is "sales personality type" conceptualised in the literature?
- How is the "performance of sales staff" conceptualised in the literature?
- Do theoretical relationships exist between "personality type", "sales personality type" and "performance of sales staff" in a call centre sales environment?
- What are the implications of the theoretical relationships between "personality type, sales personality type and the performance of sales staff" in a call centre sales environment?

The specific empirical study will address the following research questions:

- Do empirical relationships exist between "personality type" and the "performance of sales staff" in a call centre insurance sales environment?
- Do empirical relationships exist between "sales personality type" and the "performance of sales staff" in a call centre insurance sales environment?
- What is the best subset of personality scales from the Jung Type Indicator (JTI) and the Sales Preference Indicator (SPI) for predicting each of the univariate measures of sales performance?
- Based on the research findings of this study what are the implications and recommendations for the field of Industrial/Organisational Psychology as regards to "personality type, sales personality type and the performance of sales staff" in a call centre sales environment?

1.3 AIMS

The following general and specific aims were formulated from the research questions above.

1.3.1 General aim of the research

The general aim of this study is to investigate whether relationships exist between personality type, sales personality type and the performance of sales staff in a call centre sales environment.

1.3.2 Specific aims of the research

The following specific aims were formulated for both the literature review and the empirical study:

1.3.2.1 Literature review
The specific aims relating to the literature review were to conceptualise:
- personality type from a theoretical perspective.
- sales personality type from a theoretical perspective.
- the performance of sales staff in a call centre environment from a theoretical perspective.
- the theoretical relationships between personality type, sales personality type and the performance of sales staff in a call centre environment.

- the implications of the theoretical relationships between personality type, sales personality type and the performance of sales staff in a call centre sales environment.

1.3.2.2 Empirical study

The specific aims relating to the empirical study were to:

- determine the empirical relationships between personality type and the performance of sales staff in a call centre sales environment

- determine the empirical relationships between sales personality type and the performance of sales staff in a call centre sales environment

- determine the best subset of personality scales from the Jung Type Indicator (JTI) and the Sales Preference Indicator (SPI) for predicting each of the univariate measures of sales performance

- provide recommendations to the discipline of Industrial and Organisational Psychology, relating to personality type, sales personality type and the performance of sales staff in a call centre sales environment and also for further research.

1.4 THE PARADIGM PERSPECTIVE OF THE STUDY

The purpose of a paradigm is to assist the researcher with the intended research technique in ontologically and epistemologically significant ways (Guba & Lincoln, 1994). A paradigm may be described as the basic belief system (Guba & Lincoln, 1994) or mutually exclusive views on the social world as regards to generating different theories relating to psychological topics (Kavous, 2000).

A paradigm serves as a research guide and, therefore, it precedes the research method (Guba & Lincoln, 1994). According to Terre Blanche and Durrheim (1999), the paradigm is central to the research design as it provides a rationale both for the study and for the manner in which the research question will be addressed. In addition, the paradigm commits the researcher to amassing, observing and construing the required information in an unambiguous manner (Terre Blanche & Durrheim, 1999). The paradigm perspective clearly enunciates the intellectual climate as well as the market of intellectual resources which serve to demarcate the boundaries of the study.

1.4.1 Relevant paradigms

A paradigm assists researchers in conceptualising and classifying their research (Denzin & Lincoln, 2000). As such, it provides assumptions relating to the research and assists with the

identification of instruments, participants and the methods that will be applied in the study (Denzin & Lincoln, 2000). The psychodynamic and positivist paradigm will provide a sound theoretical, psychological basis on which the results of the research study will be based and interpreted.

1.4.1.1 Literature review

From a literature viewpoint, the personality type of the call centre sales staff is approached from a psychodynamic perspective. The psychodynamic paradigm is based on the argument that basic, general principles are accountable for the behaviour in which individuals engage, although it proposes different elements for conceptualising and investigating human behaviour (Bergh & Theron, 2009). The psychodynamic perspective approaches human behaviour from a psychological, biological and societal viewpoint (Danziger, 1990). The mind is occupied with biological, intrapsychic drives according to endemic mechanical laws (Ratner, 1994). However, if the individual consciously denies or suppresses any of these drives as a result of societal pressures, these drives will remain hidden in the unconscious and lead to a distorted perception of the self and others (Ratner, 1994). Nevertheless, the repressed unconscious remains active and intrepidly attempts to evade the societal pressures which often serve to guide the consciousness (Danziger, 1990).

Jung (1971) proposes that individuals should explore the functioning of the psyche in order to discover the meaning behind symptoms and behaviours as this meaning holds the key to understanding oneself. He bases his theory on the premise that personality as a whole may be described as the psychic self which includes both a conscious and an unconscious component and demarcates the functional complex personality. Jung (1971) divides the content of the human psyche into three parts. The first part is the ego, which is similar to the conscious mind. Secondly, there is the personal unconscious, of which we are not presently aware, but which may easily be recalled. Thus, the personal unconscious refers to the recollection of memories and thoughts which are not inhibited but which are concealed in a person's mind. The third part is known as the collective unconscious. Jung (1971) describes this collective unconscious as a multitude of experiences that has been inherited from the human species at birth. Jung (1971) further emphasises the principle of opposites that is an ineradicable and indispensable precondition for all psychic life. Personality types and the principle of opposites will be investigated in detail in this study.

1.4.1.2 Empirical study

The empirical study is approached from the positivist research paradigm perspective. Terre Blanche and Durrheim (1999) describe the positivist research approach as a study of stable

and fixed external realities. This approach enables the researcher to adopt an impartial and detached epistemological position in the research process. The positivist research approach is a reliable, objective method of observing facts through the eyes of a neutral observer (Cassell & Johnson, 2001; Madill, Jordan & Shirley, 2000). Thus, it is possible to control and manipulate the research methodology through experimental, quantitative or hypothesis testing procedures (Terre Blanche & Durrheim, 1999).

According to Cacioppo, Semin and Berntson (2004), the positivist research approach is characterised by a specific process with the observed facts of the research being contextualised within either a model or theory. This is usually followed by a quantitative experimental study. After capturing the data, inferential statistics are applied to verify the previously stated hypothesis. Functional relationships may be deduced after the interpretation of the statistical results which pertain to the original hypothesis statement (Guba & Lincoln, 1994). Brink (1991) argues that the positivist approach promotes the reliability, stability and duplication of findings as a result of the fact that the researcher's impartiality is maximised. The primary concern of the positivist research approach is the clarification of experimental data so as to ensure that it is, ultimately, possible to control, manipulate and predict phenomena (Brink, 1991).

1.4.2 The market of intellectual resources

Mouton and Marais (1996) define the market of intellectual resources as the collection of beliefs which has a direct bearing on the epistemic position of scientific status. They further differentiate between two types of belief, namely, theoretical beliefs which pertain to the nature and structure of phenomena and methodological beliefs which pertain to the nature and structure of the research process. This study is supported by the meta-theoretical statements which are based on the theoretical statements and central hypothesis of the study.

1.4.2.1 *Meta-theoretical statements*

A meta-theoretical statement is often referred to as traditions or schools of thought that investigate, analyse or criticise theories in a specific domain (Hjørland, 2005). The meta-theoretical statement forms part of the sociological, teleological, ontological and epistemological dimensions of social science research study and it contributes to the identification of the specific research methodology to be followed in a study (Hjørland, 2005). The three sub-fields of psychology, which are particularly relevant to this study, are organisational psychology, personnel psychology and psychometric assessment. These sub-

fields will now be briefly discussed.

Ivancevich and Matteson (2002) describe an organisation as an all-encompassing entity that comprises a number of components. The organisation is also part of a much larger system within the environment. The task of organisational management is to create an optimal balance between the components of the organisation. This study focuses on the way in which the human capital function forms part of a bigger organisational system. It is hoped that exploring the different components of the organisation, including understanding the way in which personality relates to the performance of the sales staff in a call centre environment, will help contribute to optimal job performance and organisational functioning.

Muchinsky *et al*. (1998) identify individual differences and job performance as important elements of personnel management. These elements encompass the recruitment of personnel, as well as the selection, retention, development and utilisation of human resources. This study addresses the personnel function within the organisation, particularly as regards to the identification of suitable sales staff for a call centre environment. It is envisaged that identifying suitable sales staff may enhance the person–environment fit in the call centre sales environment (Sawyer *et al*., 2009) while optimised hiring processes may eliminate poor performers and reduce financial and human resource costs, leading, in turn, to improved organisational outcomes (Sawyer *et al*., 2009).

Psychometric assessment refers to a systematic process in terms of which psychometric tests are used to gather a wide array of information regarding human behaviour (Foxcroft & Roodt, 2009). Foxcroft and Roodt (2009) further emphasise the importance of psychometric assessment in the selection and recruitment of suitable candidates for a specific job or in a specific field of study. This study will investigate personality type, as measured by the Jung Type Indicator (JTI), and sales personality type, as measured by the Sales Preference Indicator (SPI). The data will be analysed statistically in order to formulate conclusions regarding suitable personality and the performance of sales staff in a call centre environment.

1.4.3 Relevant theories and models

Theories are unproven inferences about authenticities, which are often either agreed or disagreed upon (Ewen, 1984). Personality theories provide frameworks and explanations aimed at simplifying complicated human behaviours and highlighting important aspects of human behaviours (Ewen, 1984). Jung's personality theory of opposing energies forms the basis for investigating personality type in this study while sales personality type is

investigated in the context of the social interaction theory. A model serves as a framework for the acquisition and organisation of scientific knowledge in order to understand the nature of reality and the investigation of that reality (Frigg, 2006). Thus, the person–environment fit model should assist with the investigation of the employee and organisational compatibility.

1.4.3.1 Jung's personality theory

Jung's (1971) personality theory is based on the concept that opposition generates power within the psyche. Jung (1971) explores personality type in terms of the principle of opposites, equivalence and entropy, which will be discussed in more detail in Chapter 2. Personality type is further divided into basic attitudes and psychological functions. This study will investigate extraversion (E) and introversion (I) as basic attitudes and also sensing (S), intuition (N), thinking (T) and feeling (F) as psychological functions.

Based on Jung's personality theory, Briggs and Briggs-Myers (1984) developed a personality measure, the Myers Briggs Type Indicator (MBTI). They incorporated Jung's two basic attitudes and four psychological functions into this measure and added a further dimension, namely, judging (J) and perceiving (P). The JTI will be used to measure personality type according to the E-I; S-N; T-F and J-P scales.

1.4.3.2 The social interaction theory

After a thorough investigation of the SPI manual and conversations with A. McInnes and P. Wood, the originators and distributors of the SPI (personal communication, November 23, 2011), it was determined by the researcher that it was not possible to conceptualise sales personality type, as measured by the SPI, according to a specific theory, but that the conceptualisation would have to be based on a detailed literature review on personality sales dimensions (Opra Consulting Group, 2007). The researcher then identified a suitable theory that could serve as a framework for sales personality types. In view of the nature of the call centre sales position and the demands placed on the call centre sales agent the researcher deemed it appropriate to explore sales personality type in the context of both surface and deep acting (Grandey, 2000) in relation to the social interaction theory (Côté, 2005).

Sales staff behaviour is predetermined by the organisationally desired display rules to which sales staff must adhere to in order both to attain high sales volumes and to realise high quality customer service (Cropanzano *et al.*, 2004). The call centre sales position is becoming increasingly stressful and this, in turn, is impacting on sales performance (Diefendorff & Gosserand, 2003). As pointed out earlier, the stressful nature of the call centre sales position has resulted in the label of emotional labour (Van den Broek *et al.*, 2004).

Bono and Vey (2007) are of the opinion that personality may be linked to sales staff emotional performance.

The researcher decided to apply Grandey's (2000) surface and deep acting theory in the context of Côté's (2005) social interaction theory, particularly in view of the fact that the relationship between personality and performance is regulated by the nature and demands of the job role (Sawyer *et al.*, 2009). These two interlinked theories, surface and deep acting theory and social interaction theory, appeared relevant as it is critical to identify which individuals are energised through the emotional exchange process with customers, and those who are not (Guy *et al.*, 2008). The strain caused by the requirements of the call centre sales position not only affect sales performance, but may also impact on broader organisational performance issues such as absenteeism, turnover and burnout. Grandey's (2000) surface and deep acting are illustrated in the context of Côté's (2005) social interaction theory in Figure 1.1, as proposed by the researcher.
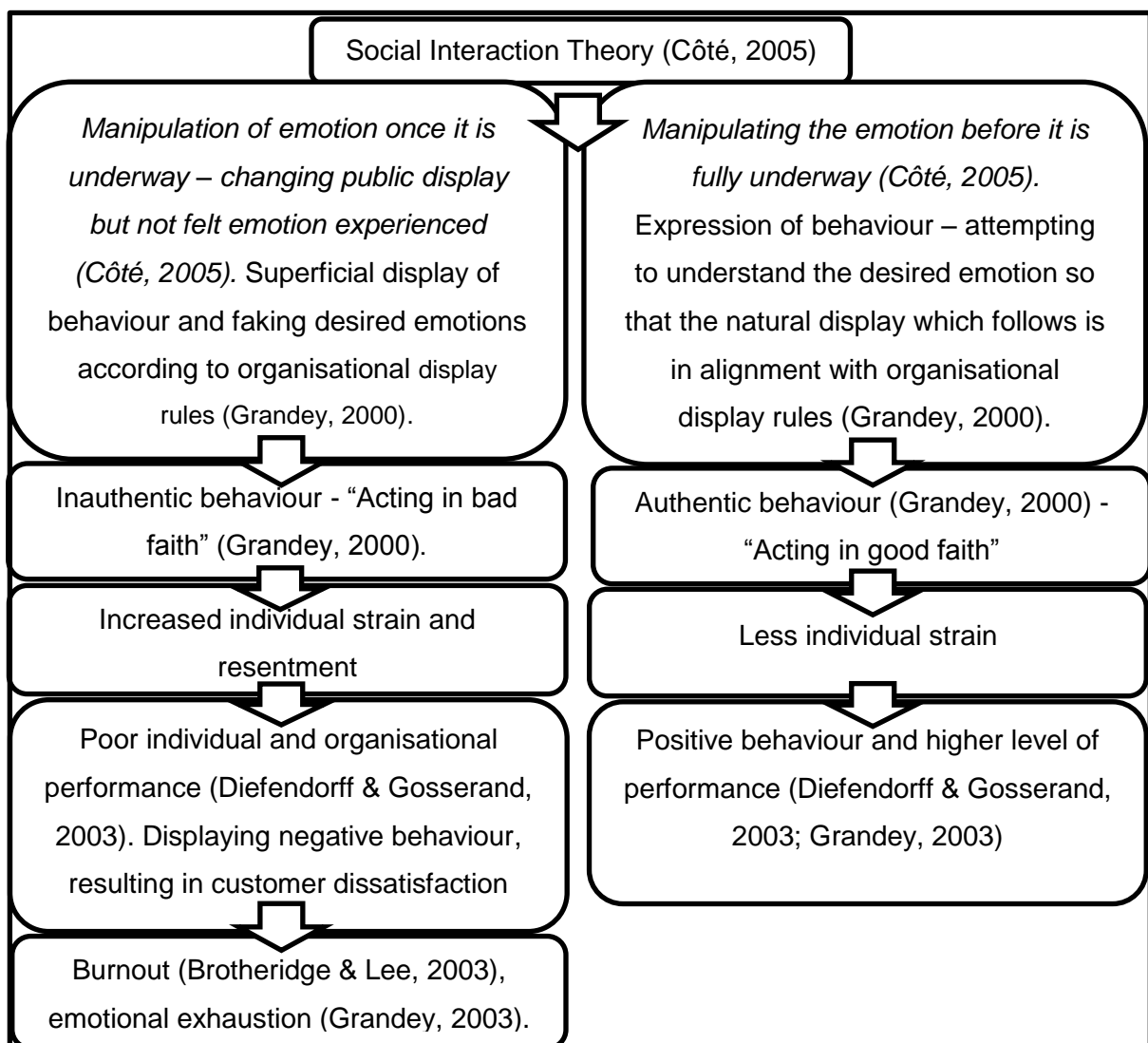
Figure 1.1 Côté's social interaction theory (2005)

The display rules expected in the call centre sales environment require sales staff to act in a friendly and interested way (Diefendorff & Richard, 2003), manage demanding customers (Lewig & Dollard, 2003) and reach sales targets through effective, high quality sales (Russell, 2009). Some call centre sales staff may be more adept at adhering to such rules than others while the personality of these staff members may play an essential role in this process. It is, therefore, critical to identify which sales personality types are suited to the call centre sales position in order both to promote deep acting and to avoid surface acting so as to optimise call centre sales. An understanding of sales personality types and the identification of suitable sales staff for the call centre sales position may ensure a more optimal person–environment fit and a higher level of sales performance.

The study will explore sales personality type together with the SPI in terms of consistent (C) versus adaptive (A) selling; emotional connection (EC) versus emotional objectivity (EO); quiet (Q) versus outgoing (O); separate networks (SN) versus integrated networks (IN); self-focus (SF) versus organisational focus (OF) and cooperative (CP) versus competitive (COM) selling. If the personality types of call centre sales staff correspond to those required in the call centre sales environment, this may result in a higher level of sales performance as well as reduced absenteeism, reduced turnover and reduced burnout and this may, in turn, improve organisational performance in the long term. The relevance of Grandey's (2000) model of emotional labour as part of Côté's (2005) social interaction theory in conceptualising the sales personality type is described in more detail in Chapter 2.

1.4.3.3 Person–environment fit model

According to Judge and Cable (1997), employees are attracted to organisations where they "fit" while they will inevitably leave organisations where they do "not fit", as based on various organisational variables. Some of these variables may be associated with rewards which may, in turn, be defined as either extrinsic or intrinsic (Ivancevich & Matteson, 2002). Extrinsic rewards refer to the personal feedback or financial reward which an employee receives from management while intrinsic rewards refer to the satisfaction an employee experiences when his/her personal needs are fulfilled. Incongruity between extrinsic and intrinsic rewards may result in an employee experiencing stress (Ivancevich & Matteson, 2002). This elevated form of stress may cause discomfort or dissatisfaction, which may then lead to the employee either becoming unproductive or seeking employment elsewhere.

Hülsheger and Schewe (2011) investigated the person–environment fit based on various models of emotional labour, including emotional dissonance and surface and deep acting.

They found that acting inauthentically and experiencing negative emotions may lead to ego depletion and emotional dissonance as a result of role-conflict. They further argue that the degree of role-conflict which sales staff experience may impact their performance. The person–environment fit model is explained in more detail in Chapter 2.

1.4.4 The central hypothesis

The central hypothesis for this study may be defined as follows:

There is a relationship between personality (defined as personality type and sales personality type) and the performance of sales staff in a call centre environment.

1.5   RESEARCH DESIGN

This research study is based on a quantitative survey design using correlational analyses to determine whether a relationship exists between personality constructs and the performance of sales staff in a call centre environment. The independent variable is personality type and the dependent variable is the performance of sales staff. Personality type is measured by means of the JTI and sales personality type is measured by means of the SPI.

Performance data was derived from three sets of quantitative criteria that the participating organisation uses to measure the performance of its sales staff:

- Actual time spent on the telephone with customers
- Total sales volume generated by sales staff
- Quality of telephone calls measured by an independent quality control department through quantitative measures

As regards to the statistical analyses performed in the study, the above performance measures were used to create the following four univariate criterion variables:

- Quality of the telephone calls with customers
- Efficiency of the sales staff is calculated through combining the sales volumes generated by sales staff and the time spent on the telephone with customers
- Sales volume generated by sales staff
- The consistency of the sales generated over a period of three months.

Multivariate combinations of performance variables were further created through cluster analyses of the above mentioned performance criterion variables for the purposes of further correlational analysis. In carrying out the study, descriptive, correlational and inferential statistics were used, following a thorough investigation of the psychometric properties of the measurement scales.

1.5.1 Statistical procedure

The statistical analysis of the study is described below:

1.5.1.1 Descriptive statistics

Descriptive statistics are conventionally used to analyse raw data by indicating the number of participants in a study, the minimum and maximum scores, means and standard deviations (Gravetter & Wallnau, 2007). The first section of the statistical analysis provides a description of the respondents according to age, ethnicity and gender. This is followed by an investigation of the reliability and validity of the research measurement (including the personality measurements and performance measurements) by means of Cronbach's alpha coefficients and the item total correlations of each scale. Factor analysis was an additional optional procedure which was used for examining the construct validity of personality scales with questionable psychometric properties.

Performance data may be described using multivariate combinations of performance variables that are achieved by clustering respondents with similar performances together, and apart from other respondents with different performances on these variables. The purpose of these multivariate techniques is to group data together that is similar and, therefore, to identify a natural structure in the data (Hair, Black, Babin, Anderson & Tatham, 2006). Cluster analyses of data involve the gathering of data into two or more groups and maximising the homogeneity of the objects within groups and between groups (Hair *et al.*, 2006). The k-mean clustering method was used in this study. This clustering method involves the classification of a data set with the aim of finding the most optimal configuration through a certain number of clusters (MacQueen, 1967). The resultant clusters were then described and compared through an Analysis of Variance (ANOVA) on the continuous dependent variables and Chi square analyses of the categorical variables.

1.5.1.2 Correlational statistics

Correlational statistics were used in the study to identify relationships between constructs (Gravetter & Wallnau, 2007) and, thus, the Pearson product moment correlation was used.

The first set of correlational statistics arose from the analysis of the empirical JTI items and the univariate performance measures. This was followed by a correlational analysis of the empirical SPI items and the univariate performance measures.

1.5.1.3 Inferential statistics

Multiple regression analysis was the multivariate procedure used in this study to predict scores on the dependent variable as opposed to a number of scores on the independent variables. Correlations between the personality type measures with the univariate criterion variables of sales, efficiency, quality and consistency of sales were investigated using best subset regressions. The best subset regression technique was applied in this study because the researcher was investigating the best possible subsets that would predict performance and not a single subset only (Neter, Wasserman & Kutner, 1985). The typical stepwise regression method assumes that there is a single "best" subset of variables predicting the independent variable, which is often not the case. However, according to Neter *et al.* (1985), the best subset regression method overcomes the limitation of the stepwise regression technique of a single subset, but provides the researcher with "all-possible-subsets". This is followed by a parallel comparison of the JTI and SPI and the cluster means of the multivariate performance combinations.

1.5.2 Internal and external validity

The monitoring of the validity and reliability of the study is described in the following section. According to Gravetter and Wallnau (2007), a study is valid if the study measures what it intends to measure while; if a study produces consistent and stable results, the study may be described as reliable (Gravetter & Wallnau, 2007). Mouton and Marais (1996) further define the reliability of a study as the minimisation of the variation disturbance through the structuring of the research model in a way which is appropriate within the research context.

It was essential that this study be both reliable and valid and, thus, the reliability and validity of the study were assessed using the empirical data of the research study. Personality tests with documented evidence of sound reliability and validity and which were recommended by Psytech South Africa, a leading psychological test provider, were used to gather information regarding personality type and sales personality type.

Mouton and Marais (1996) maintain that it is essential that a research study be planned and structured in such a way that both the internal and the external validity of the study are maximised. Neuman (2003) defines the internal validity of a study as the exploration of tests

in order to create a concept of what will be measured and the attempt to control possible internal errors in the research design that may affect the outcome of the study. The internal validity of this study was monitored as follows:

- The statement of a properly defined central hypothesis
- The application of models and theories derived from the literature review
- The utilisation of valid psychometric assessment instruments that are scientifically reliable and valid

Neuman (2003) defines the external validity of a study as the possibility of accurately generalising the findings of the study to other populations similar to the individuals in the research study. The external validity of this study was controlled as follows:

- By creating a suitable benchmark for the performance of sales staff through objective performance criteria
- By ensuring that the sample was representative of the population group that was investigated

Terre Blanche and Durrheim (1999) describe the unit of analysis as the object under investigation in the research process. It is essential that researchers define whom or what they want to explore and about whom/what they intend to draw conclusions. Thus, the research question needs to be examined thoroughly to identify what the unit of analysis is (Terre Blanche & Durrheim, 1999). The unit of analysis in this study was the call centre sales agent (Mouton & Marais, 1996).

1.5.3   Ethical execution of the study

Specific measures were taken in this study to ensure the ethical execution of the research process. The participating organisation provided written consent for the study to be undertaken. In addition, the informed consent of every participant was obtained before the research process commenced. The purpose of the study and the confidentiality of the scores were explained to all the participants. The participants were treated with respect with every participant being given the option of requesting personal feedback on his/her scores. The researcher maintained a high professional standard of competence and ensured that every participant was treated with skill and care. Figure 1.2 depicts the flow of the research process.

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┌─────────────────────────────────────────────────────────────────────────┐
│ ╲           ╲  •Conceptualise personality type                          │
│  ╲ Literature ╲ •Conceptualise sales personality type                    │
│   ╲ review   ╲  •Conceptualise performance of call centre sales staff    │
│    ╲         ╱                                                            │
├─────────────────────────────────────────────────────────────────────────┤
│ ╲           ╲  •Determine population sample through purposive sampling   │
│  ╲ Empirical ╲ •Identify psychometric test battery                       │
│   ╲ study    ╲  •Data collection through survey design                   │
│    ╲         ╱  •Identify performance criteria and measures of call      │
│                    centre sales staff                                    │
├─────────────────────────────────────────────────────────────────────────┤
│ ╲           ╲  •Biographical distribution of the sample                 │
│  ╲ Descriptive╲•Description and  investigation of reliability and        │
│   ╲ statistics╲  validity of psychometric properties of the              │
│    ╲         ╱    personality scales                                      │
│                 •Description of the univariate and multivariate outcome  │
│                    performance variables                                 │
├─────────────────────────────────────────────────────────────────────────┤
│ ╲           ╲                                                            │
│  ╲Correlational╲•Pearson product moment correlations with JTI, SPI and   │
│   ╲ statistics╲   univariate performance measures                        │
│    ╲         ╱                                                            │
├─────────────────────────────────────────────────────────────────────────┤
│ ╲           ╲  •Regressions of univariate criterion variables (quality, │
│  ╲ Inferential╲  efficiency, sales and consistency of sales) on          │
│   ╲ statistics╲  personality type measures                               │
│    ╲         ╱  •Combinations of sales performance measures identified   │
│                    and examined for predictability                       │
├─────────────────────────────────────────────────────────────────────────┤
│ ╲           ╲  •Make decisions regarding the hypotheses                  │
│  ╲ Hypothesis ╲•Report and interpret the results                         │
│   ╲ testing  ╲                                                           │
│    ╲         ╱                                                            │
├─────────────────────────────────────────────────────────────────────────┤
│ ╲           ╲  •Discussion of the study                                  │
│  ╲ Conclusion ╲•Limitations of the study                                 │
│   ╲          ╲  •Future recommendations                                  │
│    ╲         ╱                                                            │
└─────────────────────────────────────────────────────────────────────────┘
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Figure 1.2 Flow diagram of the research process

1.6   RESEARCH METHOD

The research study comprised two phases, namely, the literature review and the empirical study.

1.6.1 Phase one: Literature review

The first phase of the study comprised the literature review. This phase is explained in more detail in Chapter 2. The literature review explores personality in terms of personality type and sales personality type with a theoretical link being established between personality type, sales personality type and the performance of call centre sales staff. Lastly, the implications of a relationship between personality and the performance of call centre sales staff are examined.

1.6.2 Phase two: Empirical study

Chapter 3 describes the empirical study which is presented in the form of a research article. The background to and problem statement of the study are indicated and trends from the literature, as well as the potential value of the study, are discussed. This chapter also describes the research design, the research results and concludes with a discussion on the practical implications of the study, the limitations of the study and future recommendations. Chapter 4 integrates and discusses the conclusions of the study, the limitations and the recommendations as regards to the field of Industrial and Organisational Psychology and possible future research.

1.7   CHAPTER LAYOUT

The chapters will be presented in the following manner.

Chapter 2: Literature review: Personality and the performance of sales staff in a call centre environment
Chapter 3: Research article
Chapter 4: Conclusions, limitations and recommendations

1.8   CHAPTER SUMMARY

Chapter 1 presented the scientific orientation of the research study. The chapter also contained the background to and motivation behind the study, the research problem, general and specific aims of the study, the paradigm perspective, the research design and the research method. Personality was explored in terms of personality types and sales personality types. It is hoped that, by exploring the relationships between personality and the performance of call centre sales staff, organisations may be able to identify the personality attributes that contribute to effective call centre sales performance. This information may, in

turn, enhance the identification of suitable personality types during the selection and hiring process of call centre sales agents. The chapter concluded with the chapter layout and a summary of the study.

CHAPTER 2

LITERATURE REVIEW: PERSONALITY AND THE PERFORMANCE OF SALES STAFF IN A CALL CENTRE ENVIRONMENT

Chapter 2 provides a theoretical overview of the relevant literature on personality and the performance of sales staff in a call centre environment. The first construct, namely, personality, is described in terms of "personality types" and "sales personality types" in the context of the relevant theories and models. The second construct, namely, performance, is discussed in the context of call centre sales models, call centre sales job designs and specific call centre sales performance criteria. The practical implications of the theoretical relationships between the constructs will be elaborated upon.

2.1   PERSONALITY

The term, personality, is applied in order to make sense of human behaviour (Gregory, 2000). The constructional and dynamic personal features of personality are reflected by individuals and continuously appear in reaction to certain contexts that either distinguish people from another or group them together (Costa & McCrae, 1992; Pervin, 1993). Osif (2005) describes personality as the unique observed impression a person makes on another and the inherent structures which provides the reason for creating that impression while Weiten (2008) defines personality as a unique collection of steady behavioural qualities. According to Vohs and Baumeister (2011), personality is a constellation of different dimensions of relatively stable individual differences that are usually found evenly distributed among the general population.

The next section presents a conceptualisation of personality types in the context of Jung's personality theory within the framework of the psychodynamic perspective. On the other hand, sales personality type is conceptualised in the context of the social interaction theory and the person–environment fit model. Lastly, personality measurement and the variables influencing personality measurement are discussed.

2.1.1   Conceptualisation of personality type

Personality type may be defined as observed behavioural tendencies that are consistent, habitual and stable over a given time period and in different situations. Accordingly, personality type is assumed to refer to abiding inner tendencies representing commonalities and differences between individuals (Funder, 1991; Gregory, 2000). If any of these

predispositions or attitudes occur regularly, they are described as the individual's personality type (Jung, 1971).

2.1.2 Jung's personality theory

Jung's (1971) personality theory forms the basis of this study within the parameters of the psychodynamic paradigm. Jung (1919) believed that human behaviour is instinctive, constant and regular, and driven by inherent physiological desires. His contribution to the psychodynamic paradigm is based on the premise that the self needs to be explored in terms of both the conscious and the unconscious processes (Jung, 1971). The totality of the unconscious is divided into the psyche which delineates the personality. Jung's (1971) principle of opposites constitutes an engrained and requisite condition for psychic life and illustrates Jung's principles of the operation of the psyche in terms of three categories.

The first category portrays the principle of opposites (Christopher & McFarland Solomon, 2000; Jung, 1971). Every thought immediately generates an opposite thought, similar to a battery with two opposing poles. Jung (1971) suggests that it is the concept of opposition that creates the power or libido of the psyche. According to Jung (1971), a strong contrast results in strong energy while a weak contrast results in weak energy.

The second category is that of equivalence. Jung (1971) suggests that the opposing energies are expended equally on both the abovementioned opposing poles. Depending on the specific wish that was made, the energy will result in various behaviours aimed at realising the wish, while the other part of the energy, once acknowledged and recognised, will contribute to a general improvement of the individual's psyche. Should the other side of the wish or desire not be acknowledged and accepted, the energy will develop in the form of a complex. The complex may be defined as a trend of suppressed thoughts and feelings that create a theme around a given archetype (Jung, 1971).

The final category is that of entropy, which refers to the tendency of opposing poles to collide, resulting in the energy gradually decreasing until it is evenly distributed. Jung (1971) based this principle on physics, which explains that all physical systems run down until the energy involved in the systems is equally disseminated. The process of viewing both sides of who we are is known as transcendence (Jung, 1971).

Jung (1969) proposes that personality is structured in various components. The first component of personality, the consciousness, may be described as the tip of the iceberg in a vast ocean (Jung, 1964; Jung, 1969). The conscious is then further divided into the ego and

the persona (Jung, 1964; Jung, 1969).

The ego forms the centre of an individual's awareness and conscious ideas and is described as both stable and unique. The ego is a representation of the human conscious intelligence and a reproduction of experiences (Hollis, 1996). Through the ego, the psychic energy is directed to conduct business, achieve goals in order to maintain stability and endurance through life (Hollis, 1996). The persona that Jung describes as part of consciousness refers to the mask that is worn by individuals to hide their true inner feelings (Jung, 1969). In other words, the persona is the projection of what individuals feel is expected of them and "behaviour that is forced on them by the world" (Jung, 1969, p. 57). According to Jung (1964), the conscious is strongly influenced and affected by the reality of life and the powerful unconscious. It is critical to understand the ego, as this may provide answers to questions regarding career success and the realisation of goals in the work environment. The persona may be of particular relevance to the current study as call centre sales staff are often required to act in ways which are inconsistent with their personality type.

The second component of personality is the personal unconscious, which Jung (1969, p. 3) describes as "inborn". Certain memories are forgotten because they are no longer important while some memories are repressed as a result of their threatening nature. Initially the "state of repressed or forgotten contents" was defined and limited as a "concept of the unconscious" (Jung, 1969, p. 3). Psychodynamic theorists, however, describe the unconscious as the autonomous force operating within, which is often transferred to the outer world (Hollis, 1996). Jung (1964) further describes the shadow as a repressed part of the personal unconscious. The shadow is repressed because it is shameful and unpleasant, although beneficial and balancing to the favourable outer persona. The shadow is of particular importance in this study as behaviour that is repressed as a function of the persona is buried in the shadow. It is argued in this study that, in the context of the call centre sales environment, both a poor person–environment fit and unpleasant experiences are managed by the persona and are hidden in the shadow so as to enable the individual to cope with the demanding situation of the call centre sales environment.

The third component of the personality is termed the "collective unconscious" (Jung, 1969, p. 3). This third component represents of the deepest layer of the complex psyche. Jung (1969) uses the term "collective" because the concept differs from the term "personal psyche". The collective unconscious is indicative of individuals portraying similar "modes of behaviour" (Jung, 1969, p. 4) to that of all other individuals. The collective unconscious may be described as the behaviour of an organisation and accepted beliefs of a group of people

working together in similar circumstances.

According to Ewen (1984), Jung's theory provides a framework for understanding the psyche although his theory is often misconstrued and oversimplified. It is not possible simply to classify an individual in a category of which the opposing function is eliminated. The opposing function may be less developed, but it will always be present. According to Jung (1971), all the above psychological functions are present in all people, but in varying proportions. The proportions may be categorised as follows:

- The superior function – this function is extremely well developed in the individual.
- A secondary function – individuals are aware of this function and it supports the superior function.
- A tertiary function – this function is slightly less developed and the individual is not very conscious of it.
- An inferior function – this refers to an extremely poorly developed function that is unconscious and is denied by the individual.

Jung's (1971) personality types are illustrated in Figure 2.1.
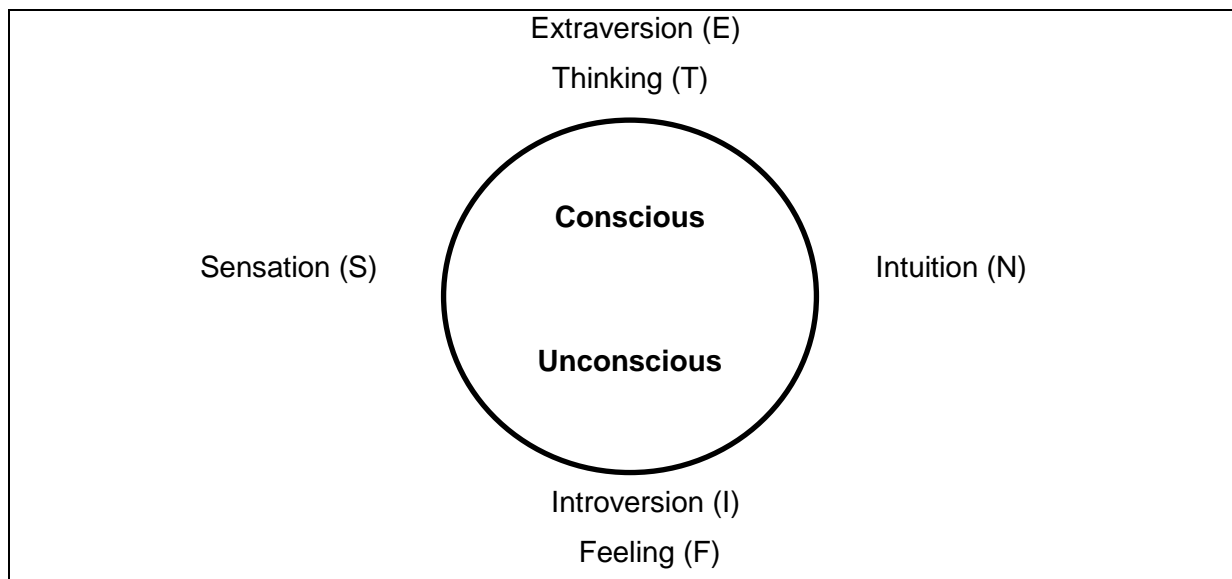
Figure 2.1 Jung's personality types (Ewen, 1984)

If the E-type is the dominant attitude, then the T function will be directed towards the external world (Ewen, 1984). The S-N types may be either conscious or unconscious auxiliary functions. The I-attitude and F-function will, therefore, be repressed into the unconscious. The same applies to the remainder of the attitudes and feelings. According to Jung's personality theory, a dominant attitude and function have to develop for the person to

progress and become successful (Ewen, 1984).

The identification of an employee's personality type may lead to an understanding of the way in which the person manages time, solves problems and makes decisions (Briggs & Briggs-Myers, 1984). Briggs and Briggs-Myers (1984) further state that an understanding of personality type may help an employee to understand the organisational culture and optimise his/her performance in a team. In the sales role, it is essential to understand the personality type of both the employees and the customers in order to optimise individual sales performance and, ultimately, organisational performance (Briggs & Briggs-Myers, 1984). Jung's (1971) personality typology is based on two opposing attitudes and four psychological functions. These are described below.

2.1.2.1 Extraverted versus introverted personality type

The two opposing attitudes, the E and I-types, are indicative of where people prefer to direct their attention and how they relate to both their inner and their outer worlds (Jung, 1971). Eales-White (2007) defines the E-I type as indicative of from where individuals obtain their focus and energy. The E-type is concerned with facing the outer persona and outer reality, whereas the I-type is the individual who relates to the collective unconscious and its archetypes (Eales-White, 2007). It has been found that E-types, for example, will draw their energy from their interaction with other individuals. It may, thus, be expected that an extravert may enjoy negotiating with and influencing others, as is required in the sales roles (Barrick & Mount, 2005).

2.1.2.2 Sensing versus intuitive personality type

Jung (1971) also identified certain basic manners in terms of which individuals deal comfortably with their inner or outer worlds. The basic psychological functions may take on different individual forms and are described as the S and N types. The S-N type indicates from where an individual prefers to take in information or find out about things (Eales-White, 2007). The work of a call centre salesperson is often monotonous (Russell, 2009) while the call centre salesperson is also often called upon to solve problems systematically (Korczynski, 2002). The S-type, which is more detailed orientated personality type (Briggs & Briggs-Myers, 1984), may, therefore, be a personality type which is suited to the call centre sales position. The call centre sales role requires individuals to deliver high quality service (Lewig & Dollard, 2003) and contribute to wider organisational sales goals (Korczynksi, 2002). On the other hand, the N-type may be described as the more strategic, bigger-picture orientated preference (Briggs & Briggs-Myers, 1984) and it may be expected that this type would be found in sales roles as a result of the intuitive manner in which customers are

approached (Personnel today, 2007).

2.1.2.3 *Thinking versus feeling personality type*

Another psychological function is the T and F-types, which indicates the way in which an individual prefers to make decisions (Jung, 1971). The T-F types indicate an individual's preference for logical versus harmonious decision-making (Eales-White, 2007). The call centre sales role has become extremely target driven and the sales staff is forced to act in an emotionally detached manner in order to reach predetermined, standardised sales goals. In other words, the call centre sales staff members have to exercise their thinking (T-type) preference (Russell, 2009). With the growing pressures and emotional labour demands of the call centre sales role, management requires sales staff to identify with the customer (Russell, 2009) and, therefore, to exercise their feeling (F-type) preference.

2.1.2.4 *Judging versus perceiving personality type*

Briggs and Briggs-Myers (Briggs & Briggs-Myers, 1984) added the J and P-types to Jung's existing psychological functions. The J-P types are indicative of the way in which an individual prefers to orient him/herself toward the outer world. Eales-White (2007) describes the J-P dimension as an individual's tendency to enjoy a structured or flexible environment when operating in the external world. The J-type enjoys an organised environment (Eales-White, 2007). This type may be particularly suited to the call centre sales environment which is characterised by repetitive and often mundane labour (Russell, 2009). On the other hand, the P-type is adaptable (Eales-White, 2007) and this may be an important requirement in the call centre sales environment where the sales staff is required to deal effectively with constant change and adapt to the needs of different customers (Carrim *et al.*, 2006).

2.1.3 **Conceptualisation of sales personality type**

According to Wang and Liang (2012), a salesperson characteristically displays perseverance and meticulous, cautious thinking. The typical sales personality includes organisational and planning skills, goal orientation and self-motivation. According to Jerabek (2010), sales personality type may be described in terms of good interpersonal skills, assertiveness, initiative, confidence, competitiveness and a strong mental capability with high integrity. The ability to retain existing customers and develop new business through effective relationships is considered an integral part of the sales personality (Wang & Liang, 2012).

Wang and Liang (2012) indicate specifically that extraverted, agreeable and empathetic personality types are necessary for success in the insurance sales environment. An extravert

is described as a goal orientated salesperson who cares for the customer through a trusting relationship. The agreeable sales personality type enables customers to feel warm and valuable as a result of the smooth course of business, while the empathic sales personality type promotes and develops business in a way which leads to increasing sales. According to Mayer and Greenberg (2006), empathy and drive are critical requirements of a successful salesperson.

The call centre sales position has become standardised, controlled, repetitive and highly stressful (Moller *et al.*, 2004). If call centre sales staff experience call centre sales environment in a negative way, they may consciously or unconsciously direct their negative emotions towards the customer and this may lead to the loss of sales (Moller *et al.*, 2004). Wang and Liang (2012) highlight the importance of being able to control one's emotions during the sales process as the constant level of human contact may lead to frustration and strain. In addition, rejection from customers is often a cause of strain (Wang & Liang, 2012), as well as having to deal continuously with problems and difficult customers (Barrick & Mount, 2005). Sales staff deal with different customers with varying demands and it is, therefore, critical that they are adaptable (Wang & Liang, 2012).

As a result of the inherently demanding requirements of the sales position, as indicated above, it is critical to select sales staff with suitable sales personality types (Wang & Liang, 2012). According to Stevens and Macintosh (2003), it may be expected that individuals with particular sales personality types may be more successful than others at certain tasks that are required in a sales position. In view of the fact that specific personality types, such as extraversion and conscientiousness, have been found to be positively related to sales performance, it is advisable that organisations select and hire individuals with these sales personality types (Stevens & Macintosh, 2003). Osif (2005) further argues that workplace personalities affect employee perceptions of their jobs and the work environment. Organisations with employees who have negative attitudes tend to experience higher turnover as well as lower productivity levels and lower growth (Osif, 2005).

2.1.4   Côté's social interaction theory

As indicated in Chapter 1, the researcher believes that Grandey's (2000) perspective of surface and deep acting in the context of Côté's (2005) social interaction theory may serve to enhance the understanding of sales personality type. Surface and deep acting on the part of call centre sales staff are the categories that are used to classify emotional labour (Hochschild, 1983; Grandey, 2000). Surface acting is described as a superficial display of

emotions towards the customer without trying to change how the individual concerned really feels while deep acting is described as an attempt to change the emotions one experiences in order to align one's behaviour and experiences with those desired by the organisation. Surface acting is regarded as presenting a false self to others and deep acting is regarded as presenting the true self to others (Hochschild, 1983).

According to Diefendorff and Gosserand (2003), the purpose of both surface and deep acting is, ultimately, to benefit individual performance. However, if there is a discrepancy between the sales agent's customer interaction experience and the requirements of a particular position, this will create strain for the individual (Diefendorff & Gosserand, 2003). In order to reduce the strain, the cycle starts again and sales staff may choose to continue either to surface or deep act.

According to Côté's (2005) social interaction theory, surface acting may elicit negative responses from customers as the behaviour displayed by the salesperson is inauthentic. In addition, in view of the fact that surface acting requires pretentious behaviour, it tends to result in resentment in the salesperson (Côté, 2005). This type of interaction may cause strain for the salesperson, resulting in poor performance and burnout. It may also have a negative effect on organisational performance because of the high levels of job dissatisfaction and the turnover among sales staff (Brotheridge & Lee, 2003; Diefendorff & Gosserand, 2003; Grandey, 2003).

Deep acting, in the other hand, may be considered more authentic than surface acting (Côté, 2005). Despite the fact that deep acting is emotionally exhausting, it is supported by the inner alignment of underlying feelings with the expected display rules of the organisation (Goldberg & Grandey, 2007). If customers experience the behaviour of a salesperson as authentic, the interaction tends to be more positive and less stress inducing for the salesperson (Grandey, Fisk, Matilla, Jansen & Sideman, 2005) and this, in turn, may ultimately lead to improved sales performance.

Personality should be explored in terms of personality-congruency when applying surface and deep acting strategies in situations that require the emotional regulation of behaviour (Bono & Vey, 2007). This study will explore sales personality type in terms of C versus A selling; EC versus EO selling; Q versus O selling; SN versus IN selling; SF versus OF selling and CP versus COM selling. The model presented in Figure 2.2 explains the way in which the social interaction theory fits in with the sales personality types that are explored in the study.
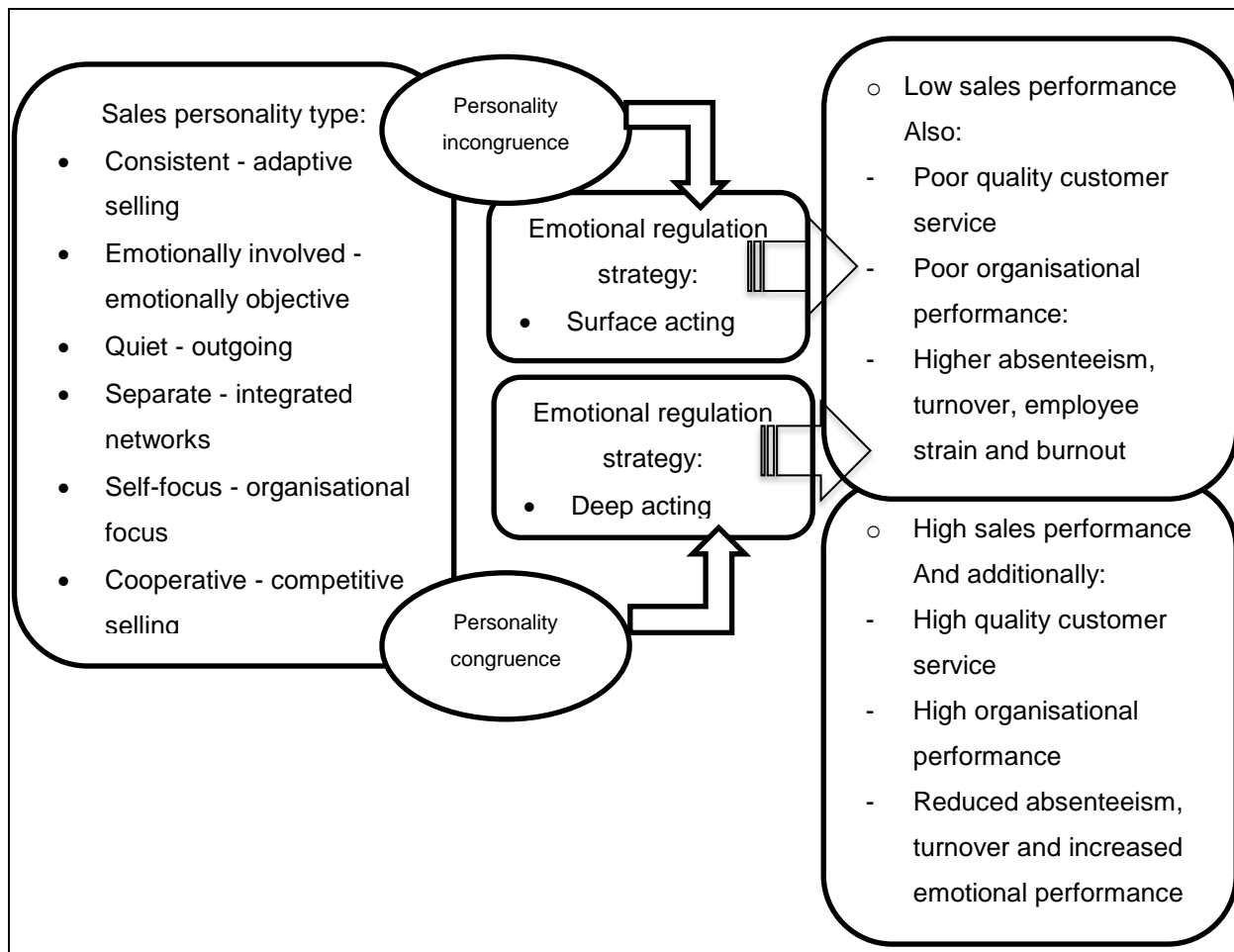
Figure 2.2 Integration of Côté's (2005) social interaction theory and sales personality types

Witt, Andrews and Carlson (2004) found that call centre sales staff are able to maintain high call volumes and deliver high quality sales service to customers if they are not emotionally exhausted. If, for example, a requirement of the call centre sales position is to act in a friendly, interested and enthusiastic manner, a call centre agent may experience a lower level of strain if the individual's sales personality type is "outgoing" as compared to an agent who is not "outgoing". In other words, if the individual's sales personality type is characterised as "quiet", the call centre agent position may create strain for the individual concerned and could impact on his/her performance.

It is evident that an unsuitable sales personality type may impact on the performance of call centre sales agents if their sales types do not fit those required in the call centre sales environment. Accordingly, it appears advisable to identify suitable sales personality types that may predict call centre sales staff performance.

2.1.5 Person–environment fit

A person–environment fit model refers to the compatibility between an organisation and an employee. It has, for instance, been found that employees are happier and more productive in work settings that are congruent with their personality dispositions (Chernyshenko, Stark & Williams, 2009). Thus, identifying suitable personality types and sales personality types may contribute to better person–environment fit in call centre sales positions. In addition, an improved organisational fit may improve the application of human resource strengths and improve the performance of organisations (Birkman-Fink, 2009; Datamonitor, 2007). Figure 2.3 illustrates the person–environment fit model in the context of Côté's (2005) social interaction theory.
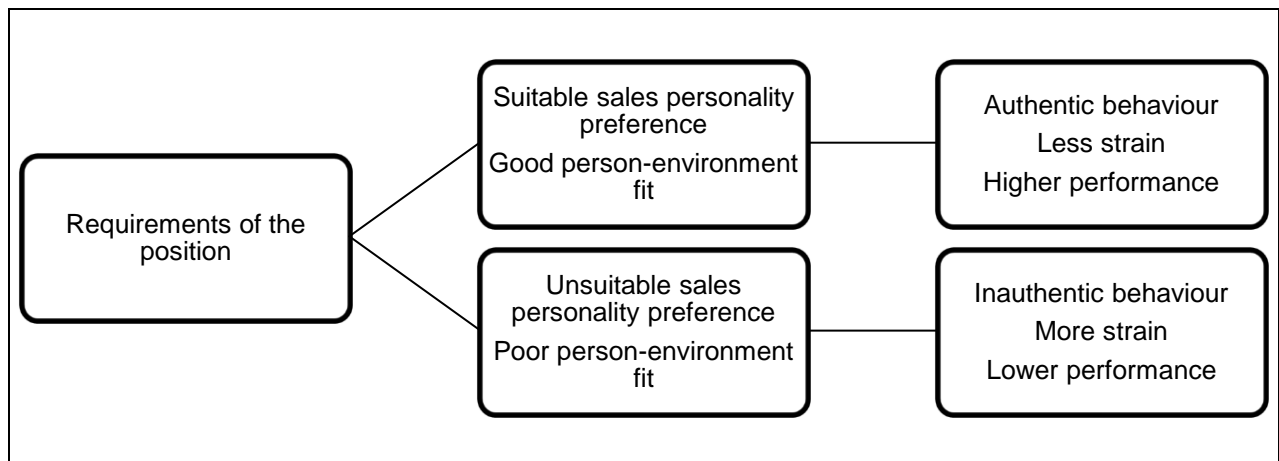
Figure 2.3 Person–environment fit model in the context of Côté's (2005) social interaction theory

The SPI is based on specific sales personality preferences that are found in the sales environment and was developed by the Opra Consulting Group (2007) based on research conducted by Brett, Cron and Slocum (1995), McBane (1995), Spence and Helmreich (1983) and Spiro and Weitz (1990).

2.1.5.1 *Consistent versus adaptive sales personality type*

The C-sales personality type approaches all customers in a similar manner (Opra Consulting Group, 2007). These personality types have a routine, repetitive orientation towards the sales process and may, at times, not interpret or understand the needs of customers correctly. In view of the fact that they are more focused on themselves than on others, they characteristically show little empathy and may be perceived as direct and outspoken, which often results in miscommunication with the customer (Opra Consulting Group, 2007). On the other hand, the A-sales personality type usually adjusts to the needs of the customer (Opra Consulting Group, 2007). In view of the fact that they are tactful and considerate they tend to

establish good rapport with customers and, therefore, they address the needs of customers (Opra Consulting Group, 2007). When sales staff members adapt during different sales encounters and apply different selling techniques, they are exhibiting a high level of adaptive selling (Spiro & Weitz, 1990). The A-sales personality type is positively related to assertiveness, gregariousness and affiliation (Opra Consulting Group, 2007).

2.1.5.2 Emotionally connected versus emotionally objective sales personality type

The EC-sales personality type is sensitive towards either a positive or a negative display of emotion from new or existing customers (Opra Consulting Group, 2007). The emotional connection that takes place during the customer interaction may easily affect the salesperson and often determines whether a sale will be made or not. According to McBane (1995), emotional objectivity refers to the ability to empathise with customers, understand their needs and overcome their suspicion and scepticism. The EO-sales personality type is able to distance him/herself from either a positive or a negative display of emotion from new or existing customers (Opra Consulting Group, 2007). This style is characterised by resilience, emotionally stability and composure during the sales process. Emotional objectivity is also positively related to perseverance, flexibility and phlegmatic behaviour (Opra Consulting Group, 2007).

2.1.5.3 Quiet versus outgoing sales personality type

The Q-sales personality type is characterised as shy and reserved and such a person is not very proficient at generating new business (Opra Consulting Group, 2007). However, once a relationship has been established with a customer, the Q-sales personality type is good at managing and maintaining both the relationship and account. This personality type tends to work in a structured, well prepared manner and is reluctant to share ideas with others (Opra Consulting Group, 2007). The O-sales personality type, on the other hand, enjoys interacting and dealing with other people. It is assumed that, because of their frequent dealings with other people, they are quick to learn how to read and understand people. They enjoy working in environments which require them to liaise, network and initiate conversation with other people. The O-sales personality type is often related to self-assurance, arrogance, persuasion and gregariousness (Opra Consulting Group, 2007).

2.1.5.4 Separate networks versus integrated networks sales personality type

SN and IN refer to the salesperson's inclination or reluctance to integrate business with pleasure (Opra Consulting Group, 2007). The sales personality type that prefers separated networks will usually not do business with friends and family members in case this may jeopardise the relationship. This may result in their taking longer than others to build a steady

customer base. In view of the fact that they do not have a natural orientation towards selling, they do not view sales as a worthwhile profession and rarely take pride in their successes (Opra Consulting Group, 2007).

On the other hand, the sales personality type that prefers integrated networks is characterised by the ability to incorporate business with family and friends in order to enhance business. They do not experience emotional discomfort when sharing their business with personal and professional contacts and, therefore, they quickly build a stable customer basis. They have a natural orientation towards selling and, thus, do not experience any guilt or shame in being associated with a sales vocation and they are proud of their successes. A preference for integrated networks is positively related to affiliation and negatively associated with independence and security (Opra Consulting Group, 2007).

2.1.5.5 *Self-focused versus organisational focused sales personality type*

The SF-salesperson may be defined as self-reliant and independent (Opra Consulting Group, 2007). Individuals with this sales personality type enjoys autonomy and freedom and applies their own principles and values. Their behaviour is often based on their own feelings and attitudes at a specific time (Opra Consulting Group, 2007). Brett *et al.* (1995) describe organisational focus or commitment as the emotional attachment of an individual to an organisation and his/her commitment to the team. When individuals manifest an organisational focus they find the principles and values of their organisation of particular important. The OF-sales personality type makes a concerted effort to adhere to organisational display rules when dealing with customers (Opra Consulting Group, 2007). This type is characterised by an awareness of the wider organisational context in which they are functioning. The OF-salesperson is also described as assertive, persuasive, ethical and affectionate (Opra Consulting Group, 2007).

2.1.5.6 *Cooperative versus competitive sales personality type*

Individuals with a CP-sales personality type works well in a team setting and share their success easily with others (Opra Consulting Group, 2007). The CP-sales personality type values security and usually acts in a manner that will minimise risk. Thus, they tend to consult others before making any decisions or attempting new initiatives. They work well within the boundaries of organisational systems and processes (Opra Consulting Group, 2007). In addition, they are often described as open and sincere and customers usually trust them. They tend not to force the closure of a sale on a customer because they find building rapport extremely important and would perceive this approach as too aggressive (Opra Consulting Group, 2007).

A key personality attribute in sales success is competitiveness (Brewer, 1994). Competitiveness refers to the satisfaction derived from interpersonal competition and the need to win (Spence & Helmreich, 1983). The COM sales personality type has a strong competitive drive and may be described as a high achiever. These people enjoy working individually and reaching their own sales targets and they find it easy to close a deal with a customer in an assertive way. The COM-sales personality type is positively related to achievement, friendliness, persuasion and assertiveness (Opra Consulting Group, 2007).

Figure 2.4 provides a summary of the personality types and sales personality types and their relationships with call centre sales performance, as presented in this study.

Personality type
- Extraversion versus introversion
- Thinking versus feeling
- Sensing versus intuition
- Judging versus perceiving

Call centre sales performance

Sales personality type
- Consistent versus adaptive
- Emotionally connected versus emotionally objective
- Quiet versus outgoing
- Separate networks versus integrated networks
- Self-focus versus organisational focus
- Cooperative versus competitive

Figure 2.4 Summary of personality types and sales personality types and their relationship to call centre sales performance

Personality type and sales personality type form a crucial aspect of this study. Both are measured through personality assessment. Personality assessment will now be briefly discussed.

2.1.6   Personality assessment

Personality assessment refers to the sampling of a range of an individual's interpersonal

characteristics in order to predict behaviour (Hogan & Hogan, 2007). Personality assessment provides diagnostic value when the results are compared to norms or standards that envisage certain behaviours. According to Anastasi and Urbina (1997), personality measurement refers to the holistic evaluation of an individual, including the intellectual and non-intellectual evaluation of emotional states, interpersonal relations, motivation, interests and attitudes. Personality assessment may be conducted by means of questionnaires, inventories, checklists and projective techniques (Foxcroft & Roodt, 2009; Gregory, 2000).

Personality assessment has contributed significantly to enhancing the selection and screening processes of applicants in organisations (Anastasi & Urbina, 1997; Foxcroft & Roodt, 2009; Gregory, 2000). It would, therefore, be beneficial for organisations to incorporate personality assessment into their recruitment and selection processes. The behaviours that are necessary to perform a job may be identified through a thorough analysis of the job and pay structure in order to identify the personality traits which must be assessed for the role (Furnham & Fudge, 2008).

Personality traits influence our daily behaviour and may be expected to be stable over time (Matthews, Deary & Whiteman, 2003). In order to render traits scientifically useful, personality is assessed so as to classify traits and, thus, to predict certain behaviours. Personality type may be described as external behaviours, underlying attitudes, conscious and unconscious motivations and the sense of one's "self" (Riso & Hudson, 2003). An understanding of an employee's personality type may contribute to enhanced customer service and to the building of a profitable sales force. However, in order to do this, personality type must be measured through personality assessment (Riso & Hudson, 2003).

2.1.6.1 *Personality measures used in the current study*

The JTI is a personality assessment that measures inherent psychological processes known as personality types or preferences (Psytech SA, 2010). The purpose of the JTI is to understand personality types in the corporate environment and to optimise both individual and team performance. The SPI assesses sales personality type specifically with relation to the individual's inherent selling style. This includes aspects which are often found within the sales environment, including adaptability, objectivity, salespersona, networking, organisational focus and competitiveness – all of which have been found to be important personality attributes during a sales transaction (Opra Consulting Group, 2007).

Test faking may be one of the main reasons for the weak correlations which are typically found between personality and job performance (Putka & McCloy, 2004). However, test

faking may influence hiring decisions (Goffin & Boyd, 2009). Accordingly, the topic of test faking is briefly discussed in the following section.

2.1.6.2   Impression management and the validity and reliability of personality measurement
The deliberate or motivated faking of the responses on personality questionnaires has been a concern for researchers for some time (Robie, Brown & Beaty, 2007). Hogan, Barrett and Hogan (2007, p. 1) use the term "impression management" when responding to a personality measure. This refers the intentional controlling of one's answers when completing a personality questionnaire and specifically as relating to one's behaviour during social interactions. The faking of responses on personality questionnaires may also be defined as the deliberate selection of inaccurate responses in order to enhance one's chances of a favourable hiring decision (Goffin & Boyd, 2009).

Jackson, Wroblewski and Ashton (2000) and Risavy and Hausdorf (2011) agree that test validity may be affected by test faking and that high social desirability scores should be investigated by means of a thorough interview with the candidate. Some researchers maintain that faking does not influence the psychometric properties of a personality test (Smith & Ellingson, 2002) although others disagree (Mayer & Greenberg, 2006; Stark, Chernyshenko, Chan, Lee & Drasgow, 2001). Mayer and Greenberg (2006) argue that a positive distortion of a personality measure may, indeed, be predictive of sales success because the candidate has shown a sufficient level of intelligence to know what he/she should say to impress others. Hogan *et al*. (2007) regard faking on personality tests as unimportant as they maintain that the candidate is merely attempting to control his/her reputation through impression management.

In order to limit and regulate the faking on personality tests it has been suggested that normative measures should be replaced by ipsative test items (Bowen, Martin & Hunt, 2002); forced-choice test items (Christiansen, Burns & Montgomery, 2005) or subtle test items (Holden & Jackson, 1981; Worthington & Schlottmann, 1986). The JTI and SPI, which are used as personality measures in this study, both use ipsative test items to limit faking.

a)   The JTI
The JTI is a measurement of personality type and preferences. It does not have built-in impression management scales as does the SPI.

b)   The SPI
The SPI has a built-in social desirability scale which is designed to provide an indication of

the respondent's attitude when completing the test (Opra Consulting Group, 2007). A respondent with a high social desirability score may have a high need for social approval. However, a high score on social desirability may also be interpreted as reflecting honesty and diligence on the part of the respondent and should be verified through a personal interview with the participant. On the other hand, a low social desirability score portrays someone with an unconcerned, open and honest attitude while an extremely low social desirability score may reflect someone who is very hard on his/herself.

The SPI further has a central tendency scale which serve as an indication of a respondent's tendency to opt for the middle rating on a questionnaire (Opra Consulting Group, 2007). A high central tendency score suggests a cautious respondent who avoids disclosing too much information about him/herself or the respondent may simply have moderate views about things in general. The validity of results may be affected if the score is too high. A respondent with a low central tendency score may be seen as having followed test instructions and avoided consistently opting for the middle option. Such respondents usually have definite opinions about things in general and they may also have a high level of self-awareness.

The SPI also incorporates an acquiescence scale which indicates how consistently the "agree" or "disagree" options in the test were used (Opra Consulting Group, 2007). Extremely high or low scores on this scale are indicative of disproportionate bias which may affect the validity of the personality assessment results. Extremely high scores may indicate that the respondent did not express his/her true opinions and tends to be compliant while extremely low scores may point to a disagreeable and argumentative nature. It is recommended that the results be further investigated by means of an interview with the respondent.

2.2   SALES PERFORMANCE

The sales process is based on relationship building with prospective clients, analysing their needs and offering products and services to meet those needs (Selden, 1998). The traditional sales process differs from the call centre sales process in the sense that, after the contact and analysis phase of the sales process, meetings are arranged to propose different products and services according to the customer's needs. However, call centre sales are technologically based with no physical contact with the customer. The call centre sales strategy is built on the mass production of maximised output and minimised expenses using technology to mechanise and automate production in the call centre sales organisation (Batt & Moynihan, 2002). The call centre sales model is designed according to Taylorism which is characterised by the minimisation of skill requirements, job discretion and the monitoring of

job cycle time in order to standardise work and to demarcate sales performance.

Although frequently used in the organisational context, the term "performance" is seldom clearly defined (Neely, Gregory & Platts, 2005). Baldauf and Cravens (2002) suggest that there is a strong relation between the behaviour of salespeople, their individual sales performance and organisational performance. They argue that performance criteria indicate an individual's contribution to the organisation and, thus, it is possible to measure the person's input.

Researchers have attempted to identify the determinants of sales performance and to define sales performance (Schwepker & Good, 2011). This is, however, challenging as the definition of the term changes constantly as a result of the growing complexity of the buyer-seller relationship (Schwepker & Good, 2011). As mentioned before, technological advancement (Batt & Moynihan, 2002) and the rise of call centres (Nash, 1994) have dramatically transformed both the sales process and the way in which performance is defined.

2.2.1 Conceptualisation of sales performance

Sales knowledge, flexibility, cognitive aptitude and work engagement are all terms that have been used to define sales performance (Verbeke, Dietz & Verwaal, 2011). Chonko, Loe, Roberts and Tanner (2000) regard sales volumes, the reaching of targets, customer relationships, management of accounts, and customer knowledge as aspects critical in determining sales performance. They further emphasise the importance of aspects such as planning and organising ability, as well as time management, in defining sales success (Chonko *et al.*, 2000). Rothmann and Coetzer (2003) describe sales performance as the efficient application of skills, initiative and resources in order to complete a task. Schwepker and Good (2011) differentiate between two types of sales performance, namely, outcome-based and behaviour-based performance. Table 2.1 provides an overview of various definitions of both outcome-based and behaviour-based sales performance.

Table 2.1

Sales performance definitions

Author	Definition
Beatty, Mayer, Coleman, Reynolds & Lee (1996).	Customers often form a much stronger and loyal relationship with the salesperson than with the organisation. This, in turn, is regarded as behaviour-based sales performance.

Gilmore & Pine (2002); Meyer & Schwager (2007).	Services and products have become commodities and customers are increasingly seeking an extraordinary, engaging, vigorous and captivating sales experience with the sales organisation. This, in turn, is regarded as outcome-based performance which is objective in nature and which refers to the generation of new customers and accounts, profits and product sales by the salesperson.
Gilmore & Pine (2002); Meyer & Schwager (2007).	Services and products have become commodities and customers are increasingly seeking an extraordinary, engaging, vigorous and captivating sales experience with the sales organisation. This is regarded as outcome-based performance which is objective in nature and refers to the generation of new customers and accounts, profits and product sales by the salesperson.
Anderson & Dubinsky (2004).	Behaviour-based sales performance is the communication of information that makes the salesperson both a solution provider and sales consultant who serves the customer with expert advice.
Voss, Roth & Chase (2008).	Outcome-based sales performance refers to the success attained by a sales organisation when customer loyalty as well as purchasing and engagement behaviours have been captured.
Payne, Storbacka & Frow (2008).	Excellent customer interaction is preceded by contact with the organisation and should last long after the sales transaction has been completed. This is regarded as outcome-based sales performance.
Verhoef, Lemon, Parasuraman, Roggeveen, Tsiros & Schlesinger (2009).	Outcome-based sales performance refers to the customer's experience that encompasses the search for a specific product or service, the sale, consumption and the after sales experience.
Grewal, Levy & Kumar (2009).	The ultimate goal of sales performance is creating customer behavioural outcomes such as customer retention, cross-buying and word-of-mouth.
Verbeke *et al.* (2011).	Personal characteristics have a significant influence on the definition of sales performance.
Agnihotri, Rapp, &	Sales performance refers to the salesperson's ability and

Trainor (2009).	capacity as an expert to provide the customer with product and service information. Customer loyalty is then created and the customers are retained. Adaptive selling and information communication also influences the behavioural outcomes of the salesperson. Other behaviour-based performance outcomes include a combination of understanding the sales environment, the competitors, the markets and the products.
Verbeke *et al.* (2011).	Personal characteristics have a significant influence on the definition of sales performance.

In short, it is evident from the definitions above that outcome-based sales performance and behaviour-based sales performance are related to the quantitative outcome of the sales process, the quality of the customer relationship and the retention of customers.

2.2.1.1 Call centre sales performance

Today's call centres are based mainly on the generation of mass sales in a call centre environment. The focus is a balanced approach to effective call centre sales performance which incorporates technology and the management of complex service and sales interactions (Batt & Moynihan, 2002). In essence, the call centre is designed to decrease staff turnover, with the call centre sales staff being viewed as replaceable cogs within the organisation, and, ultimately, to optimise the call centre sales performance (Batt & Moynihan, 2002). The traditional purpose of the call centre sales model was to respond to customer queries. However, a more sales orientated role has developed – a role that necessitates strong relationships with customers (Aksin & Harker; 1999; Strandberg, 2003).

The call centre sales model used in this study is based on the conceptual model which was developed by Strandberg and Dalin (2010) and which is depicted in Figure 2.5. The focus of the call centre used in this study is the mass sales of insurance products through relationship building. The call centre sales agent is required to build rapport with the customer, sometimes using his/her discretion during the sales process as well as using scripts and managing the interaction with the same customer in order to complete the sales transaction.
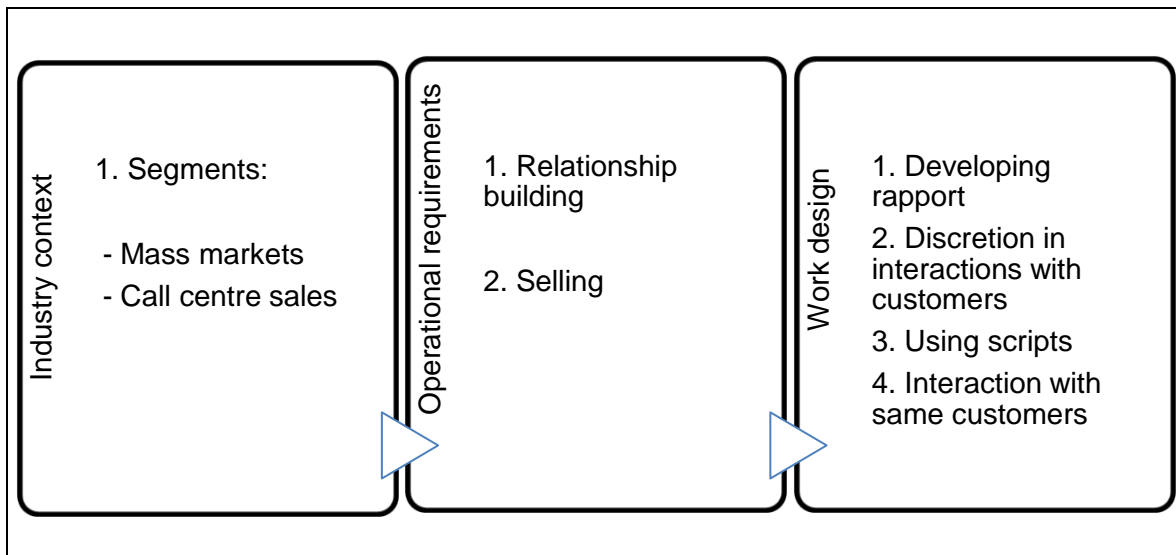
Figure 2.5 Conceptual call centre sales model

According to Banks and Roodt (2011), the core focus of a call centre is the optimisation of service delivery to the customers. Despite the fact that the call centre sales model is focused on relationship building, mass sales are calculated quantitatively. Call centre staff performance criteria are identified mainly through quantitative performance data such as the number of calls waiting; the proportion of calls answered; the duration of the call with the customer and also for how long the customer waits to be assisted (Banks & Roodt, 2011). The call centre sales performance criteria that were used in this study are described in the following section.

a)   Quantitative performance criteria
Objective job performance criteria are quantifiable (Ferrell *et al.*, 2008) and may be related to the target driven call centre sales role (Russell, 2009). Muchinsky *et al.* (1998) refer to objective job performance as production data that is accumulated through assessing the sales volume over a given time period. Call centre staff performance criteria are identified mainly on the basis of numerical performance data. The management of people by numbers often results in the removal of the uncertain and unpredictable human dimension in the call centre environment (De Waal, 2002).

The quantifiable performance criteria that will be used in this study include the total time on the telephone with customers; the total sales volume generated by sales staff and quality management.

- *Total time spent on the telephone*
The total time spent on the telephone with customers refers to the "call volume" of call centre

sales staff (Witt *et al.*, 2004) and is regarded as "hard" call centre sales performance criteria. This is usually measured through an automated management information system that provides quantitative measures of sales performance. Call centre sales staff members adhere to specific operational guidelines during their customer liaison and this serves as a guideline for the length of a call (Hochschild, 1983). Call centre sales staff are further expected to manage a specific number of calls to customers per day while the length of the calls are often considered as a measure of performance (Witt *et al.*, 2004). The total time spent on the telephone with customers may, therefore, be regarded as a measure of performance because a large percentage of customers end the call before the call or sales transaction may be finalised.

- *Total sales volume*

The total sales volume generated by call centre sales staff is regarded as "hard" performance criteria and is measured quantitatively. The total sales volume of sales staff is usually defined as the commission which is based on the total amount of sales made or quotas reached (Boorom, Goolsby & Ramsey, 1998). The total number of sales or sales quotas comprises the predetermined financial targets which are set for a sales agent by the organisation. A sales agent's commission will increase if his/her sales increase and this, in turn, directly affects his/her annual income. The commission and annual income are outcome related performance measures which are an accurate indication of the efforts of the salesperson concerned (Low, Cravens, Grant & Moncrief, 2001).

- *Quality management*

Quality management refers to the assessment of the sales organisation's excellence or superiority in comparison with other sales organisations (Lemke, Clark & Wilson, 2011). Lemke *et al.* (2011) describe the quality experience as a "caring attitude", "reliability" and "timeliness". According to Payne *et al.* (2008), the experience of quality goes beyond service quality. Lemke *et al.* (2011) further describe quality management as excellent communication, the application of knowledge through the service interaction, caring through the application of procedures and processes and the relationship that is created with the customer.

Witt *et al.* (2004) describe call centre customer service quality as a monitored quality control system that periodically review sales staff performance through recorded telephone calls. Quality management also includes the adherence to the display rules as predetermined by the sales organisation (Hochschild, 1983). Call centre sales staff are urged to uphold excellent customer service and to deal effectively with demanding customers (Carrim *et al.*,

2006; Nel & De Villiers, 2004). In addition, exceptional customer service should include the speed and quality of the customer's experience during the telephone call (Batt, 1999). The quality management of both the telephone call and the sales transaction with the customer is regarded as a "soft" sales performance criterion, but is measured quantitatively through the recording of telephone calls. The sales agents use their soft skills to communicate with and to persuade clients to buy their products. They are then measured in terms of a predetermined checklist to identify whether they meet the quality criteria set by the organisation. The quality management of the sales process is critical because customers evaluate their sales experience holistically and they compare their experiences with the experiences they may have had with previous organisations (Payne *et al.*, 2008; Verhoef *et al.*, 2009).

In short, call centre sales performance is measured using quantitative performance measures, namely, the total time spent on the telephone with customers, total sales volume and quality management.

2.2.2 Levels of call centre sales performance criteria

The different levels of call centre sales performance used in this study are explained based on time, sales and quality. The researcher in this study did not deem it sufficient merely to consider levels of quantitative performance in order to measure sales performance effectively and accurately. The researcher was of the belief that creating various ratios and combinations of performance criteria and exploring the consistency of sales, based on the abovementioned sales performance criteria, would add additional value to the study.

2.2.2.1 Ratios

According to Johnsson (2008), sales performance is often explained in terms of efficiency. O'Donnell and Duffy (2002) describe efficiency as the ratio between the resources which were expected to be consumed and the resources that were actually consumed. A ratio is created in order to measure efficiency and may include time, money or any other performance dimension. Furthermore, these authors define efficiency using the following simple formula – Efficiency equals output, minus input, divided by resources. Neely *et al.* (2005) define efficiency as the optimal economic use of an organisation's resources, whilst simultaneously meeting customer expectations and creating customer satisfaction. In this study, the sales volumes generated by sales staff and the time spent on the telephone with customers was used to calculate the efficiency of sales performance.

2.2.2.2 Combinations of performance

According to Read (2003), call centre sales performance components, such as first call resolution, talk time; cost per call and customer satisfaction, should be combined to create an accurate benchmark of performance. This would enable the organisation to compare its performance with that of other organisations and also to identify performance gaps. However, the use of certain performance criteria in isolation may be detrimental to organisational development and performance. In the past, sales organisations tended to focus on pure cost measures, but the trend nowadays is towards sales efficiency and customer loyalty and satisfaction (Read, 2003). In this study, quality, efficiency, sales and the consistency of sales were used to indicate sales performance.

2.2.2.3 Consistency of sales

According to Fields (2010), the consistency of sales is a key to the success of the sales organisation concerned. Consistent sales refer to the generation of continuous sales by a salesperson during economic up and down times. If a sales organisation is to grow and expand then the consistent delivery of sales is a challenge which must be met (Jennison, 2005). In this study, the consistency of the sales volumes generated by sales staff was calculated over a period of three months.

To summarise, call centre sales performance is measured mainly through quantitative criterion measures, such as call handling times, task times and call waiting times. In this study call centre sales performance were explored in terms of time, sales volume and quality. These performance measures were further combined to create performance ratios of the efficiency and the consistency of the sales generated by sales staff.

2.3 THE IMPLICATIONS OF A RELATIONSHIP BETWEEN PERSONALITY AND PERFORMANCE OF SALES STAFF

Dannenburg and Zupancic (2009) argue that the strategic success of an organisation depends on both an effective sales function and the management of this sales function. Sales costs amount to almost 30% in top performing sales organisations and approximately 10% in lower performing sales organisations. However, very few sales organisations deploy their sales teams and apply their human resources effectively based on their corporate strategy, long term plans and specific targets (Dannenburg & Zupancic, 2009). If they are to be efficient, it is essential that call centre sales organisations perform very close to their maximum capacity as the employment costs comprise more than half of a call centre's total operational costs (Duder & Rosenwein, 2001). However, this high level of utilisation of

resources may lead to deterioration in service (Duder & Rosenwein, 2001) and it also is risky as a small percentage of calls only result in actual sales (Duder & Rosenwein, 2001).

The sales function of an organisation may be its largest cost factor and, thus, it is critical that the organisation apply its resources optimally so that the highest possible revenue may be generated (Dannenburg & Zupancic, 2009). A large number of candidates are often available for call centre sales positions as a result of the low skills requirement of this position (O'Hara, 2001). However, inefficient selection and recruitment procedures may result in substandard performance and excessive staff turnover (Johnston & Marshall, 2005; Vinchur, Schippmann, Switzer & Roth, 1998).

The on-going costs of the recruitment process and staff training, sales losses and overall time lost within the organisation may be incalculable (Johnston & Marshall, 2005; Panko, 1997; Ronen, 2010). Poor performing employees may have a devastating effect on the performance of an organisation and unqualified and unmotivated new recruits may, for instance, need to be closely supervised and trained (Hoel, 2004). Ronen (2010) explains that the consequences of poor performance may be even more devastating if the poor performer remains in the organisation and takes the place of a potential outstanding performer. Personnel related costs include not only recruitment and selection expenses, but also additional training costs and long-term productivity losses (Hoel, 2004).

As was evident in Chapter 1, if sales staff members work in an environment in which they are able to be authentic and express their true selves, then the negative consequences of emotional labour may be reduced (Guerrier & Adib, 2003). It is essential that the dynamics between personality and the work situation be explored as the consequences of a poor match may be far-reaching on both the individual and the organisational level (Barrick & Mount, 2005; Stewart & Barrick, 2004). Stewart and Barrick (2004) argue that individuals in a team who are neither agreeable nor emotionally stable may communicate poorly and display low interdependence which may, in turn, lead to conflict within the group (Stewart & Barrick, 2004). They also argue that the implications for either too few or too many extraverts in a team may affect organisational functioning and, therefore, performance. Emotional regulation through surface and deep acting in jobs that requires emotional labour also affects performance (Schmeichel, Demaree, Robinson & Pu, 2006). This could be ascribed to conflict in the person–environment fit dynamics (Hülsheger & Schewe, 2011). Constant emotional regulation may result in lower levels of mental performance, including memory and decision making (Richards & Gross, 2000; Zyphur, Warren, Landis & Thoresen, 2007). Surface acting depletes mental resources while an inauthentic emotional display of behaviour

may elicit less positive reactions from customers and this, in turn, may influence performance (Goldberg & Grandey, 2007).

Briggs and Briggs-Myers (1984) maintain that an employee's personality type may aid the understanding of the way in which the salesperson manages time, solve problems and makes decisions. As is evident from the literature review, the E, N, T and P personality type may result in a friendlier, more intuitive, objective and flexible approach to delivering sales and customer service. Thus, the identification of suitable sales personality types for a call centre sales environment may optimise person–environment fit.

The literature review suggests that employing A, EO, O, IN, OF and COM sales personality types may result in enhanced call centre sales performance. This, in turn, suggests that the ideal call centre salesperson is more adaptable, emotionally objective, enjoys integrating his/her professional and personal lives and is team focused and competitive. Thus, a suitable person–environment fit may be achieved by understanding personality types and sales personality types and the way in which they affect performance in a call centre sales environment.

Figure 2.5 illustrates the conceptual framework used for this research study. The study will explore the components of personality type, as measured by the JTI, as well as the components of sales personality type, as measured by the SPI. Sales performance is measured according to objective criteria provided by the participating organisation, namely, the total time spent on the telephone with customers, the total sales generated monthly and the total quality management.
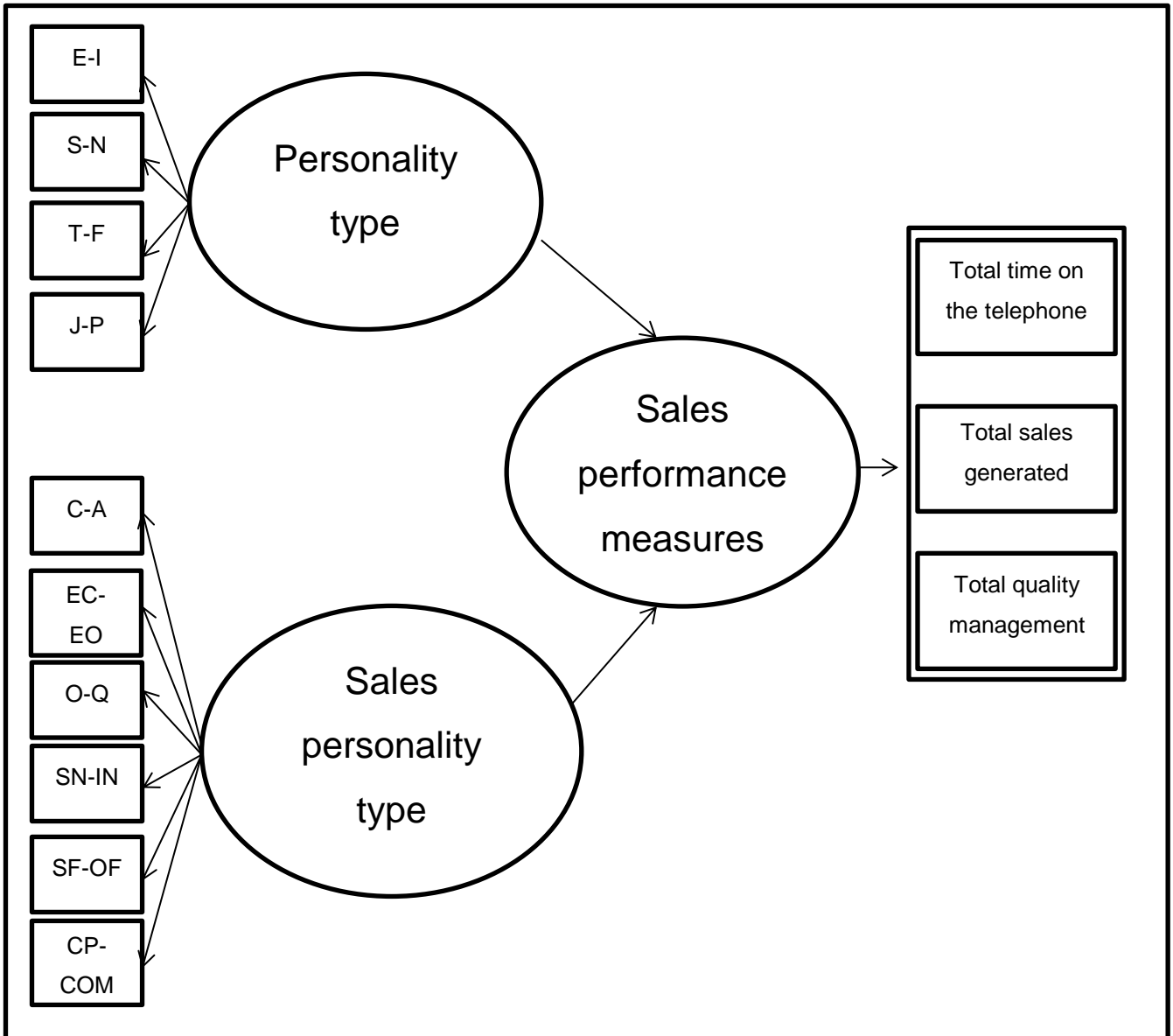
Figure 2.5 Conceptual framework of the research study

2.4 RESEARCH HYPOTHESIS

Terre Blanche and Durrheim (1999) describe theories as statements about the truth that have been tested empirically through the statement of a hypothesis. A hypothesis is a deductive, logical reasoning process relating to drawing conclusions about particular observations (Terre Blanche & Durrheim, 1999). The hypothesis states the likely relationship between the variables and the implications of such a relationship. The statistical hypotheses and sub-hypothesis of this study are formulated based on the literature review. The performance of sales staff is operationalised at both the univariate and multivariate levels. Table 2.2 presents the research questions and research hypothesis that will be investigated in this study.

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Table 2.2

Research questions and research hypothesis

Research Question	Research hypothesis
1. **What are the relationships between personality type and each of the univariate measures of sales performance?**	H01: There are no statistically significant relationships between personality type (and the dimensions of personality type as measured by the JTI) and call centre sales performance. H1: There are statistically significant relationships between personality type (and the dimensions of personality type as measured by the JTI) and call centre sales performance.
2. **What are the relationships between sales personality type and each of the univariate measures of sales performance?**	H02: There are no statistically significant relationships between sales personality type (and the dimension of sales personality type as measured by the SPI) and call centre sales performance. H2: There are statistically significant relationships between sales personality type (and the dimensions of sales personality type as measured by the SPI) and call centre sales performance.
3. **What is the best subset of personality scales from each of the JTI and SPI for predicting each of the univariate measures of sales performance?**	No hypothesis – explanatory

As was highlighted in Chapter 1, the following aims of the literature review and also the aims of the empirical study were conceptualised.

2.4.1   The specific aims relating to the literature review were conceptualises:

- Personality type from a theoretical perspective.
- Sales personality type from a theoretical perspective.
- The performance of sales staff in a call centre environment from a theoretical

perspective.

- The theoretical relationships between the personality type, sales personality type and the performance of sales staff in a call centre environment.
- The implications of the theoretical relationships between personality type, sales personality type and the performance of sales staff in a call centre insurance sales environment.

2.4.2 The following specific aims relating to the empirical study will be addressed in the next chapter:

- Determine the empirical relationships between personality type and the performance of sales staff in a call centre insurance sales environment.
- Determine the empirical relationships between sales personality type and the performance of sales staff in a call centre insurance sales environment.
- What is the best subset of personality scales from each of the JTI and SPI for predicting each of the univariate measures of sales performance?
- Provide recommendations to the discipline of Industrial and Organisational Psychology, relating to personality type, sales personality type and the performance of sales staff in a call centre insurance sales environment and also recommendations for further research.

2.5 CHAPTER SUMMARY

Chapter 2 described the literature review relating to personality and the performance of sales staff in a call centre environment. Personality was defined in terms of personality type and sales personality type. Personality type was further explored in relation to Jung's personality typology within the psychodynamic paradigm. Sales personality was investigated in terms of the social interaction theory and in relation to the person–environment fit model. The impact of impression management on personality measurement was discussed briefly.

This was followed by the conceptualisation of call centre sales performance, such as the time spent on the telephone with customers, sales volume generated and the quality management of both the calls and the sales transaction. In order to add value to the study these quantitative performance measures were used to create ratios of efficiency and combinations of performance and to explore the consistency of sales. An integration of the theoretical relationships between personality type, sales personality type and the performance of sales staff and the importance of such relationships were discussed. The chapter concluded with

the presentation of a conceptual framework for the research study and statements of the hypothesis.

CHAPTER 3
[1]RESEARCH ARTICLE

Personality and the performance of sales staff in a call centre environment

ABSTRACT

Orientation: Call centres provide significant employment opportunities globally as well as making a substantial contribution to economic growth. The challenges inherent in the call centre sales position, including rigid, predetermined quantitative performance measures, may affect both individual and organisational sales performance. These challenges have intensified the employee absenteeism, staff turnover and burnout that affect call centre sales performance. There is an increasing need to identify the personality types and sales personality types that may contribute to the optimal person–environment fit in order to improve call centre sales performance.

Research purpose: The main focus of the study was to establish whether relationships exist between personality and the performance of sales staff in a call centre environment. Personality is explored in terms of personality type (as measured by the Jung Type Indicator) and sales personality type (as measured by the Sales Preference Indicator) respectively.

Motivation for the study: Call centre sales staff faces constant pressure to perform and to reach sales targets in an environment that is labelled as emotionally demanding. Assessing the preferred call centre sales staff personality type as well as the preferred sales personality type may contribute to the optimal person–environment fit that may improve call centre sales performance.

Research design, approach or method: The study is based on a quantitative survey design using a purposive sample of 146 call centre sales staff in the insurance industry.

Main findings: The empirical study yielded statistically significant (positive and negative), but weak relationships, between both personality type and sales personality type and the performance of sales staff in a call centre environment.

Practical implications in terms of Industrial/Organisational Psychology practices: Identifying

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[1]Please note: The guidelines provided by the South African Journal of Industrial Psychology have been used as an extremely broad and general guideline for the framework of the research article.

the relationships between personality and the performance of call centre sales staff may assist in the selection of suitable sales staff to ensure optimal sales performance. This may, in turn, contribute to the optimal person–environment fit that may benefit both individual and organisational performance.

Contribution/value-add: The statistically significant but weak relationships between personality and quantitative call centre sales performance suggest that further research should be conducted on this relationship. It may be advisable to include qualitative call centre sales performance, specifically relating to emotional labour, in future studies. The findings of the study may add value to the fields of organisational psychology and personnel psychology and to the psychometric assessment of call centre sales staff.

Key words: Personality; personality type; sales personality; sales; performance; individual performance; organisational performance; call centre; JTI; SPI.

3.1   INTRODUCTION

The key focus and background of the study are revisited in Chapter 3. The trends in the relevant literature are reviewed and the objective of the study is discussed. Chapter 3 outlines the research design, which incorporates the research approach, research method and results of the study. The chapter concludes with an integration and discussion of the results. The conclusion, limitations and recommendations of the study are also briefly discussed.

3.1.1 Key focus of the study

The key focus of this study is to explore the relationships between personality and the performance of sales staff in a call centre environment. Personality is explored in terms of personality type and sales personality type. Personality type is measured by means of the Jung Type Indicator (JTI) and sales personality type is measured by means of the Sales Preference Indicator (SPI). The relationships between these types of preferred personalities and performance are explored in the context of a call centre insurance sales environment.

The strategic intent of a call centre is to offer customers a variety of products and to ensure personal interaction through quality call centre experiences (Nash, 1994; Nel & De Villiers, 2004). The premise of the call centre sales strategy is based on the maximisation of outputs and the minimisation of expenses through automated and mechanised technologies (Batt &

Moynihan, 2002). Robinson and Morley (2006) point out that the strategic intent of the call centre to balance reduced costs whilst maintaining excellent customer service often results in the call centre sales position becoming increasingly stressful. Jacobs and Roodt (2011) further suggest that the high psychological demands of the call centre sales position often cause discomfort on the part of the call centre sales agents. They refer to the continuous client interaction that is required of call centre sales agents in order to realise sales targets. Bagnara and Marti (2001) point out that the technological nature of the call centre, ever changing customer expectations and product and knowledge complexities also contribute to a demanding working environment.

Call centre sales performance is defined primarily in quantitative terms relating to contact volume, contact handling time, adherence to predetermined work schedules, quality control, efficiency of call time and sales generated (Du Preez, 2008). The work performed by call centre sales agents is also described as emotional labour and, thus, in terms of this emotional labour they are required to manage their emotions and behaviour according to organisational display rules (Chu, 2002; Côté, 2005; Hochschild, 1983). This suggests that employees evoke or suppress certain emotions and behaviours in order to conform to organisational display rules (Chu, 2002).

Sales staff frequently has to deal with demanding and often abusive customers who have become more sophisticated in terms of their buying power as the competition amongst the various service providers has increased (Ingram, 2004; Jones, Brown, Zoltners & Weitz, 2005; Lewig & Dollard, 2003). In addition, call centre sales staff members are expected to anticipate and manage customer queries and complaints and, simultaneously, sustain positive customer relationships (Nel & De Villiers, 2004). In order to cope with the emotional demands of the job, an individual may decide either to surface or to deep act (Grandey, 2000). Surface acting refers to inauthentic behaviour displayed by the employee according to predetermined organisational display rules. This, in turn, means that the sales agents would interact with clients in a manner that is inconsistent with their true personality type and this may cause feelings of discomfort and stress. Deep acting refers to an authentic display of behaviour according to predetermined organisational display rules. In other words, deep acting would refer to interaction with clients in a manner that is consistent with the sales agent's true personality type. Thus, Persaud (2004) suggests that emotional labour may be either a source of job satisfaction or a cause of strain and burnout, depending on whether the individual has a natural propensity to surface or to deep act.

According to Persaud (2004), the demanding and challenging nature of the call centre sales

role has given rise to phenomena such as absenteeism, turnover and burnout of sales staff, which affect both individual and organisational sales performance. The high sales performance targets and emotional labour required of call centre sales staff often lead to high levels of absenteeism and turnover as a result of workload and stress (Townsend, 2007). These prevalent problems in the call centre industry are aggravated by the "recruitment of staff of the wrong personality type" (Barnes, 2001, p. 3).

Yang, Che and Spector (2008) argue that a suitable degree of person–environment fit relates to various organisational outcomes, such as good performance, mental wellbeing and turnover intentions. Furnham (2008) explains that personality is critical in explaining workforce behaviour, specifically in terms of job performance, absenteeism and health related issues. It is, thus, essential that employees possess specific personality attributes in order to function effectively in the call centre sales environment (Nel & De Villiers, 2004).

According to Du Toit *et al.* (2005), challenges such as those pointed out above suggest the need for the identification of suitable individual personality qualities in the recruitment process in order to ensure person–environment fit. The call centre sales position generally requires low-level skills and a large number of candidates are, therefore, often available to fill the available positions. However, selecting the most suitable candidates may be difficult in view of the challenges inherent in the call centre sales environment (Frenkel, Tam, Korczynski & Shire, 1998; O'Hara, 2001). Els and De Villiers (2000) believe it is critical that selection and hiring criteria are reviewed to assist in the hiring process and particularly to ensure a return on investment in sales staff. The key focus of this study, therefore, is the identification of suitable preferred personalities and preferred sales personalities among call centre sales staff to ensure an optimal sales performance by realising an acceptable level of person–environment fit.

3.1.2 Background to the study

The call centre sales organisation has created a competitive platform on which companies compete in terms of different products and services (Armistead, Kiely, Hole & Prescott, 2002) and this may, in turn, explain the upsurge in call centres globally (Nel & De Villiers, 2004). Call centre sales organisations provide secure employment but they also face several challenges, including high staff turnover rates and high levels of absenteeism.

Call centre sales staff handle numerous calls rapidly whilst following preset scripts, based on the organisational display rules which control their behaviour (Witt *et al.*, 2004). In order to

perform efficiently, sales staff members need to manage a specific number of calls daily, averaging a specific length of time on the telephone with customers. Thus, the speed and volume of the sales calls, including abandoned calls, forms a critical component of the sales performance criteria of sales staff (Witt *et al.*, 2004). Additional performance criteria of sales performance in the call centre focus on high quality customer service (Batt, 1999).

In view of South Africa's current economic situation, most organisations are not able to afford ineffective human resource practices. The organisational costs of inefficient practices include high levels of turnover among staff, time and money lost, as well as recruitment and selection processes and the training and supervision of sales staff that result from staff turnover (Mayer & Greenberg, 2006). In addition, organisations may have to deal with the consequences of employing an unsuitable salesperson, managing poor performance and then initiating the recruitment and selection cycle yet again.

Emery and Handell (2007) advises that appointing an incompetent person may cost an organisation more than 2,5 times the employee's salary, without considering the negative effects this appointment may have on organisational productivity. The cost of staff turnover is almost incalculable when new sales staff members' salaries, commission, and expense accounts are considered, especially if they perform poorly (Mayer & Greenberg, 2006). It is, thus, essential that a sales organisation focus on appointing sales employees who are able to close sales deals in a reasonable length of time so as to ensure operational efficiency. Globally, challenges such as staff turnover have led to a renewed interest in the sales role and have accentuated the importance of exploring suitable personality types when selecting staff for the call centre sales role (Carrim *et al.*, 2006).

Personality may predict certain behaviours at work which may not be predicted by general mental ability, knowledge of the job, the work environment (Barrick & Mount, 2005) or other predictors such as biographical data (Mount, Witt & Barrick, 2000). Organisations are increasingly using personality measures in order to identify suitable candidates (Robie *et al.*, 2007; Ryan, McFarland, Baron & Page, 1999). The importance of personality assessment in the prediction of job performance, however, has long been criticised (Barrick & Mount, 2005), inter alia, as a result of its low criterion and predictive validity (Scroggins, Thomas & Morris, 2009). However, despite these criticisms, a number of studies have established that personality may predict certain work outcomes (Barrick & Mount, 2005; Furnham, 2008) and is critical in organisational functioning (Del Giudice, 2010). The assessment of personality type appears to have great value in sales force selection (Marcus, 2005) while personality has proven to be a useful predictor of organisational performance (Ones, Dilchert,

Viswesvaran & Judge, 2007).

Personality, in turn, is also influenced by specific working environments. A pressurised sales environment and an unsuitable person–environment fit may, for example, create distress among employees. However, the relationship between personality and job performance tends to be complex as work behaviour is multifaceted and it is constantly affected by mediating and regulating variables (Barrick & Mount, 2005). Nevertheless, Barrick and Mount (2005) argue that taking into account the work environment and its influencing variables – in this instance, the call centre sales position – may contribute to understanding personality as a predictor of job performance.

It is evident that the call centre sales position is challenging and demanding and it is for this reason that it is the focus of this study. It is envisaged that more in-depth assessment of the personality attributes of call centre sales staff may assist both in identifying suitable sales staff and in optimising person–environment fit. According to Moller *et al.* (2004), it is critical that organisations find a suitable way in which to identify the personality types and sales personality types that are appropriate to a call centre sales environment. Realising this may help prevent negative consequences such as absenteeism, turnover and burnout and this, in turn, may ensure improved sales performance.

In this study the constructs of personality type and sales personality type are investigated to address the personality attributes which are related to job performance in a call centre sales environment. It is envisaged that establishing a suitable person–environment fit in this type of environment by means of personality assessment should reduce staffing costs over the long term and also optimise both sales efficiency and performance.

3.1.3 Trends from the research literature

Dominant trends in the literature will now be discussed as regards personality type, sales personality type and the performance of sales staff.

3.1.3.1 Personality type

Psychologists refer to personality as private, inner, dynamic processes that reflect consistencies in social behaviour (Furnham, 2008). Personality type or preference is described as categories of personality or trait summaries (Furnham, 2008). Jung (1949) developed the personality type theory to explain differences among individuals. Personality type refers to the ways in which individuals use their minds to accept and organise

information and to reach conclusions which may act as a predictor of the way in which people will behave (Jung, 1949).

Extraverted versus introverted personality type

Extraversion (E) and introversion (I) are indicative of the inclination of individuals to be drawn to either their inner or their outer worlds and where they prefer to apply their attention (Jung, 1971; Jung, 1949). The E-type enjoys interaction with other individuals who are their source of energy (Keirsey & Bates, 1984) while the I-type prefers to reflect on thoughts and memories with their energy being derived from understanding the world before experiencing it (Keirsey & Bates, 1984). The E-type is described as sociable and talkative (Peeters *et al.*, 2006) and may experience loneliness when not interacting with people (Struwig, n.d.). On the other hand, the I-type is described as territorial and may experience feelings of loneliness when amidst a crowd of people (Struwig, n.d.).

Sensing versus intuitive personality type

The sensing (S) and intuitive (N) personality types reflect a preference for attending to and gathering data and refer to the way in which individual decide to deal with their inner and outer worlds (Jung, 1971; Keirsey & Bates, 1984). The S-personality type is described as realistic and practical with people characterised by this type preferring to work systematically by using their senses (Myers, 1998). The S-personality type is known to be "sensible" and they are recognised for their attention to detail as well as their cautious and methodical analysis of events (Struwig, n.d.). They also enjoy working with large amounts of facts (Keirsey & Bates, 1984).

The N-personality type differs from the S-personality type in terms of their sensitivity and awareness (Struwig, n.d.). These individuals have the ability to identify connotations, associations and opportunities in occurrences and events (Keirsey & Bates, 1984). In addition, their intuitive nature affords them the ability to identify essential patterns beyond the information that is provided through their senses (Myers, 1998). They reach conclusions quickly and follow their natural instinct (Myers, 1998). The N-personality type is excited by future possibilities and options (Struwig, n.d.).

Thinking versus feeling personality type

The thinking (T) and feeling (F) personality type refers to an individual's preference to process information and make decisions (Jung, 1971). The T-personality type is described as a logical and analytical problems solver (Keirsey & Bates, 1984). These individuals prefer cause-and-effect reasoning, basing their conclusions on an objective analysis of evidence in

order to seek the truth (Myers, 1998). On the other hand, the T-personality type individuals base their decisions on impersonal principles and they sometimes perceive the F-personality types as being too soft-hearted. The F-personality type assesses people through value-based decision making. The F-type is usually person-centred and empathic, striving for positive interface and harmony with other individuals (Myers, 1998). A common misconception is that F-types are too emotionally sensitive. According to Struwig (n.d.), both the T and F personality types may react with the same level of emotional intensity. The difference is, however, that the F-type individuals display their emotions more visibly than the T-type (Struwig, n.d.).

Judging versus perceiving personality type

The judging (J) and perceiving (P) personality type refers to the way in which people decide to organise and orient themselves to the outer world (Briggs & Briggs-Myers, 1984). The J-personality type prefers to make decisions so as to obtain closure and avoid last minute stresses and pressures (Keirsey & Bates, 1984). These individuals prefer to have their lives scheduled, orderly and planned in order to create more control (Myers, 1998). The J-personality type individuals may experience feelings of urgency if there is a pending decision but, once the decision has been made, they are able to relax (Struwig, n.d.). The P-personality type enjoys flexibility, change and spontaneity (Keirsey & Bates, 1984). These individuals dislike routine and schedules and enjoy leaving things open to change as they are energised by last minutes pressures (Myers, 1998). In contrast to the J-personality type, the P-personality type may resist making a decision, attempting to gather more data before doing so (Struwig, n.d.). Day, Bedein and Conte (1998) found that individuals who are more flexible and adaptable to change have a lower propensity to leave their jobs.

Keirsey and Bates (1984) identified four combinations derived from the Jungian personality type theory. They classified the following groups together based on the definitions provided above:

- Intuitive and feeling personality type (NF)
- Intuitive and thinking personality type (NT)
- Sensing and perceiving personality type (SP)
- Sensing and judging personality type (SJ)

NF combination

The NF combination reflects individuals who base their decisions on their feelings and on possibilities rather than on an objective evaluation of a situation. This personality type

combination enjoys working with and through people and has the ability to comprehend complex human behaviour. These individuals consider the values and priorities of other people to be more important than their own. However, they may lose self-confidence if they receive negative feedback from others (Keirsey & Bates, 1984; Myers & McCaulley, 1985). The NF personality type is serious about making unique contributions as a worker and enjoys realising potential in others or him/herself (Struwig, n.d.).

NT combination

The NT personality type combination individuals are recognised as logical, objective, analytical thinkers. They base their conclusions and decisions on laws and principles and focus on the pursuit of impersonal truth. They may be perceived as being distant and aloof, as they do not enjoy personal comments (Keirsey & Bates, 1984; Myers & McCaulley, 1985). The NT personality type has a strong need to be competent and feels compelled to improve the current way of doing things. Upon acting, these individuals do so with precision and exactitude (Struwig, n.d.).

SP combination

The SP personality type combination is focused on the present moment and on new experiences. These individuals seek and welcome change and are described as excellent problem solvers. They enjoy change and adapt easily to any situation and, therefore, they take risks boldly. They are described as process-orientated negotiators (Keirsey & Bates, 1984; Myers & McCaulley, 1985). The SP personality types are described as exciting, enthusiastic, happy and fun-loving. They are also seen as impulsive and spontaneous and are able to cope with discomfort, deprivation and fatigue (Struwig, n.d.).

SJ combination

The SJ personality type combination individuals are realistic, self-assured, trustworthy and conventional and they seek stability. Problems are solved based on tried-and-tested methods. They usually dislike change and ambiguity and, thus, they make their decisions with caution and care. During customer interactions, they may interpret interpersonal signals inaccurately and this, in turn, may lead to criticism and directness (Keirsey & Bates, 1984; Myers & McCaulley, 1985).

It has been found that sales staff tends to manifest in particular personality types based on Jungian theory (Jung, 1949). The main types that would typically be expected in a sales environment are the N and T types while the least likely personality types to be found in a sales environment are the S and F types (Personnel today, 2007). The large number of N

personality types in a sales department may be ascribed to the intuitive manner in which sales staff tends to approach customers and gain competitor information. This implies that less rigid planning and preparatory approaches to selling may enhance sales performance. A sales manager is less likely to fall within the personality type categories of I, S, T and P, but twice as likely to fall within the E, S, T and J categories (Personnel today, 2007).

The T-type combined with the E-type will result in empathic, genuine interpersonal relationships with customers. Empathy and extraversion appear to be related to sales performance (Barrick & Mount, 2005; McBane, 1995; Rollins, 1990; Yilmaz & Hunt, 2001). The flexible type is also recognised as diplomatic and sympathetic and these individuals tend establish good rapport with customers through showing genuine interest (Opra Consulting Group, 2007). According to Keirsey and Bates (1984), the ENFJ, ENFP, ESFJ and ESFP types make excellent salespeople whereas the INTP types do not enjoy sales occupations. It is, thus, expected that a predominance of E, N, T and P personality types will be found in the current study.

3.1.3.2 Sales personality type

The key focus of identifying sales personality type is to identify the way in which employees behave within a given environment that is a natural extension of their personality. During the development of the SPI, sales personality type was explored based on research conducted by Brett *et al.* (1995), McBane (1995), Spence and Helmreich (1983) and, Spiro and Weitz (1990). The following sales personality types were identified (Opra Consulting Group, 2007).

Consistent versus adaptive sales personality type

The consistent (C) sales personality type is described as preferring a constant and similar approach both to clients and to the sales process (Opra Consulting Group, 2007). The opposite of the C-sales personality type is the adaptive (A) sales personality type. This type is described as having a preference for adjusting to the sales process according to the needs of the client (Opra Consulting Group, 2007). It may be expected that the A-sales personality type would be open to experience and change, an attribute which has been found to be related to both job performance and sales performance (Griffin & Hesketh, 2004; Yilmaz & Hunt, 2001). It has been found that adaptability is linked to both sales performance and sales staff retention (Park & Holloway, 2003) because people with flexible personality types tend to have a lower propensity to leave their jobs (Day *et al.*, 1998).

Emotionally connected versus emotionally objective sales personality type

The emotionally connected (EC) sales personality type may be defined as the emotional association which the salesperson has with the interaction that takes place between the salesperson and the customer during the sales transaction (Opra Consulting Group, 2007). If the salesperson is too emotionally sensitive, then closing the sales deal may be jeopardised. Mount and Barrick (1998) describe a person who shows low emotional stability as someone who experiences anxiousness, nervousness, insecurity and sensitivity. The emotional objective (EO) sales personality type refers to the salesperson's ability to distance him/herself emotionally from emotions during the sales transactions with customers (Opra Consulting Group, 2007). According to Molleman, Nauta and Jehn (2004), emotionally stable individuals are confident about their decisions; they are more cooperative and relaxed and may be expected to achieve significant sales success. Skyrme, Wilkinson, Abraham and Morrison (2005) found that employees who are emotionally stable achieve higher job performance than those who are less emotionally stable. Maslach (1982) further found that anxious individuals experience burnout more quickly than emotionally controlled individuals. The call centre sales environment is synonymous with emotional labour and it is critical that sales staff should be able to appear calm, relaxed and in control of their emotions.

Quiet versus outgoing sales personality type
The quiet (Q) sales personality type is described as introverted, private and reserved (Opra Consulting Group, 2007). According to Barnes (2001), the Q-sales personality type should be more suited to the call centre because call centre sales staff members do not experience much face-to-face interaction with customers. They may, however, at times experience role overload as a result of the excessive telephonic contact with customers and this may affect their performance (Layman & Guyden, 1997). The Q-sales personality type has also been linked to burnout (Maslach, 1982). The outgoing (O) sales personality type is described as extraverted, talkative and sociable (Opra Consulting Group, 2007). These individuals are energised through contact with other people and, thus, the interactions between the extravert and customers may lead to improved sales performance. The O-sales personality type is likely to engage in deep acting with customers – critical in occupations related to emotional labour (Austin, Dore & O'Donovan, 2008). Deep acting has also been linked to employee health and wellbeing as opposed to surface acting (Austin *et al.*, 2008). Individuals with an outgoing, extraverted nature often require more social support and they may, therefore, experience exhaustion in the workplace (Swickert, Rosentreter, Hittner & Mushrush, 2002).

Separate networks versus integrated networks sales personality type
The separated networks (SN) and integrated networks (IN) sales personality types refer to a salesperson's tendency to enjoy integrating business in all areas of his/her life and not

limiting it to his/her position within the organisation (Opra Consulting Group, 2007). The SN-sales personality type individuals do not want to jeopardise relationships with family and friends because they do not see the sales occupation as a real profession. It is important to identify a sales personality type that prefers SN as a selling style because this may influence sales performance in view of the fact that it takes a person with this type of personality longer to build a stable customer basis and this may affect sales performance.

The IN-sales personality type individuals have an inherent preference for sales and do not experience any feelings of shame, guilt or emotional discomfort when selling to family and friends (Opra Consulting Group, 2007). They build customer basis quickly and usually manifest higher sales performances as they enjoy sales and see it as a serious profession. It may, therefore, be expected that the IN-sales personality type will be more successful in the sales role than the SN-sales personality type.

Self-focused versus organisational focused sales personality type
The self-focused (SF) sales personality type may be described as self-directed, self-reliant and independent (Opra Consulting Group, 2007). The SF-sales personality type individuals relies more on their own feelings and attitudes and the personal reward they may receive from a sales transaction rather than focusing on organisational goals and visions (Opra Consulting Group, 2007).

The organisational focused (OF) sales personality type is seen as a representative of the organisation and prefers to abide by organisational values and goals (Opra Consulting Group, 2007). The OF-sales personality type is more committed and focused on increased organisational achievement rather than on personal reward. Qureshi, Hayat, Ali and Sarwat (2011) define organisationally committed individuals as being emotionally attached to the organisation with a feeling of responsibility towards the successful attainment of the organisational goals. They also found that there is a relationship between organisationally committed individuals, customer service and organisational outcomes (O'Hara, Boles & Johnston, 1991; Qureshi *et al.*, 2011). OF-sales personality types find it easier and less demanding to adhere to organisational display rules, which are synonymous with call centres and emotional labour (Opra Consulting Group, 2007). It may, therefore, be expected that an OF-salesperson will be more effective in sales than the SF-sales personality type.

Cooperative versus competitive sales personality type
Cooperative behaviour may be defined as the interaction between individuals in order to reach a common goal which is mutually advantageous to all parties (Definitions.net, 2012).

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The cooperative (CP) sales personality type is described as open, sincere and reliable and is viewed as trusted by customers (Opra Consulting Group, 2007). These individuals tend to minimise their risks and value security and they will consult with team members before making decisions. Peeters *et al.* (2006) describe this sales personality type as cooperative, agreeable and gentle. Cooperativeness is synonymous with trust and with caring personality types (Mount, Barrick & Stewart, 1998). Mount *et al.* (1998) and Skyrme *et al.* (2005) found that agreeableness is positively linked to performance, specifically in occupations that require team work. Judge, Higgins, Thoreson and Barrick (1999) found that agreeableness and cooperation are necessary in the demanding call centre sales environment although Mount *et al.* (1998) argue that team work is not necessarily a significant component in the call centre sales environment.

The competitive sales personality type (COM) is defined as achievement orientated, persuasive and assertive. The COM-sales personality types attend to prefer working individually and are driven to meet their own sales targets. The COM-sales personality types are considered more successful than the CP-types as they are extremely comfortable with closing sales deals in an assertive way with clients (Opra Consulting Group, 2007). It may, therefore, be expected that sales staff with high sales performance are more competitive in nature.

Based on the literature review relating to sales personality preferences, it is expected that sales agents will be less consistent (C) and more adaptive (A) in their selling styles. The researcher was expecting less emotionally connected (EC) and more emotionally objective (EO) sales personality types among sales agents while it was also expected that less quiet (Q) and more outgoing (O) sales personality types would be found amongst sales agents. In this study the researcher was also expecting less separated networks (SN) sales personality types and more integrated networks (IN) personality types as well as less self-focused (SF) versus more integrated networks (IN) sales personality types and also less cooperative (CP) sales agents versus more competitive (COM) sales personality types.

3.1.3.3 Call centre sales staff performance

A sales organisation is required to do more than just sell and the sales role has become increasingly complex (Brown & Jones, 2005) with the focus shifting from mere sales to a focus on the customer (Storbacka, Ryals, Davies & Nenonen, 2009). Chonko *et al.* (2000) define sales performance as the successful acquisition of competitor and customer knowledge, product knowledge, building customer relationships and reaching sales targets. Gautier (2002) further defines call centre sales performance as the identification of customer

needs and meeting those needs through an effective service and sales function.

The call centre sales organisation aims to achieve high market volume and significant cost minimisation (Batt, 1999). However, call centre sales performance differs somewhat from the traditional sales role in the sense that the call centre sales role has become more mechanistic and routinised in nature (Batt, 1999) than face-to-face, personalised sales.

Zapf, Isic, Bechtoldt and Blau (2003) define quantitative call centre sales performance as the amount of calls which sales staff members manage during a day. However, this creates time pressures and causes a decrease in concentration and attention. Despite the fact that the emphasis is placed on quality service, sales staff members are often assessed according to the quantity of calls they handle (Frenkel *et al.*, 1998). Call centre sales performance is typically based on technical targets, such as how long it takes for the salesperson to answer the telephone and particularly whether the person converted incoming phone calls and enquiries into sales. Call centre sales performance is also measured according to personal productivity, for example, calls made to customers per hour and the sales generated. Gautier (2002) emphasise operational efficiency in terms of effective customer problem resolution. The quality of call centre sales performance is typically managed by means of the recording of all telephone calls and then measured quantitatively by means of predetermined quality control checks of these recordings (Pyke, 2008).

The use of ratios and combinations to establish efficient call centre sales performance and exploring the consistency of sales is more useful than exploring separate measures of performance (M. Werbeloff, personal communication, April 15, 2012). The time spent on the telephone and the sales volume generated are explored with quality as a control mechanism. This method is extremely one-dimensional and, therefore, in this study, in order to determine sales efficiency, ratios as well as combinations of these performance measures are explored in addition to the consistency in which sales are generated across time.

According to Pettijohn, Pettijohn, Taylor and Keillor (2000) performance efficiency is determined through the creation of performance ratios. Zallocco, Bolman Pullins and Mallin (2009), argue that sales performance should be defined in terms of effectiveness and efficiency. They explain that effectiveness is doing the "right thing" and efficiency is doing the "right things at the right time". Efficiency is further defined as the optimised utilisation of resource input-outputs in combination with other sales activities that impact on effectiveness (Zallocco *et al.*, 2009). Neely *et al.* (2005) define efficiency as the economic allocation of a firm's resources. They also highlight the importance of establishing organisational

effectiveness when combining efficiency with the satisfaction of customer needs. Pelham (2006) further identifies customer building activities as an example of sales performance efficiency and, thus, this is deemed to be an important quality control mechanism. Zallocco *et al.* (2009) maintain that it is possible to measure performance according to sales outcomes if such performance is measurable (time and sales volume). They also argue that sales performance behaviours may be measured as sales performance if those behaviours are measureable (quality).

Bono and Vey (2007) define any job performance that requires emotion regulation as emotional performance. They argue that emotional performance is the effective, genuine expression of either a negative or a positive emotion, according to a role requirement. The positive expression of emotions is commonly required in customer service or sales orientated roles.

Emotional labour or emotional work refers to the quality of the interaction between sales staff and customers (Zapf, 2002) and is described as the regulation of psychological processes in order to express the appropriate emotions as required by the organisation (Grandey, 2000; Zapf, 2002). Organisational display rules tend to be defined according to specific organisational regulations, such as not exceeding the conversation time with a client of more than five minutes; addressing customers by their names; conversing in a friendly tone and displaying positive emotions (Zeithaml & Bitner, 2000) even if the situation is unpleasant (Zapf *et al.*, 2003). Despite the fact that emotional performance is not measured in this study, the investigation of personality characteristics may make a contribution in this regard.

To summarise, the time spent on the telephone with customers, the sales generated by staff and quality measurement will be used in this study to determine performance ratios and efficiency.

3.1.3.4   The theoretical relationships between personality and the performance of sales staff
Judge *et al.* (1999) assessed job performance intrinsically and extrinsically in a subjective and objective manner, over a period of more than 50 years. Their study revealed that, although the correlation between personality and job performance tends to be modest, the effects of evaluating personality are noteworthy as the results have been accumulative and compounding over time (Judge *et al.*, 1999).

Research has also contributed to an understanding of the relationship between personality constructs and job performance (Barrick, Mount & Judge, 2001). A negative relationship

between confrontational, stubborn, uncooperative and intolerant employees and job performance has been identified (Barrick & Mount, 2005) while a positive relationship between imaginative, knowledgeable, inquisitive and self-determined employees and job performance has been found (Barrick & Mount, 2005). In addition, positive behaviours such as leadership efficacy, successful task completion and overall job satisfaction are also related to personality.

The nature of a job moderates the extent of the relationship between personality characteristics and job performance (Mount *et al.*, 1998). It is, thus, essential that researchers consider the features of job performance which are being studied and take into account the environment in which the job performance occurs (Barrick & Mount, 2005). Barrick and Mount (2005) point out that characteristics such as "hard working", "persistent", "cooperative" and "considerate" are critical in most work environments. They believe it would be advisable to consider the conditions of a working environment when screening applicants by means of personality assessment.

Although personality assessment was originally criticised for its low criterion and predictive validity (Scroggins *et al.*, 2009), it has been established that an assessment of people's personality type has great value in sales force selection (Marcus, 2005). The personality construct has, indeed, proven to be a useful predictor of organisational performance (Ones *et al.*, 2007). It is envisaged that suitable personality assessment procedures should reduce staffing costs over the long term with this underpinning the need for the current study.

Figure 3.1 presented the conceptual framework for this research study. Personality type is be explored as defined by the JTI's four scales (E-I, S-N, T-F and J-P) while sales personality type is further explored as defined by the six scales of the SPI (C-A, EC-EO, O-Q, SN-IN, SF-OF and CP-COM). The performance measures of time, sales and quality were used to create ratios of efficiency and combinations of performance measures that was then used to form clusters of performance.

Figure 3.1 depicts the hypothesised relationship between personality types and sales personality types in relation to sales performance measures in terms of quality, efficiency, sales and the consistency of sales. The quality data was received from an independent quality control department and determined by preset quantitative quality control checks. Sales staff efficiency was calculated using a combination of time on the telephone with customers and the actual sales generated by sales staff while the sales volume is the actual sales generated by a sales agent in a month. The consistency of sales refers to the

consistent generation of sales volumes over a three month period.
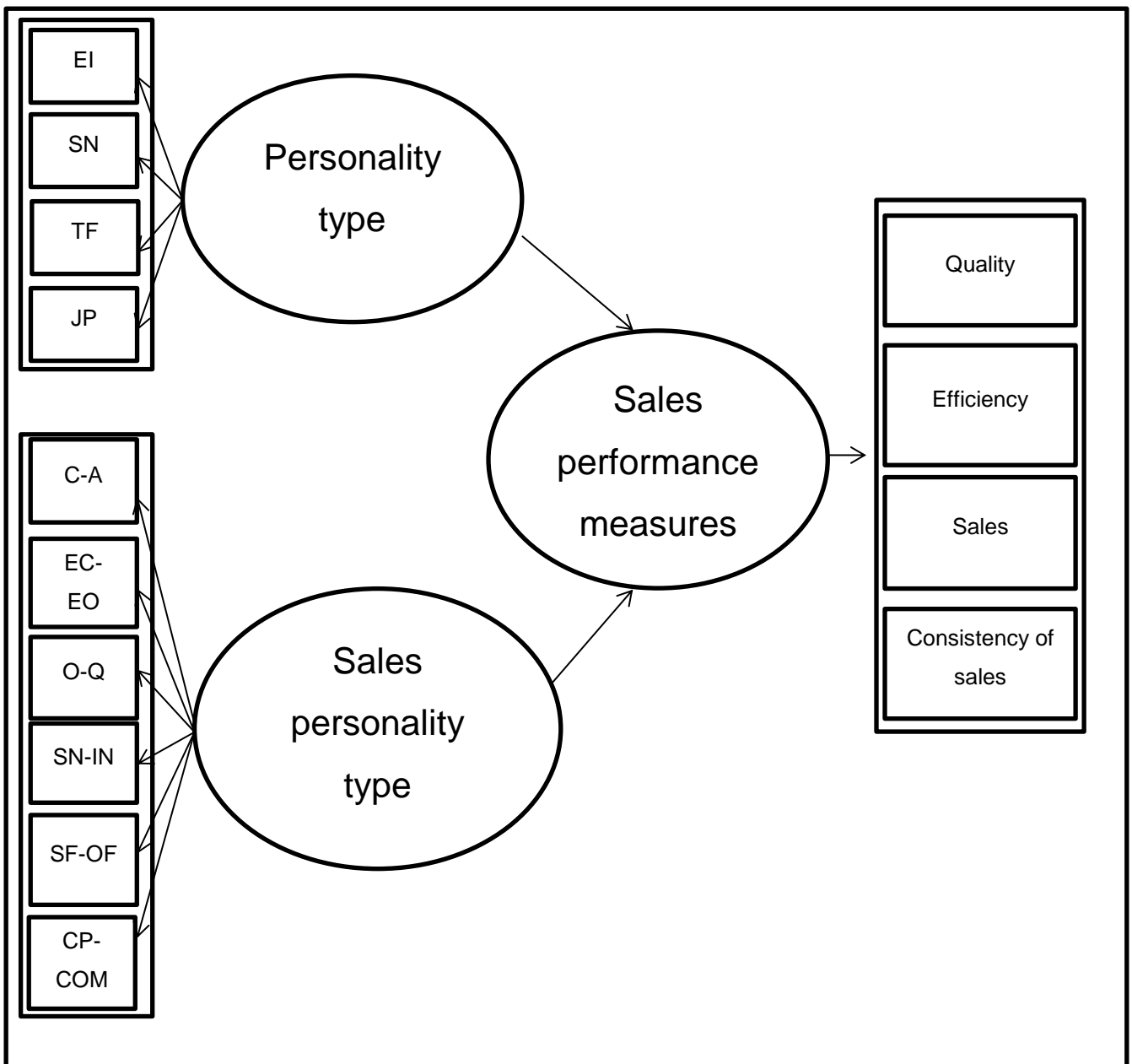
Figure 3.1 Conceptual framework of the research study

3.1.4 Hypotheses

The research study will address the following statistical hypotheses and research questions (see Table 3.1).

Table 3.1

Research questions and research hypothesis

Research question	Research hypothesis
1. **What are the relationships between personality type and each of the univariate measures of sales performance?**	H01: There are no statistically significant relationships between personality type (and the dimensions of personality type as measured by the JTI) and call centre sales performance. H1: There are statistically significant relationships between personality type (and the dimensions of personality type as measured by the JTI) and call centre sales performance.
2. **What are the relationships between sales personality type and each of the univariate measures of sales performance?**	H02: There are no statistically significant relationships between sales personality type (and the dimension of sales personality type as measured by the SPI) and call centre sales performance. H2: There are statistically significant relationships between sales personality type (and the dimensions of sales personality type as measured by the SPI) and call centre sales performance.
3. **What is the best subset of personality scales from each of the JTI and SPI for predicting each of the univariate measures of sales performance?**	No hypothesis – explanatory

3.1.5 Research objectives

The main objective of this study is to investigate critically the relationships between both personality type and sales personality type and the performance of sales staff in a call centre environment. The call centre sales position has been described as pressurised, target driven and emotionally demanding. Despite the fact that the position typically requires low-level skills, it also entails various responsibilities such as dealing with demanding customers and reaching sales objectives. It is, thus, critical that the role of personality in ensuring success in this position is explored in order to ensure person–environment fit and possibly to combat the

high levels of absenteeism, turnover and burnout of employees which characterise a call centre sales environment.

3.1.6 The potential value added by the study

There is a growing interest in call centres as a result of their possible contribution to job creation in South Africa. The purpose of this study is to contribute new knowledge regarding personality and the performance of sales staff in a call centre sales environment that may contribute both to the selection of suitable call centre sales staff and a more optimal person–environment fit. The identification of those personality types which are related to call centre sales performance may contribute to addressing issues such as the high levels of absenteeism, turnover and employee burnout which appear to be features of the call centre sales environment.

3.1.7 What will follow?

In the next section, the research design used in the study will be explained. The research design describes the approach and methods used to complete a study. Thereafter the results of the study will be presented and discussed. Any significant correlations will be highlighted and interpreted in relation to other research findings. Finally, conclusions will be drawn, some of the limitations of the study will be pointed out and recommendations for future research suggested.

3.2 RESEARCH DESIGN

Terre Blanche and Durrheim (1999) describe the research design as the deliberate and planned form of systematic observation that differentiates research from regular observations. In addition, the research design forms an association between the original research questions and the consequent implementation of the research action to ensure systematic, controlled execution (Terre Blanche & Durrheim, 1999). The research approach and research method that were followed in this study are discussed below.

3.2.1 Research approach

This study adopted a quantitative research approach because such an approach enabled the researcher to use questionnaires in order to collect the required data (Creswell, 2003). A quantitative survey design uses either predetermined questions or performance data

(Creswell, 2003; 2005) to collect data in the form of numbers which are then used in the statistical data analysis to make assumptions about the population in an accurate manner (Terre Blanche & Durrheim, 1999).

3.2.2 Research method

The first part of this study consisted of a theoretical conceptualisation of personality type and sales personality type and the performance of sales staff in a call centre environment. This was followed by investigating trends in the relevant literature to identify whether any theoretical relationships exist between the constructs. The following section of the study consists of the empirical study which was conducted in order to identify whether relationships exist between the personality type, sales personality type and the performance of call centre sales staff. The research participants, measuring instruments, research procedure and statistical analysis will now be briefly described.

3.2.2.1 Research participants

In order to ensure convenience and accessibility, a purposive sample consisting of 202 participants in a call centre sales environment was selected. A purposive sample is a non-probability sample that conforms to specific criteria (Cooper & Schindler, 2008), for example, sales staff in a call centre sales environment. The final sample of participants consisted of 146 sales staff members who completed both personality measures, yielding a response rate of 73%. The biographical distribution, frequency distribution and percentage of participants will now be presented, followed by the descriptive statistics pertaining to the sample.

Table 3.2

Biographical information of the sample (N = 146)

Variable	Categories	Average	Standard deviation	$N = 146$	Percentage of sample
Age	20 – 45 yrs	28.29 yrs	4.6 yrs	146	100%
Gender	Male	-	-	96	66%
	Female	-	-	50	34%
Ethnic group	Black	-	-	103	71%
	Indian	-	-	25	17%
	Coloured	-	-	17	12%
	White	-	-	1	1%

As is evident in Table 3.2, the final sample consisted of 146 sales agents between the ages

of 20 and 45 years. The average age for the sample was 28,29 years with a standard deviation of 4,6 years. The sample was unevenly split between gender groups and included 96 males (66%) and 50 females (34%). The sample included 103 black participants (70,7%); 25 Indian participants (17%); 17 coloured participants (12%) and one white (1%) participant.

3.2.2.2 Measuring instruments

The measuring instruments used included the JTI as a personality measure and the SPI as a sales personality measure of sales staff in a call centre.

a) The Jung Type Indicator

The JTI (Psytech SA, 2010) is based on Jung's (1971) theory which explains people's orientation in life in terms of their psychological type. The JTI is a psychometrically sound test (Psytech SA, 2011). It is registered with the Health Professions Council of South Africa (HPCSA) as a classified psychological test (form 207) and provides a reliable and valid measure of an individual's psychological type (Health Professions Council of South Africa, n.d.; Psytech SA, 2011).

Each scale of the JTI consists of 15 test items. Respondents rate themselves on statements on a five-point Likert-type scale depending on whether they agree with each item or not. Upon completion the candidate is allocated a JTI code indicating a preference for extraversion (E) or introversion (I), thinking (T) or feeling (F), sensing (S) or intuition (N), judging (J) or perceiving (P). The code is established through a score on a stanine scale. A score of between one and four reflects a preference for E, S, T and J while scores between five and six reflect borderline preferences. Scores between seven and 10 are classified as reflecting I, N, F and P preferences.

The internal consistency of the JTI was measured by means of Cronbach's alpha coefficients. In previous research (Psytech SA, 2010) it was determined that the JTI has high levels of internal consistency varying between alpha coefficient levels of 0.75 and 0.88 across a number of different samples (Psytech SA, 2010). Evidence for the discriminant validity of the JTI was obtained by observing correlations between the various subscales. A correlation of 0.27 between the S-N and T-F subscales; -0.26 between the E-I and T-F scale and 0.25 between the S-N and J-P scales were observed, which suggests that the subscales measure independent characteristics (Psytech SA, 2010). Lower inter-correlations of 0.10 were observed between the T-F and J-P scales; 0.05 between the E-I and S-N scales and -0.04 between the E-I and J-P scales.

In a recent study with the JTI, based on a sample of 2 533, the Cronbach's alpha coefficient of 0.82 which was obtained for the E-I scale was deemed satisfactory with a fair inter-item correlation of 0.25 (N. Tredoux, personal communication, April 13, 2012). The Cronbach's alpha coefficient for the S-N scale delivered a low value of 0.66 with an unsatisfactory inter-item correlation of 0.11 while the T-F scale of the JTI delivered a low Cronbach's alpha value of 0.66 with an unsatisfactory inter-item correlation of 0.12. The J-P scale of the JTI yielded a satisfactory Cronbach's alpha value of 0.78 with a relatively low inter-item correlation of 0.21 (N. Tredoux, personal communication, April 13, 2012).

b)   Sales Preference Indicator

The SPI has been used to identify suitable frontline sales and service staff in the airline industry; high, middle and low level staff in the financial industry; and sales staff in the agricultural industry (Opra Consulting Group, 2007). A considerable number of general personality measures are available in South Africa, but a measure that focuses exclusively on the sales personality types of sales staff was required for this study. The SPI was, therefore, selected for this study. In December 2010, the SPI was classified as a "test under development" (Donnelly & Tredoux, 2010; http://www.hpcsa.co.za). Its psychometric integrity is discussed below.

The SPI is based on six core elements of personality that are critical to successful sales, and which are referred to as an individual's sales personality type (Opra Consulting Group, 2007). Upon completion the candidate is allocated a SPI code indicating a preference for consistent sales (C) or adaptive sales (A) personality type; emotionally connected (EC) or emotionally objective (EO) sales personality type; outgoing (O) or quiet (Q) sales personality type; separated networks (SN) or integrated networks (IN) sales personality type; self-focused (SF) or organisational focused (OF) sales personality type. The SPI consists of 68 statements and respondents rate themselves on statements on a five-point Likert-type scale on whether they agree with an item or not (Donnelly & Tredoux, 2010). Every scale consists of 10 items, with the exception of the cooperative-competitive scale which consists of nine items. The additional test measures (social desirability, extreme response and acquiescence scale) consist of nine test items.

Donnelly and Tredoux (2010) found that the internal consistency indices of the SPI (Cronbach's alpha coefficients) ranged between 0,54 and 0,75 with a mean alpha of 0,65. Although values of 0,70 are usually desirable, the less favourable alpha values were attributed to the fact that English is not considered a first language for the broad South African population (Donnelly & Tredoux, 2010). Donnelly and Tredoux (2010) suggested that

an understanding of English at Grade 12 level is sufficient to complete the questionnaire and, thus, the researcher ensured all the participants in this current study had a minimum education level of Grade 12.

In order to establish construct validity of the SPI for practical use, Donnelly and Tredoux (2010) used various estimation techniques to validate overall model fit. A moderate degree of model fit was found (Donnelly & Tredoux, 2010). Construct validity was also established through the confirmatory factory analytic method (CFA). The Root Mean Squared Error of Approximation (RMSEA) indicated an adequate fit of 0.066. The Goodness of Fit Index (GFI) and Adjusted Goodness of Fit Index (AGFI) were used to identify how well the model was able to duplicate the sample covariance matrix. A value of 0,73 was obtained for the GFI and a value of 0,70 for the AGFI. Although the SPI is still under test development, Donnelly and Tredoux's (2010) research suggest that the SPI is suitable for further research purposes.

c)   Performance of sales staff

The participating organisation provided performance measures based on time, sales and quality measures. These measures, as presented in Table 3.3, were used to create more advanced performance measures in the study.

Table 3.3

Performance criteria for call centre sales staff

Quantitative performance criteria	Measurement
Quality	Quality was measured by an independent quality control department based on a spreadsheet containing predetermined quality control checks.
Efficiency	The efficiency of the sales staff was calculated by combining time on the telephone with customers and the actual sales generated.
Sales volume	Sales volume refers to the actual sales volume generated by a salesperson per month.
Consistency of sales	The consistency of sales refers to the identification of consistent results of sales staff over a three months period.

In view of the high turnover rate among sales staff in the participating organisation, sales performance data over a period of three months was collected in order to ensure accurate and reliable performance data. The performance data for sales staff who had gone on leave

during the three months period was not included. The performance data of the final sample pertained only to permanent sales staff members who sold the same products.

3.2.2.3 Research procedure

The Department of Industrial and Organisational Psychology at the University of South Africa provided ethical clearance to conduct the study. The study was conducted among call centre sales staff in a large insurance firm in South Africa. Written permission to conduct the study was obtained from the organisation's management and also from the participating individuals. Participation in the study was voluntary and the purpose of the study was explained beforehand to all relevant departments.

The researcher personally administered the personality measures and explained the process and procedures to the participants. All the participants provided their written informed consent to take part in the study. The issues of confidentiality and privacy were explained to the participants. The researcher was available to answer any questions that the participants may have had during the administration of the questionnaires. The participants completed both personality measures in paper and pencil format. Their responses were later captured onto the Genesys online system for automatic scoring and report writing. The participants were informed that each of them would receive two comprehensive reports as feedback and that this feedback would be treated as confidential.

It is clearly an issue of some sensitivity that the study includes the performance data of the participants. However, no information regarding personality and personal performance was made available to anyone within the organisation and the information was applied for the purposes of the study only.

3.2.2.4 Statistical analysis

The Statistical Package for the Social Sciences (SPSS version 19, 2011) and STATISTICA data analysis software system (StatSoft, version 10, 2011) were used to analyse the data statistically. According to Cohen (1988), correlations may vary from -1 to 1, and with 0 indicating that there is no linear relationship between two variables. A correlation of -1 suggests a perfect negative linear relationship while a correlation of 1 suggests a perfect positive linear relationship between variables.

It is critical to note that the statistical level of significance is influenced by sample size (Cohen, 1988). Statistical significance is set to the 5% level of significance, which yields a 95% confidence interval level. This is indicative of there being a 95% chance of a true

correlation in the population group with a 5% chance of an improbability (Cooper & Schindler, 2008; Gravetter & Wallnau, 2007). For practical purposes, *r* values larger than 0.30 (medium effect) were deemed to be sizable.

The first step in the statistical analysis was to describe the respondents according to their age, gender and ethnicity. The reliability of the scales was investigated by means of Cronbach's alpha coefficients and item-total correlations. Despite the fact that the psychometric properties of the JTI and SPI had been previously investigated and found to be reliable and valid for practical use (Donnelly & Tredoux, 2010; Opra Consulting Group, 2007; Psytech SA, 2010), low reliabilities and inter-item correlations were found in this study on both questionnaires.

The construct validity of the JTI and SPI scales was further investigated by factor analysing their structures at the item level. The results of the exploratory factor analyses using principal component analyses with varimax rotation were compared against theoretical structures. All factor analyses were conducted following tests of the overall significance of the underlying correlations of the item scores using the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's test of sphericity (Hair *et al.*, 2006). This was followed by the description of the score distributions and frequency distributions of the categorical variables. The original JTI and SPI test items were compared with the newly derived empirical test items and did not indicate significant improvement in the Cronbach's alpha values and inter-item correlations. Accordingly, the researcher decided to continue the correlational and regression analysis with the original test items of both the JTI and SPI and not the newly derived empirical test items.

The second part of the statistical analysis consisted of an investigation of the structural adequacy of the hypothesised correlations through correlations of the predictor variables with univariate and multivariate outcome variables. The Pearson product moment correlations were used to determine the direction and strength of the relationship between the variables. Correlations with the univariate criterion variables of quality, efficiency, sales and consistency of sales were investigated by means of best subset regressions. The best subset regression method assumes that there is more than a single best subset predicting the independent variable and, thus, this method was deemed appropriate for the study (Neter *et al.*, 1985) The k-mean clustering method was used to group these outcome variables further in order to create multivariate combinations of performance indicators such that the respondents who were similar were clustered together but apart from other respondents who differed from the former on these variables. This was followed by an analysis of variance (ANOVA) that was

performed in order to compare the means of the clusters, as it was expected that the clusters would differ significantly on the variables that had been used to create them. The resultant clusters were then described and compared through ANOVAs on continuous variables and Chi square analyses on categorical variables. By doing so, important combinations of sales performance measures were identified and examined for predictability.

The statistical analysis concluded with a parallel comparison between the JTI and SPI original items and the cluster means of average/poorly performing sales staff members and highly performing sales staff members. This enabled the researcher to identify whether significant differences on personality type scale and sales personality type scales exist when sales staff members are clustered according to their sales performance.

3.3 RESULTS

In the following section the descriptive statistics of the JTI and SPI are provided. As a result of the low reliabilities and inter-item correlations that were found for both questionnaires, a factor analysis was performed on both instruments. The reliabilities and inter-item correlations of the original JTI and SPI items were compared with the new empirical test items to identify whether there had been any improvement. It was found that the new empirical Cronbach's alpha values were still low and, in certain instances, even lower than in the original JTI and SPI test items. Some of the inter-item correlations had increased somewhat but, as certain of the new scales consisted of as few as two to three items per scale only, the researcher decided to continue with the original JTI and SPI items. This is followed by an outline of the descriptive statistics of both inventories and the performance criteria used in the study. Thereafter, the correlational analyses of the relationships between personality type, sales personality type and the performance of sales staff are discussed, followed by the regression analysis.

3.3.1 Descriptive statistics

In the following section the frequency of responses on the JTI is described, followed by the descriptive statistics.

3.3.1.1 *Frequency of responses on the JTI*
The frequency of responses on the JTI ($n = 146$) is presented in Figure 3.2.
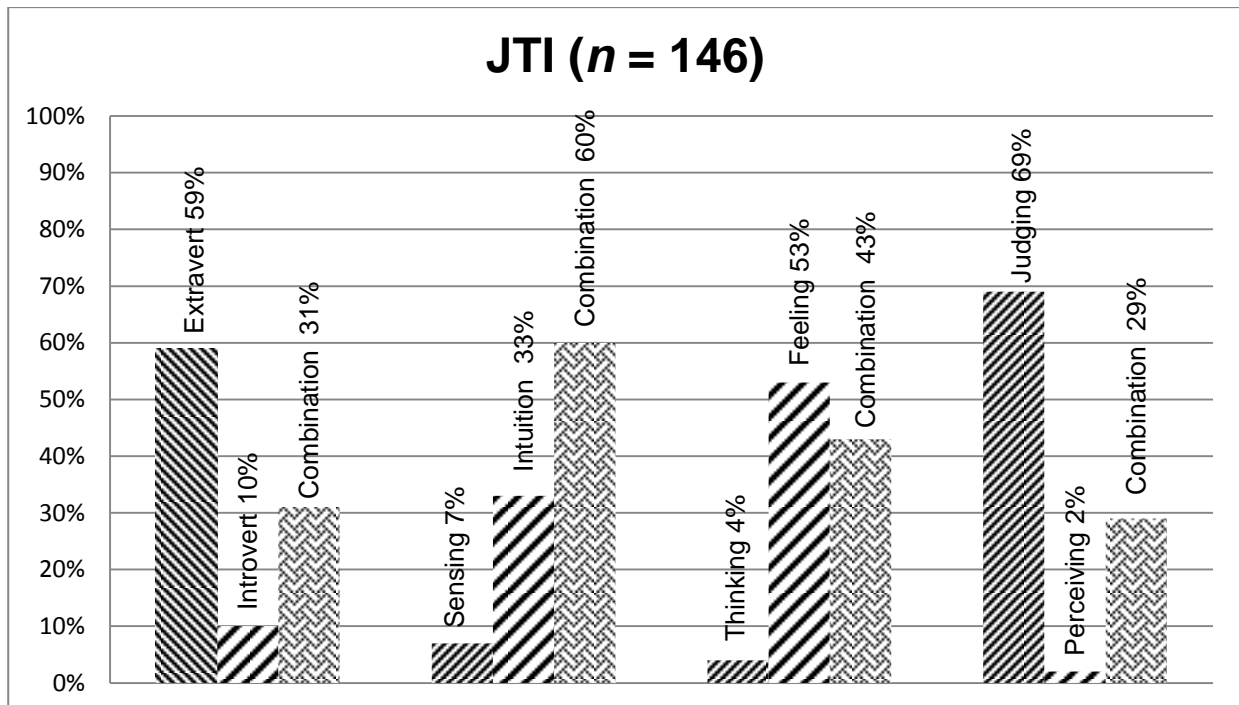
Figure 3.2 Frequency of responses of the JTI

Based on the literature review, high frequency rates were expected on the extraversion (E), intuition (N), thinking (T) and perceiving (P) scales. It is evident that there were, indeed, more extraverts (59%) and intuitive (33%) types in the sample, but also fewer thinking (4%) and perceiving (2%) types in the sample. The frequency for combined preferences is extremely high, especially on the S-N (60%) and T-F (43%) scales. The low Cronbach's alpha reliabilities and extremely low inter-item correlations that were found on the JTI under the heading 3.2.2.2 a), may explain the high frequency of combined frequencies that was found in this sample.

Table 3.4 presents the minimums, maximums, means and standard deviations. The Cronbach's alpha coefficients and inter-item correlations for the JTI are displayed and compared with the original Cronbach's alpha coefficients and inter-item correlations.

3.3.1.2 Descriptive statistics of the JTI

The minimums, maximums, means, standard deviations, Cronbach's alpha coefficients and inter-item correlations for the JTI are presented in Table 3.4. The highest mean score (out of 10) was observed on the T-F scale ($M = 6.63$; $SD = 1.29$) and this indicates that more sales staff members tended towards the feeling personality type while the lowest mean score on the J-P scale ($M = 3.78$; $SD = 1.43$) suggested that more respondents tended towards the judging personality type.

The Cronbach's alpha values reflected a fair reliability of 0.76 on the E-I scale and a low reliability of 0.69 on the J-P scale. Unsatisfactory reliabilities of 0.52 were found on the T-F scale and 0.36 on the S-N scale. A satisfactory reliability coefficient is 0.70, but it should, preferably, be higher (Cooper & Schindler, 2008). For research purposes an alpha value should be at least 0.7 (D. Ljungqvist, personal communication, September 30, 2012) and, thus, the decision was made to conduct a factor analysis with the JTI. The inter-item correlations between the items varied between 0.03 and 0.18. This is unsatisfactory as a satisfactory inter-item correlation should exceed 0.30 (Cooper & Schindler, 2008). Both the unacceptable Cronbach's alpha values and unsatisfactory inter-item correlations contributed to the decision to conduct a factor analysis with the JTI.

Table 3.4

Means, standard deviations and Cronbach's alpha coefficients for the JTI (n = 146)

JTI scales	Minimum	Maximum	Mean	Std. deviation	Cronbach's alpha coefficient	Average inter-item correlation
Extraversion – Introversion (E-I)	1	9	4.00	1.78	0.76	0.18
Sensing – Intuition (S-N)	2	9	6.03	1.12	0.36	0.03
Thinking – Feeling (T-F)	3	10	6.63	1.29	0.52	0.07
Judging – Perceiving (J-P)	1	8	3.78	1.43	0.69	0.14

Figure 3.3 presents the frequency of responses on the SPI (n = 146).
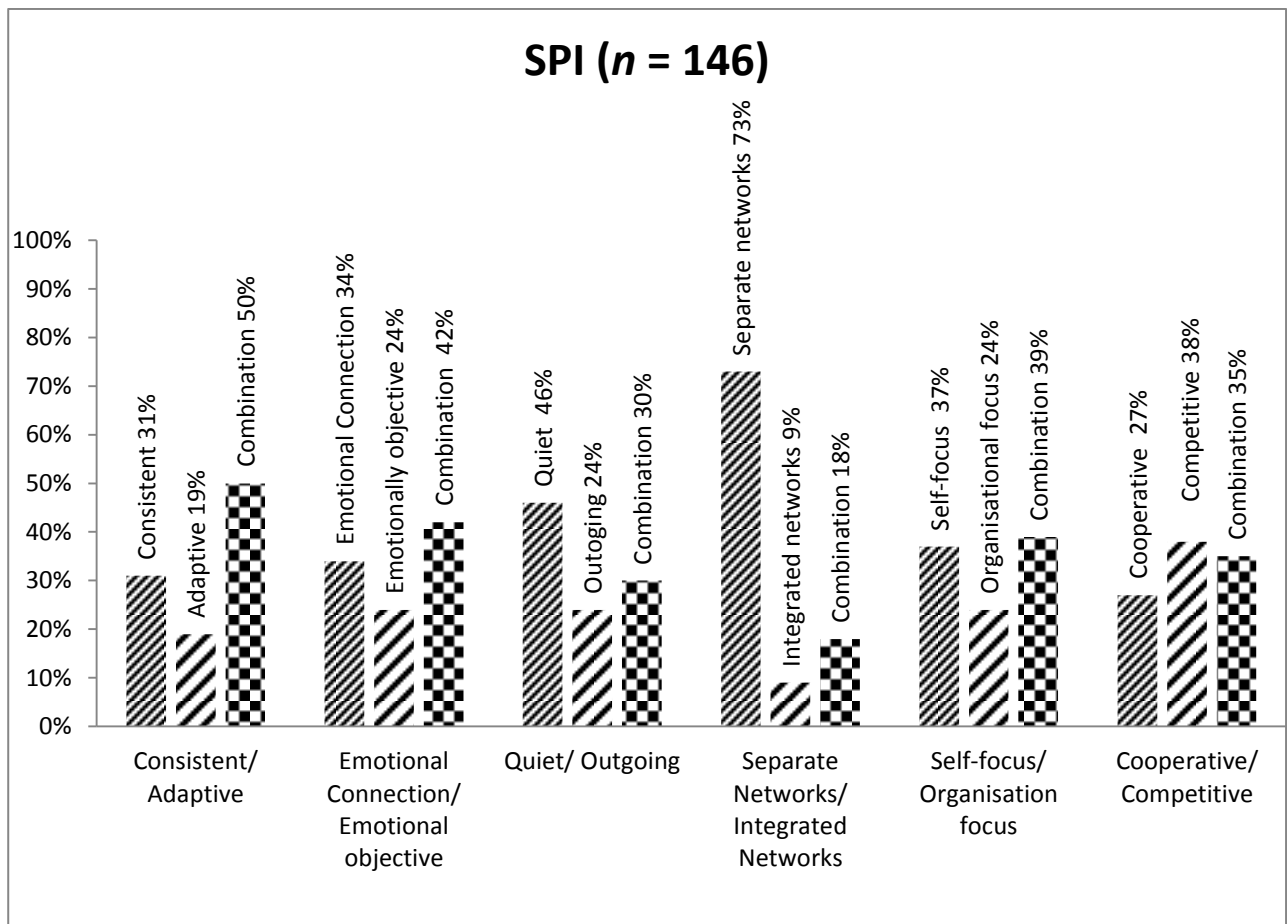
Figure 3.3 Frequency of responses on the SPI

High frequencies were expected on the adaptive scale (A), the emotionally objective scale (EO) , the outgoing scale (O), the integrated networks scale (IN), the organisational focused scale (OF) and the competitive (COM) scale but were, in fact, not found. However, there was a higher level of responses on the consistent scale (C), the emotional connected scale (EC), the quiet scale (Q), the separated networks (SN) and the self-focused scale (SF) although a lower level of responses on the cooperative (CP) and competitive (COM) scales. A combination for both preferences on each scale is indicated in the checked blocks. The low Cronbach's alpha values and low inter-item reliabilities that were found on the SPI under the heading 3.2.2.2 b), may explain the high level of combined preferences found in this sample.

Figure 3.4 illustrates the scores on the additional measures that form part of the SPI. The scores on these scales may influence the validity of the results and are, thus, briefly discussed. The first measure is the social desirability scale. A low social desirability score is

indicative of individuals who are unconcerned about social expectations and are generally true to themselves (Psytech SA, 2010) while a high score is indicative of individuals who portraying themselves in a positive light and have a strong need for social approval (Psytech SA, 2010).

The second measure is the extreme response and central tendency scale. If individuals provide extreme responses, this suggests a high level of self-awareness with definite opinions about things (Psytech SA, 2010) while a low score is indicative of the individual having relatively mild views on things and with a lower self-awareness (Psytech SA, 2010). The third measure is the disagreement and acquiescence scale. The disagreement scale provides an indication of whether the individual has a tendency to debate in general (Psytech SA, 2010) while the acquiescence scale indicates the tendency to agree and not to reflect one's true opinions.
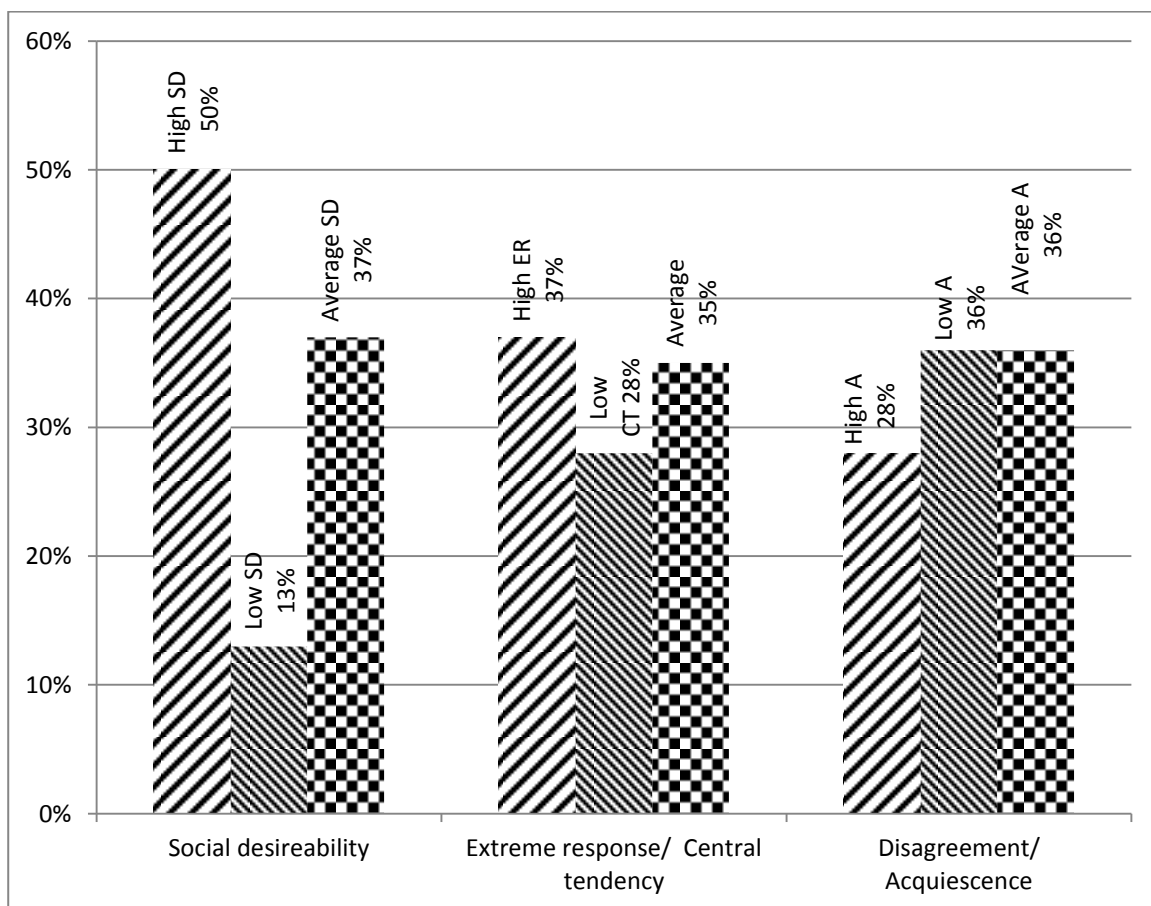

Figure 3.4 Frequency of responses on the SPI relating to social desirability, extreme responses and acquiescence

Approximately 50% of the sales agents who completed the SPI had a high social desirability score. As mentioned previously, researchers have various opinions as to whether high social

desirability scores have an impact on the reliability of the interpretation of a personality profile (Mayer & Greenberg, 2006; Smith & Ellingson, 2002; Stark *et al.*, 2001).

3.3.1.4   Descriptive statistics on the SPI

As indicated in Table 3.5 the highest mean, ranging from 1 – 10, with $M = 5.67$ and $SD = 1.98$ was observed on the CP-COM scale. This suggests that more sales agents tended toward the competitive sales personality type than to the cooperative sales personality type. The lowest mean of $M = 3.72$ and $SD = 1.74$ was found on the SN-IN scales. This, in turn, suggests that more sales agents tended towards the separated networks sales personality type than to the organisational focused sales personality type.

The Cronbach's alpha reliability values produced low reliability scores of 0.68 on the SF-OF scale; 0.65 on the low-high *SD* scale; 0.64 on the EC-EO scale and 0.61 on both the C-A and SN-IN scales. The low reliability scores of 0.39 observed on the Q-O scale and 0.47 on the CP-COM scale are unacceptable. The inter-item correlations vary between 0.06 and 0.20. This is unacceptable as a suitable inter-item correlation should reach 0.30 (Cooper & Schindler, 2008). As mentioned earlier, alpha values should be at least 0.7 for research purposes (D. Ljungqvist, personal communication, September 30, 2012). The unacceptable Cronbach's alpha values and unsatisfactory inter-item correlations together contributed to the decision to conduct a factor analysis with the SPI.

Table 3.5

Means, standard deviations and Cronbach's alpha coefficients for the SPI (n = 146)

SPI scales	Minimum	Maximum	Mean	Std. deviation	Cronbach's alpha coefficient	Average inter-item correlation
Consistent – Adaptive (C-A)	1	10	4.97	1.80	0.61	0.13
Emotionally connected – Emotionally objective (EC-EO)	1	10	5.21	1.87	0.64	0.16
Quiet – Outgoing (Q-O)	1	10	4.85	1.92	0.39	0.06
Separated networks – Integrated networks (SN-IN)	1	9	3.72	1.74	0.61	0.13
Self-focus – Organisational focus (SF-OF)	1	9	5.12	2.24	0.68	0.20
Cooperative – Competitive (CP-COM)	1	10	5.67	1.98	0.47	0.10
Low-high social desirability	1	10	4.61	2.06	0.65	0.17

3.3.2 Factor analysis of the JTI and SPI

In light of the low reliability and inter-item reliability of both the JTI and SPI questionnaires factor analyses at the item level were conducted in order to construct a new set of variables for both questionnaires. Before commencing with the factor analyses the appropriateness thereof was determined by means of the KMO and Bartlett's Test of Sphericity. The data matrix requires sufficient correlations to justify conducting the factor analysis. According to Hair *et al.* (2006), KMO values of 0.50 are unacceptable, 0.60 is middling, 0.70 is ordinary and 0.80 is meritorious. Bartlett's test of sphericity was statistically significant at (p <0.05) which suggests that there were sufficient correlations among the variables and that the factor analysis could be conducted (Hair *et al.*, 2006).

Factor analysis, using the principal component extraction method, was deemed suitable for this study. This method is appropriate when the primary concern is the reduction of data emphasising the minimum numbers of factors responsible for the maximum portion of the total variance in the data set (Hair *et al.*, 2006). This method is also applicable when prior knowledge suggests that a small proportion of the total variance only is due to specific and error variance (Hair *et al.*, 2006). The purpose of undertaking a factor analysis is to extract factors that will still represent a significant portion of the total variance across the variables (Hair *et al.*, 2006). The first principal component is made up of the best combination of variables and is termed the first factor (Cooper & Schindler, 2008) while the second principle component which is defined as the best linear combination of variables not explained by the first factor is known as the second factor (Cooper & Schindler, 2008). More factors are generated in this manner and may be termed the third factor, fourth factor, etc. Loadings exceeding + 0.70 were considered appropriate and indicative of a well-defined structure (Hair *et al.*, 2006) and were used in this study. The following criteria were used to determine how many factors should be retained (Hair *et al.*, 2006):

- Factors with eigenvalues greater than 1.0
- Factors that had been predetermined through previous research or research objectives
- Sufficient factors that would explain at least 60% or higher of the variance
- Factors that have sufficient amounts of common variance
- More factors if the subgroups are heterogeneous

3.3.2.1 Factor analysis of the JTI

By excluding items with the lowest communalities, the researcher reduced the number of items to 41. The KMO value was 0.643 based on this reduced set of items. Bartlett's Test of

Sphericity was still statistically significant at p = 0.000 (see Table 3.6), suggesting a more suitable correlation structure to commence factor analysing using the principal component extraction method on the JTI.

Table 3.6

KMO and Bartlett's Test of Sphericity on the JTI with 41 items

KMO and Bartlett's Test (Reduced to 41 items)		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.643
Bartlett's Test of Sphericity	Approx.Chi-Square	1889.570
	Df	820
	.Sig.	0.000

The JTI test items were reduced to 41 items. The E-I scale consists of 13 items; two S-N scales were derived and termed the S-N(1) and S-N(2) scales and consist of three and five items respectively; the T-F scale consists of six items and the J-P scale consists of seven items. The reliabilities and inter-item correlations of the empirically derived values for the JTI are described in the next section and are compared with the original test items (see Table 3.7).

3.3.2.2 Descriptive statistics of the empirical factors of JTI

The factor analysis provided five new scales termed E-I, S-N(1), S-N(2), T-F and J-P, with slightly improved reliabilities and inter-item correlations. The new empirically derived scales were compared to the original JTI reliabilities and inter-item reliabilities (see Table 3.7).

The new empirically derived E-I scale consisted of 13 items with a Cronbach's alpha value of 0.82 and average inter-item correlation of 0.26 in comparison to the original Cronbach's alpha value of 0.76 and average inter-item correlation of 0.18. The next scale consisted of three items and is termed the S-N(1) scale. A higher Cronbach's alpha value of 0.63 and average inter-item correlation of 0.37 was found in comparison to the original Cronbach's alpha value of 0.36 and an inter-item correlation of 0.03. The next scale was termed the S-N(2) scale with five items. The new Cronbach's alpha value was still a low 0.50 with a 0.17 average inter-item correlation in comparison to the original low Cronbach's alpha value of (0.36) and average inter-item correlation of 0.03. The next scale was the T-F scale with six items. The Cronbach's alpha value of 0.57 was still low in comparison to the original 0.52 value. The T-F scale's inter-item correlation also produced low values of 0.19 in relation to

the original inter-item correlation of 0.07. The final seven item scale was the J-P scale. This scale revealed a slightly lower Cronbach's alpha value of 0.64 in comparison to the original Cronbach's alpha value of 0.69. The J-P scale revealed a higher average inter-item correlation of 0.37 in comparison to the original average inter-item correlation of 0.14.

In light of the results of the factor analysis of the JTI, it is evident that the Cronbach's alpha reliability values and inter-item correlations had improved somewhat, but were still unacceptable, except for the E-I scale that had produced an alpha value of 0.82. As mentioned previously, a satisfactory reliability coefficient should exceed 0.70 and a satisfactory inter-item correlation should exceed 0.30 (Cooper & Schindler, 2008). It was, therefore, decided that the original JTI test items would be used to conduct the correlational and regression analyses. The purpose of the factor analysis is to preserve the construct validity of the psychological constructs that are measured (Nunnally, 1978). Another motivation for utilising the original JTI test items instead of the newly derived empirical test items is the specification of too few items per scale. According to Zwick and Velicer (1986), loading too few factors may result in the loss of important information or the inaccurate combination with other factors. The true factor structure of the original test may, therefore, be distorted and result in complex and interpretable information (Fabrigar, Wegener, MacCallum & Strahan, 1999). The items loaded per scale are depicted in Table 3.7.
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Table 3.7

Summary of the factor analysis and descriptive statistics of the empirically derived JTI test items in comparison with the original test items

Empirical scales	Number of items	Minimum	Maximum	Mean	Std deviation	Empirical Cronbach's alpha	Original Cronbach alpha	Empirical inter-item correlation	Original inter-item correlation
E-I	13	27.53	28.86	30.70	8.73	0.82	0.76	0.26	0.18
S-N(1)	3	4.90	5.81	7.79	2.87	0.63	0.36	0.37	0.03
S-N(2)	5	11.55	12.47	15.18	3.57	0.50	0.36	0.17	0.03
T-F	6	10.90	12.10	14.08	3.94	0.57	0.52	0.19	0.07
J-P	7	13.90	14.70	16.64	5.08	0.64	0.69	0.37	0.14

3.3.2.3 Factor analysis of the SPI

The KMO and Bartlett's Test of Sphericity on the SPI are presented in Table 3.8. The items were reduced to 34 items with a KMO of 0.555 at a statistically significance level of $p = 0.000$. It was, thus, deemed appropriate to continue with the factor analysis using the principal component extraction method for the SPI.

Table 3.8

KMO and Bartlett's Test of Sphericity on the SPI with 34 items

KMO and Bartlett's Test (Reduced to 34 items)		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.555
Bartlett's Test of Sphericity	Approx. Chi-Square	1295.604
	Df	496
	Sig.	.000

The SPI test items were reduced to 34 items. The C-A scale consisted of four items; the EC-EO(1) scale consisted of two items; the EC-EO(2) scale consisted of three items; the SN-IN scale consisted of three items and the SF-OF scale consisted of five items. The reliabilities and inter-item correlations of the empirically derived values for the SPI are described in the next section and are compared with the original SPI items in Table 3.9.

3.3.2.4 Descriptive statistics of the SPI

The factor analysis revealed five new scales. These are presented in Table 3.9 with the new empirical Cronbach's alpha reliabilities and inter-item correlations as compared with the original reliability values and inter-item correlations. The first scale is the C-A scale with four items. The Cronbach's alpha reliability is somewhat lower at 0.55 than the original reliability of 0.61. The average inter-item correlation, however, has increased from 0.13 to 0.24 and is satisfactory. The next scale is termed the EC-EO(1) and it has two items. The Cronbach's alpha value is much higher (0.85 in comparison to the original 0.64). The average inter-item correlation of the EC-EO(1) scale has increased from 0.16 to 0.74. This is unacceptable as the average inter-item correlation should, ideally, be around 0.30.

The next scale is termed the EC-EO(2) scale and has three items. The Cronbach's alpha value is slightly lower at 0.54 in comparison to the original value of 0.64. The average inter-item correlation of the EC-EO increased from 0.16 to 0.28, which is satisfactory. The next scale is the SN-IN scale with three items. The new Cronbach's alpha value of 0.62 is similar

to the original value of 0.61 and this is unsatisfactory. The new average inter-item correlation of 0.36 is satisfactory as compared to the original 0.13 value which was unsatisfactory. The last scale is termed the SF-OF scale and has five items. The Cronbach's alpha value is slightly lower at 0.66 in comparison to the original 0.68 but is still unacceptable. The average inter-item correlation for the SF-OF scale has increased from 0.20 to 0.28 and is, thus, satisfactory.

To summarise, the results from the factor analysis on the empirically derived SPI test items suggest that the Cronbach's alpha reliability values are, in fact, lower than the original SPI test items. The only exception is the EC-EO(1) scale that produced a higher Cronbach's alpha value of 0.85 in comparison to the original Cronbach's alpha value of 0.64. Although the inter-item correlations are higher than the original inter-item correlations, the researcher decided to conduct the correlational and regression analyses using the original SPI test items. As mentioned previously, the purpose of the factor analysis is to preserve the construct validity of the assessment (Nunnally, 1978). If too few factors are loaded on each scale, as in the case of the SPI, the true factor structure may be obscured and critical information may be lost (Fabrigar *et al.*, 1999; Zwick & Velicer, 1986). The factors loaded on each SPI scale are depicted in Table 3.9.

Table 3.9

Summary of the factor analysis and descriptive statistics on the empirically derived SPI test items as compared to the original test items

New scales	Number of items	Minimum	Maximum	Mean	Std dev.	Empirical Cronbach's alpha	Original Cronbach's alpha	Empirical inter-item correlation	Original inter-item correlation
C-A	4	6.47	7.45	9.13	3.18	0.55	0.61	0.24	0.13
EC-EO (1)	2	3.45	3.49	6.93	2.44	0.85	0.64	0.74	0.16
EC-EO (2)	3	5.32	5.70	8.30	2.59	0.54	0.64	0.28	0.16
SN-IN	3	6.68	7.13	10.39	2.99	0.62	0.61	0.36	0.13
SF-OF	5	5.94	6.47	7.74	2.87	0.66	0.68	0.28	0.20

3.3.2.5 Descriptive statistics for performance data

The descriptive statistics for the univariate and multivariate performance outcomes will now be described.

a)   Univariate outcome variables

The univariate performance data for the study is presented in Table 3.10. The descriptive statistics for the performance variables, namely, time, sales and quality are provided. As previously explained, exploring performance data by means of ratios created by combining time and sales to determine efficiency, and examining the consistency of sales over time tends to provide more accurate data than if the measures of time, sales and quality were examined separately.

The mean number of hours that call centre sales agents spent on the phone with customers were similar across the three months and measured M = 241.92, M = 239.51 and M = 235.78 hours respectively with standard deviations of SD = 54.12, SD = 63.71 and SD = 57.93 hours respectively. The means for the sales generated for the three months in question were M = 123.93, M = 135.23 and M = 131.56 respectively, with respective standard deviations of SD = 59.70, SD = 60.02 and SD = 63.12. Quality is calculated using quantitative measures and the individual was assigned a percentage on this measure. The means for quality over the period of three months were M = 84.57%, M = 85.85% and M = 84.62% respectively, with standard deviations of SD = 17.41%, SD = 17.23% and SD = 17.55%. It is evident that the distribution of scores on quality is skew as most of the ratings which the call centre sales agents received were high.

Table 3.10

Performance data descriptive statistics

		Valid N	Mean	Confidence - -95.000%	Confidence - 95.000%	Median	Minimum	Maximum	Std.Dev.	Skewness	Kurtosis
Three months	Time 1	109	241.92	231.64	252.19	241.00	61.00	336.00	54.12	-0.40	0.16
	Time 2	112	239.51	227.58	251.44	241.00	83.00	385.00	63.71	-0.26	-0.49
	Time 3	114	235.78	225.03	246.53	242.00	69.00	395.00	57.93	-0.43	0.81
Three months	Sales 1	111	123.93	112.70	135.16	122.00	23.00	304.00	59.70	0.32	-0.43
	Sales 2	114	135.23	124.09	146.37	147.00	20.00	236.00	60.02	-0.26	-1.13
	Sales 3	114	131.56	119.85	143.27	137.00	12.00	254.00	63.12	-0.11	-0.99
Three months	Quality 1	109	84.57	81.26	87.88	90.00	20.00	100.00	17.41	-2.22	4.53
	Quality 2	112	5.85	82.62	89.07	92.00	25.00	100.00	17.23	-2.10	3.70
	Quality 3	112	84.62	81.33	87.90	90.00	25.00	100.00	17.55	-2.04	3.32
Three months	Efficiency 1	109	51.83	47.18	56.48	50.85	9.43	120.48	24.50	0.53	-0.06
	Efficiency 2	112	57.56	52.68	62.44	60.17	8.47	128.24	26.05	0.46	0.11
	Efficiency 3	114	55.93	51.08	60.77	56.19	6.25	148.81	26.10	0.61	0.90
Three months	Quality & efficiency	109	44.74	40.20	49.29	41.83	0.00	108.43	23.95	0.28	-0.33
	Quality & efficiency	112	90.01	77.67	102.34	80.08	2.20	283.76	65.88	0.70	0.10
	Quality & efficiency	114	48.16	43.34	52.98	50.11	0.00	147.32	25.98	0.50	1.02
Three months	Consistency of time	110	79.03	75.97	82.10	82.87	21.33	99.20	16.24	-1.34	1.44
	Consistency of sales	114	68.39	64.81	71.98	71.98	23.03	98.51	19.30	-0.52	-0.54
	Consistency of quality	91	86.82	84.37	89.28	89.90	50.51	98.99	11.79	-1.14	0.96
	Consistency of efficiency	112	64.42	60.61	68.23	67.33	19.50	96.59	20.35	-0.36	-0.86
	Consistency of quality and efficiency	112	43.49	39.98	47.01	41.59	0.00	89.81	18.76	0.29	-0.30

a)   *Multivariate outcome variables (Cluster analyses)*

According to Zallocco *et al.* (2009), the efficiency of a sales organisation is dependent on various performance criteria such as sales units sold and revenue generated, although customer contact and the delivery of quality service through relationship building are also essential. Thus, the performance data in this study was used to form clusters of sales staff with similar performances based not only on univariate measures of performance, but also on ratios and combinations of measures in order to identify the best performing subgroups.

The means of the performance criteria, namely, quality, efficiency, sales and the consistency of sales were used to form clusters. In view of the fact that the scales of the clustering variables were different, the variables were first standardised by subtracting the scale mean and then dividing by the scale standard deviation for the respondents' scores. The means of the standardised scores were, therefore, expected to be zero, with relatively high scores reflecting positive values and low scores indicating negative values.

The k-means cluster analysis yielded three clusters consisting of 60, 43 and 9 respondents respectively. Based on the standardised means plotted in Figure 3.5 and tabulated (Table 3.9), the clusters were termed higher performers ($n = 60$), average performers ($n = 43$) and poorer performers ($n = 9$). In Figure 3.5, based on the mean quality, efficiency, sales and sales consistency, the higher performers ($n = 60$) are indicated with a dotted line, the average performers ($n = 43$) are indicated with a dash and poorer performers ($n = 9$) are indicated a solid line.

Plot of standardised means for each cluster

	Mean quality	Mean efficiency	Mean sales	Mean consistency
┈■┈ Higher performers	0.28	0.71	0.88	0.4
─✳─ Average performers	0.29	-0.69	-0.53	-0.44
─●─ Poorer performers	-3.24	-1.22	-1.21	-0.55
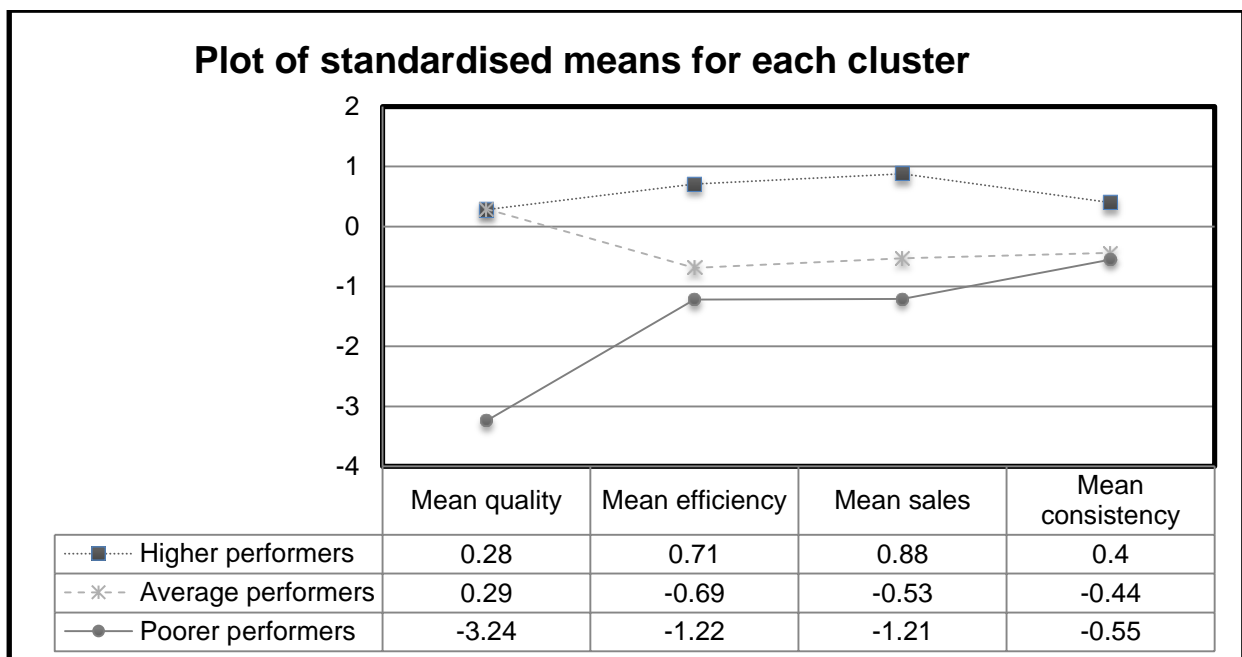
Figure 3.5 Cluster means (standardised) on quality, efficiency, sales and consistency of sales

As expected, ANOVAs revealed significant differences between the clusters ($p < 0.001$): F (2, 109) = 259.96 for quality; F (2, 109) = 76.38 for efficiency; F (2, 109) = 124.03 for sales; F (2, 109) = 12.53 for consistency of sales. These findings are presented in Table 3.11.

Table 3.11

Description of clusters on performance indicators

	Cluster 1 Poorer ($n = 9$)	Cluster 2 Average ($n = 43$)	Cluster 3 Higher ($n = 60$)	$F(2,109)$	P
Mean quality	—3.24	0.29	0.28	259.96	0.001***
Mean efficiency	—1.22	—0.69	0.71	76.38	0.001***
Mean sales	—1.21	—0.53	0.88	124.03	0.001***
Consistency Sales	—0.55	—0.44	0.40	12.53	0.001***

*** $p < 0.001$

The clusters were compared in terms of age, gender and ethnicity in order to describe their demographic characteristics. This will be discussed in the next section.

The mean ages of the clusters were $M = 28.8$, $M = 27.3$ and $M = 26.3$. Thus, the mean ages appear to be higher for the higher performing cluster although these differences were not statistically significant ($p > 0.05$). The clusters differed significantly in terms of gender (Chi-square (2) = 16.414, $p < 0.001$), with the highest performing cluster having the highest percentage of females as compared to the average and poorer performing clusters (Table 3.12).

Table 3.12

Description of gender make-up of clusters

Gender	Poorer performers ($n = 9$)	Average performers ($n = 43$)	Higher performers ($n = 60$)	Total gender representation
Male	75%	77%	53%	64%
Female	25%	23%	47%	36%
All Groups	7%	40%	53%	100%

Table 3.13 presents the ethnic distribution of the three clusters – the single white call centre sales agent is omitted. Although the majority of call centre sales agents in the sample were

black (83%), there was a significantly higher percentage of blacks in the highest performing cluster (90%) than in the other two clusters (77% and 63%) (chi-square (4) = 17.484, $p <$ 0.01). The lowest percentage of coloured call centre sales agents was found in the highest performing cluster (2%) as compared to the other two clusters (7% and 38%).

Table 3.13

Description of ethnic composition of clusters

Ethnic	Poorer performer ($n = 9$)	Average performers ($n = 43$)	Higher performers ($n = 60$)	Total ethnic representation
Black	63%	77%	90%	83%
Indian	0%	16%	8%	11%
Coloured	38%	7%	2%	6%
All Groups	7%	40%	53%	100%

To summarise, it appears that the higher performing cluster included a higher percentage of female call centre sales agents and black agents and a lower percentage of coloured call centre sales agents than in the average and poorer performing clusters.

3.3.3   Correlational statistics

The correlational statistics between the original JTI and SPI items and the univariate performance measures will now be discussed. Correlations are significant at $p < 0.05$ ($n = 146$) with practical effect size ($r \geq 0.05$ = large practical effect size; $r \geq 0.30 \leq 0.49$ = medium practical effect size and $r \leq 0.29$ = small practical effect size) (Cohen, 1988).

3.3.3.1   Correlational statistics with original JTI and SPI items and univariate performance measures

The direction and strength of the relationships were determined with the Pearson product-moment correlations with a significance value set at $p < 0.05$ (Cohen, 1992). The correlations between the original JTI items and univariate performance measures are presented in Table 3.14. The original JTI test items yielded a statistically significant relationship of small practical effect size ($r \leq 0.29$) between the E-I scale and mean sales ($r = 0.29$; $p < 0.01$) and the consistency of sales ($r = 0.27$; $p < 0.01$).

Table 3.14

Correlational statistics with original JTI items on univariate performance measures

	Scales		Mean quality	Mean efficiency	Mean sales	Consistency Sales
Original JTI items	E-I	Pearson Correlation	0.16	0.16	0.29+	0.27+
		Sig. (2-tailed)	0.087	0.089	0.002**	0.004**
	S-N	Pearson Correlation	-0.11	0.04	.04	-0.14
		Sig. (2-tailed)	0.221	0.640	0.648	0.131
	T-F	Pearson Correlation	-0.13	-0.01	0.04	0.03
		Sig. (2-tailed)	0.161	0.903	0.660	0.734
	J-P	Pearson Correlation	-0.11	-0.18	-0.14	-0.06
		Sig. (2-tailed)	0.245	0.053	0.141	0.495

** $p < 0.01$ (two-tailed) + $r \leq 0.29$ (small practical effect size)

Statistically significant weak correlations between the original SPI items and the univariate performance measures were found and are presented in Table 3.15. The C-A scale yielded statistically significant negative relationships on mean quality of medium effect size ($r = -0.30$; $p < 0.001$) and mean sales of small practical effect size ($r = -0.27$; $p < 0.01$). The SN-IN scale yielded a statistically significant negative relationship on mean quality of small practical effect size ($r = -0.26$; $p < 0.05$) while the SF-OF scale yielded statistically significant negative relationships of small practical effect size on mean efficiency ($r = -0.19$; $p < 0.05$) and mean sales ($r = -0.19$; $p < 0.05$). The CP-COM scale yielded a statistically significant positive relationship of small practical effect size ($r = 0.21$; $p < 0.05$) on mean efficiency.

Table 3.15

Correlational statistics with original SPI items on univariate performance measures

	Scales		Mean quality	Mean efficiency	Mean sales	Consistency Sales
Original SPI items	C-A	Pearson Correlation	-0.30++	-0.16	-0.27+	-0.16
		Sig. (2-tailed)	0.001***	0.094	0.003**	0.095
	EC-EO	Pearson Correlation	-0.09	-0.09	-0.11	-0.02
		Sig. (2-tailed)	0.335	0.319	0.234	0.772
	Q-O	Pearson Correlation	-0.13	-0.09	-0.15	-0.11
		Sig. (2-tailed)	0.167	0.330	0.105	0.216
	SN-IN	Pearson Correlation	-0.26+	-0.10	-0.18	-0.09
		Sig. (2-tailed)	0.006**	0.269	0.057	0.351
	SF-OF	Pearson Correlation	-0.06	-0.19+	-0.19+	-0.14
		Sig. (2-tailed)	0.503	0.038*	0.043*	0.144
	CP-COM	Pearson Correlation	0.07	0.21+	0.10	-0.00
		Sig. (2-tailed)	0.409	0.028*	0.284	0.956

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$ (two-tailed)
 + $r \leq 0.29$ (small practical effect size)++ $r \geq 0.30 \leq 0.49$ (medium practical effect size)

3.3.4 Inferential statistics: multiple regression analysis

Multiple regression analysis is a multivariate procedure that is used to predict scores on the dependent variable from a number of scores on the independent variables (Terre Blanche & Durrheim, 1999). Cohen (1992) suggests that the regression model explains small, medium and large practical effect percentages of the variance in the dependent variable ($R^2 \leq 0.12 =$ small practical effect size; $0.13 \leq R^2 \leq 0.25 =$ medium practical effect size and ($R^2 \geq 0.26 =$ large practical effect size). According to Cohen's (1992) recommendations, the sample size of ($n = 146$) is sufficiently large for three to four predictors.

The multiple regression analysis is followed by a parallel comparison of original test items and cluster means of the average/poorer performers and higher performers.

3.3.4.1 Best subset predictors for the original JTI and SPI test items

The predictability of the univariate criterion performance variables was investigated separately for each of the outcomes of quality, efficiency, sales and consistency of sales. The statistical regression method used was the best subsets regression method. Best subsets regression was carried out on each of the univariate variables with the original JTI and SPI factor predictor sets. The results of the analyses are presented for each set of predictors in turn and are depicted in Tables 3.16, 3.17, 3.18 and 3.19.

a)   Best subset predictors with JTI original test items

The maximum variance explained of the performance variables by the predictor variables is indicated by the squared multiple correlation (R^2) in Tables 3.16 and 3.17. The maximum variance explained by the original JTI factors in combination was 6.8% for mean quality, 8.5% for mean efficiency, 15.4% for mean sales and 11.5% for consistency of sales. As the explained variance is less than 10% for mean quality and efficiency, the explanation of mean sales and consistency of sales only will be considered further. For these two variables the regression weights show clearly that the extroverted-introverted score is the strongest predictor, followed by the judging-perceiving score. These two predictors in combination explain 13.6% and 9.3% of the variance in mean sales and consistency of sales respectively ($p < 0.001$). The addition of a third predictor contributes minimal (approximately 1%) additional variance.

Table 3.16

Best subset predictors for JTI original items on mean quality and mean efficiency

Mean quality							Mean efficiency						
No.	R square	No. of effects	E-I	S-N	T-F	J-P	No.	R square	No. of effects	E-I	S-N	T-F	J-P
1	0.068	4	0.17	-0.08	-0.09	-0.16	1	0.085	4	0.23	0.07	0.02	-0.24
2	0.062	3	0.18		-0.10	-0.16	2	0.085	3	0.23	0.08		-0.24
3	0.060	3	0.18	-0.09		-0.16	3	0.080	3	0.22		0.02	-0.23
4	0.051	2	0.20			-0.16	4	0.037	3		0.04	-0.02	-0.19
5	0.045	3	0.13	-0.08	-0.10		5	0.032	3	0.18	0.07	0.01	
6	0.043	3		-0.11	-0.12	-0.12	6	0.080	2	0.22			-0.23
7	0.038	2	0.15		-0.11		7	0.036	2		0.03		-0.19
8	0.036	2	0.15	-0.09			8	0.035	2			-0.02	-0.19
9	0.032	2			-0.14	-0.12	9	0.032	2	0.18	0.07		
10	0.029	2		-0.13		-0.12	10	0.028	2	0.17		0.02	
11	0.028	2		-0.10	-0.12		11	0.002	2		0.04	-0.02	
12	0.028	1	0.17				12	0.035	1				-0.19
13	0.018	1			-0.13		13	0.027	1	0.17			
14	0.015	1		-0.12			14	0.001	1		0.04		
15	0.013	1				-0.11	15	0.000	1			-0.01	

Table 3.17

Best subset predictors for JTI original items on mean sales and consistency of sales

Mean sales							Consistency of sales						
No.	R square	No. of effects	E-I	S-N	T-F	J-P	No.	R square	No. of effects	E-I	S-N	T-F	J-P
1	0.154	4	0.38	0.08	0.10	-0.22	1	0.115	4	0.30	-0.12	0.11	-0.14
2	0.148	3	0.37		0.11	-0.22	2	0.104	3	0.28	-0.11		-0.14
3	0.145	3	0.37	0.09		-0.22	3	0.101	3	0.32		0.09	-0.14
4	0.106	3	0.33	0.08	0.10		4	0.097	3	0.27	-0.12	0.10	
5	0.024	3		0.02	0.04	-0.14	5	0.033	3		-0.17	0.06	-0.07
6	0.136	2	0.35			-0.22	6	0.093	2	0.30			-0.14
7	0.100	2	0.32		0.11		7	0.086	2	0.25	-0.11		
8	0.097	2	0.32	0.09			8	0.083	2	0.29		0.09	
9	0.023	2			0.04	-0.15	9	0.030	2		-0.16		-0.08
10	0.022	2		0.03		-0.15	10	0.028	2		-0.16	0.06	
11	0.003	2		0.02	0.04		11	0.006	2			0.03	-0.07
12	0.089	1	0.30				12	0.075	1	0.27			
13	0.021	1				-0.15	13	0.024	1		-0.16		
14	0.002	1			0.05		14	0.005	1				-0.07
15	0.001	1		0.03			15	0.001	1			0.04	

a)	*Best subset predictors with SPI original test items*

The maximum variance (R^2) explained by the original SPI factors in combination was 13.5% for mean quality 14.2% for mean efficiency 14.1% for mean sales and 4.5% for consistency of sales and is presented in Tables 3.18 and 3.19. The consistent-adaptive scale was the most strongly correlated of all the scales considered in the prediction of mean quality and mean sales, and marginally lower than the cooperative-competitive scale in the prediction of mean efficiency. However, no scale alone predicted more than 9.1% of the variance. The best pair of predictors appeared to be the consistency-adaptable scale together with the cooperative-competitive scales, explaining 10%, 7.4% and 9.2% respectively. Thus, it would appear that consistent-adaptive is the best predictor both alone and in combination with others in the prediction of mean quality (12.8%) and mean sales (12.4%) whereas cooperative-competitive is the best predictor in combination with others for mean efficiency (13%). The addition of other scales into the predictor sets makes a minimal contribution.

Table 3.18

Best subset predictors for SPI empirical factors on mean quality and mean efficiency

Mean quality

No.	R square	No. of effects	C-A	EC-EO	Q-O	SN-IN	SF-OF	CP-COM
1	0.135	6	-0.26	-0.09	0.01	-0.17	0.00	0.09
2	0.135	5	-0.26	-0.09	0.01	-0.17		0.09
3	0.134	5	-0.25	-0.08		-0.17	0.00	0.09
4	0.128	5	-0.25		-0.01	-0.18	0.00	0.08
5	0.127	5	-0.26	-0.07	0.01	-0.18	0.03	
6	0.110	5	-0.29	-0.10	-0.01		-0.02	0.12
7	0.081	5		-0.06	-0.06	-0.22	-0.04	0.09
8	0.134	4	-0.25	-0.08		-0.17		0.09
9	0.128	4	-0.25		-0.01	-0.18		0.08
10	0.128	4	-0.25			-0.18	0.00	0.08
11	0.127	4	-0.25	-0.07		-0.18	0.03	
12	0.126	4	-0.25	-0.07	0.01	-0.18		
13	0.123	4	-0.25		-0.01	-0.19	0.02	
14	0.110	4	-0.30	-0.10			-0.02	0.12
15	0.110	4	-0.30	-0.10	-0.01			0.11
16	0.102	4	-0.29		-0.04		-0.03	0.10
17	0.098	4	-0.30	-0.08	-0.01		0.00	

Mean efficiency

No.	R square	No. of effects	C-A	EC-EO	Q-O	SN-IN	SF-OF	CP-COM
1	0.142	6	-0.12	-0.12	-0.01	0.02	-0.24	0.30
2	0.142	5	-0.12	-0.13		0.02	-0.24	0.30
3	0.142	5	-0.11	-0.12	-0.01		-0.24	0.30
4	0.131	5		-0.11	-0.04	-0.01	-0.26	0.30
5	0.129	5	-0.10		-0.04	0.01	-0.24	0.28
6	0.092	5	-0.16	-0.13	-0.01	-0.02		0.24
7	0.062	5	-0.11	-0.07	-0.02	-0.03	-0.16	
8	0.142	4	-0.11	-0.12			-0.24	0.30
9	0.131	4		-0.11	-0.04		-0.26	0.30
10	0.130	4		-0.12		-0.01	-0.26	0.30
11	0.129	4	-0.10		-0.04		-0.24	0.28
12	0.127	4	-0.12			0.00	-0.24	0.28
13	0.120	4			-0.07	-0.01	-0.26	0.28
14	0.092	4	-0.16	-0.13		-0.02		0.24
15	0.091	4	-0.16	-0.13	-0.01			0.24
16	0.077	4	-0.14		-0.04	-0.03		0.22
17	0.071	4		-0.12	-0.05	-0.06		0.23

Mean quality									Mean efficiency								
No.	R square	No. of effects	C-A	EC-EO	Q-O	SN-IN	SF-OF	CP-COM	No.	R square	No. of effects	C-A	EC-EO	Q-O	SN-IN	SF-OF	CP-COM
18	0.128	3	-0.25			-0.18		0.08	18	0.130	3		-0.13			-0.26	0.30
19	0.126	3	-0.25	-0.06		-0.18			19	0.127	3	-0.12				-0.24	0.28
20	0.123	3	-0.25			-0.19	0.02		20	0.120	3			-0.07		-0.26	0.28
21	0.122	3	-0.24		-0.01	-0.18			21	0.115	3				-0.03	-0.26	0.28
22	0.110	3	-0.30	-0.10				0.11	22	0.091	3	-0.16	-0.13				0.24
23	0.101	3	-0.29		-0.04			0.09	23	0.076	3	-0.15		-0.05			0.22
24	0.100	3	-0.30				-0.03	0.10	24	0.075	3	-0.16			-0.04		0.21
25	0.098	3	-0.29	-0.08	-0.01				25	0.069	3			-0.13	-0.07		0.23
26	0.098	3	-0.30	-0.08			0.00		26	0.068	3		-0.12	-0.06			0.24
27	0.092	3	-0.29		-0.04		0.00		27	0.061	3	-0.12	-0.07			-0.17	
28	0.122	2	-0.25			-0.18			28	0.115	2					-0.27	0.28
29	0.100	2	-0.30					0.09	29	0.074	2	-0.17					0.22
30	0.098	2	-0.30	-0.08					30	0.064	2		-0.14				0.24
31	0.092	2	-0.29		-0.04				31	0.055	2	-0.12				-0.18	
32	0.091	2	-0.30				0.00		32	0.055	2			-0.10			0.22
33	0.072	2			-0.07	-0.24			33	0.053	2				-0.09		0.21
34	0.071	2		-0.06		-0.25			34	0.046	2		-0.08			-0.19	
35	0.071	2				-0.25		0.06	35	0.046	2			-0.07		-0.20	
36	0.067	2				-0.25	-0.02		36	0.045	2				-0.07	-0.19	

Mean quality

No.	R square	No. of effects	C-A	EC-EO	Q-O	SN-IN	SF-OF	CP-COM
37	0.025	2			-0.13			0.09
38	0.091	1	-0.30					
39	0.067	1				-0.26		
40	0.017	1			-0.13			
41	0.008	1		-0.09				
42	0.007	1						0.08
43	0.005	1					-0.07	

Mean efficiency

No.	R square	No. of effects	C-A	EC-EO	Q-O	SN-IN	SF-OF	CP-COM
37	0.034	2	-0.16	-0.09				
38	0.046	1						0.21
39	0.041	1					-0.20	
40	0.026	1	-0.16					
41	0.010	1				-0.10		
42	0.009	1		-0.09				
43	0.008	1			-0.09			

Table 3.19

Best subset predictors for SPI original items on mean sales and consistency of sales

Mean sales									**Consistency of sales**								
No.	R square	No. of effects	C-A	EC-EO	Q-O	SN-IN	SF-OF	CP-COM	No.	R square	No. of effects	C-A	EC-EO	Q-O	SN-IN	SF-OF	CP-COM
1	0.141	6	-0.22	-0.11	-0.03	-0.04	-0.18	0.18	1	0.045	6	-0.11	0.00	-0.07	-0.01	-0.13	0.04
2	0.140	5	-0.23	-0.12		-0.04	-0.18	0.18	2	0.045	5	-0.11		-0.07	-0.01	-0.13	0.04
3	0.139	5	-0.23	-0.11	-0.03		-0.18	0.18	3	0.045	5	-0.11	0.00	-0.07		-0.13	0.04
4	0.130	5	-0.21		-0.06	-0.05	-0.18	0.16	4	0.044	5	-0.11	0.01	-0.07	-0.01	-0.12	
5	0.114	5	-0.25	-0.11	-0.03	-0.07		0.14	5	0.041	5	-0.13	-0.01		-0.01	-0.13	0.04
6	0.112	5	-0.22	-0.07	-0.03	-0.07	-0.13		6	0.035	5		0.01	-0.10	-0.03	-0.14	0.04
7	0.101	5		-0.09	-0.09	-0.09	-0.21	0.18	7	0.031	5	-0.13	0.00	-0.07	-0.03		0.01
8	0.138	4	-0.24	-0.12			-0.18	0.19	8	0.045	4	-0.11		-0.07		-0.13	0.04
9	0.128	4	-0.22		-0.07		-0.19	0.17	9	0.044	4	-0.11		-0.07	-0.01	-0.12	
10	0.127	4	-0.23			-0.06	-0.18	0.16	10	0.044	4	-0.11	0.01	-0.07		-0.12	
11	0.113	4	-0.26	-0.12		-0.07		0.14	11	0.041	4	-0.13	-0.02			-0.13	0.04
12	0.111	4	-0.23	-0.08		-0.07	-0.13		12	0.041	4	-0.13			-0.02	-0.13	0.04
13	0.109	4	-0.27	-0.12	-0.03			0.14	13	0.040	4	-0.13	-0.01		-0.02	-0.12	
14	0.108	4	-0.23	-0.08	-0.04		-0.14		14	0.035	4			-0.10	-0.03	-0.14	0.04
15	0.107	4	-0.21		-0.05	-0.07	-0.14		15	0.034	4		0.01	-0.11		-0.15	0.04
16	0.102	4	-0.24		-0.06	-0.08		0.11	16	0.034	4		0.02	-0.10	-0.03	-0.13	
17	0.096	4	-0.24	-0.09	-0.03	-0.08			17	0.031	4	-0.13		-0.07	-0.03		0.01

Mean sales

No.	R square	No. of effects	C-A	EC-EO	Q-O	SN-IN	SF-OF	CP-COM
18	0.124	3	-0.24				-0.19	0.16
19	0.108	3	-0.28	-0.13				0.14
20	0.107	3	-0.25	-0.09			-0.14	
21	0.105	3	-0.23			-0.08	-0.14	
22	0.103	3	-0.23		-0.06		-0.15	
23	0.099	3	-0.26			-0.09		0.11
24	0.097	3	-0.26		-0.07			0.12
25	0.095	3	-0.25	-0.09		-0.09		
26	0.090	3	-0.26	-0.09	-0.04			
27	0.089	3	-0.24		-0.05	-0.09		
28	0.099	2	-0.25				-0.15	
29	0.092	2	-0.28					0.12
30	0.088	2	-0.28	-0.10				
31	0.087	2	-0.25			-0.10		
32	0.082	2	-0.26		-0.07			
33	0.068	2					-0.24	0.17
34	0.060	2				-0.14	-0.18	
35	0.058	2			-0.13		-0.19	
36	0.049	2		-0.09			-0.19	

Consistency of sales

No.	R square	No. of effects	C-A	EC-EO	Q-O	SN-IN	SF-OF	CP-COM
18	0.043	3	-0.11		-0.07		-0.12	
19	0.041	3	-0.13				-0.13	0.04
20	0.040	3	-0.13			-0.02	-0.12	
21	0.039	3	-0.13	-0.01			-0.12	
22	0.034	3			-0.10		-0.15	0.04
23	0.034	3			-0.09	-0.03	-0.13	
24	0.033	3		0.02	-0.11		-0.14	
25	0.031	3	-0.13		-0.07	-0.03		
26	0.030	3	-0.14		-0.07			0.01
27	0.030	3	-0.14	0.00	-0.07			
28	0.039	2	-0.13				-0.12	
29	0.032	2			-0.10		-0.14	
30	0.030	2	-0.14		-0.07			
31	0.027	2	-0.15			-0.04		
32	0.026	2	-0.16	-0.02				
33	0.026	2	-0.16					0.01
34	0.025	2				-0.06	-0.14	
35	0.024	2					-0.16	0.04
36	0.022	2		-0.01			-0.15	

Mean sales

No.	R square	No. of effects	C-A	EC-EO	Q-O	SN-IN	SF-OF	CP-COM
37	0.043	2			-0.12	-0.15		
38	0.078	1	-0.28					
39	0.041	1					-0.20	
40	0.030	1				-0.17		
41	0.023	1		-0.15				
42	0.013	1						0.11
43	0.012	1		-0.11				

Consistency of sales

No.	R square	No. of effects	C-A	EC-EO	Q-O	SN-IN	SF-OF	CP-COM
37	0.016	2			-0.10	-0.06		
38	0.026	1	-0.16					
39	0.022	1					-0.15	
40	0.013	1			-0.12			
41	0.007	1				-0.08		
42	0.001	1	-0.02					
43	0.000	1						0.01

3.3.4.2 *Parallel comparison of original test items and cluster means of the average/poorer*
performers and higher performers

Table 3.20 indicates the extent to which there are significant differences on the personality type scales and sales personality type scales when sales staff is clustered according to sales performance. The three clusters, namely, poor performers (n = 9), average performers (n = 43) and high performers (n = 60) were rearranged to form two sample groups that were similar in size so as to permit comparison. The average and poor performers were combined to form a sample of 52 and compared with the higher performer sample of 60. A statistically significant correlation was found between the two groups on the E-I scale of the original JTI items (p < 0.01) with medium practical effect size (r = 0.49). This suggests that the two groups differ in terms of extraversion and introversion, with average/poor performers tending towards introversion and the high performers including both extraverts and introverts.

The empirical SPI items yielded a statistically significant correlation between the two groups (p < 0.02) on the SF-OF scale with medium practical effect size (r = 0.46). This suggests that the two groups differ, with the average/poorly performing group tending towards organisational focus and the higher performing group tending towards self-focus. Statistically significant differences (p < 0.001) with large practical effect size were found between the average/poorly performing group and higher performing group on all the performance measures, including mean quality (r = 0.61), mean efficiency (r = 2.31), mean sales (r = 3.07)and mean consistency of sales (r = 0.60).

Table 3.20

Comparison of empirical test items and cluster means of the average/poorer performers combined and higher performers

		Mean (Average/poorer performers) n = 52	Mean (Higher performers) n = 60	df	p	r
Original JTI items	E-I	3.70	4.53	110	0.01**	0.49++
	S-N	6.15	6.19	110	0.86	0.03
	T-F	6.55	6.63	110	0.75	0.06
	J-P	3.87	3.69	110	0.52	0.12
Original SPI items	C-A	42.19	35.16	109	0.14	0.29
	EC-EO	44.04	42.03	109	0.69	0.08
	Q-O	39.66	33.55	109	0.24	0.23
	SN-IN	24.11	16.86	109	0.10	0.32
	SF-OF	46.94	33.67	109	0.02*	0.46++
	CP-COM	44.81	50.83	109	0.27	0.21
Performance measures	Mean quality	80.08	89.46	110	0.00***	0.61+++
	Mean efficiency	38.28	70.96	110	0.00***	2.31+++
	Mean sales	83.39	174.51	110	0.00***	3.07+++
	Mean consistency	65.29	71.75	110	0.00***	0.60+++

*** $p \leq 0.001$; ** $p \leq 0.01$; * $p \leq 0.05$ (two-tailed) + $r \leq 0.29$ (small practical effect size) ++ $r \geq 0.30 \leq 0.49$ (medium practical effect size)

+++ $r \geq 0.50$ (large practical effect size)

3.3.5 Decision regarding the research hypotheses

Based on the above results the following decisions were made regarding the hypothesis (see Table 3.21). The criterion cut-off level was set at a significant confidence $p < 0.05$ (5% level) to accept the research hypothesis that there are relationships between the personality type and sales personality type of sales agents. In any instances in which the criterion cut-off level was not met, the hypothesis was rejected.

Table 3.21

Research questions and research hypothesis

Research Question	Research hypothesis	Decision
1. **What are the relationships between personality type and each of the univariate measures of sales performance?**	H01: There are no statistically significant relationships between personality type (and the dimensions of personality type as measured by the JTI) and call centre sales performance.	
	H1: There are statistically significant relationships between personality type (and the dimensions of personality type as measured by the JTI) and call centre sales performance.	Rejected (Statistically significant, but weak)
2. **What are the relationships between sales personality type and each of the univariate measures of sales performance?**	H02: There are no statistically significant relationships between sales personality type (and the dimension of sales personality type as measured by the SPI) and call centre sales performance.	
	H2: There are statistically significant correlations between sales personality type scales (the dimensions of sales personality type as measured by the SPI) and call centre sales performance.	Rejected (Statistically significant, but weak)

Research Question	Research hypothesis	Decision
3. **What is the best subset of personality scales from each of the JTI and SPI for predicting each of the univariate measures of sales performance?**	The extroverted-introverted scale is the strongest predictor followed by the judging-perceiving scale for the original JTI. These two predictors in combination explained 13.6% and 9.3% of the variance in mean sales and consistency of sales respectively. The consistent-adaptive scale of the original SPI is the best predictor both alone and in combination with others in the prediction of mean quality (12.8%) and means sales (12.4%). This is followed by the cooperative-competitive scale of the original SPI which is the best predictor in combination with others for mean efficiency (13%).	

3.4 DISCUSSION

The objective of the study was to explore whether relationships exist between the personality type and sales personality type and the performance of call centre sales staff. The JTI was administered to measure personality type amongst call centre sales staff while the SPI was administered to identify sales personality type amongst call centre sales staff. The first section of the statistical analyses commenced with the descriptive statistics. The psychometric properties of the JTI and SPI were investigated and it was found that the reliability and inter-item correlations were extremely low. Previous research using the JTI and SPI was investigated and similar low reliabilities and inter-item correlations were found. Based on these findings a factor analysis of both the JTI and SPI was conducted in order to construct new factors for both tests for the correlational analyses with higher reliabilities and inter-item correlations respectively. However, it emerged from a comparison between the original JTI and SPI items and the newly derived empirical items that the reliabilities and inter-item correlations had not improved sufficiently and were, in some instances, poorer. The correlational and regression analyses were, therefore, conducted with the original JTI and SPI items.

The descriptive statistics of the performance measures consisted of univariate and multivariate outcome variables. In order to enhance the value of the univariate performance measures in this study, the performance measures time, sales and quality were used to create ratios of performance, combine performance and explore the consistency of sales. This was followed by a discussion of the multivariate outcome variables – a technique which was used to cluster performance into categories to add an additional dimension of performance for the study. The cluster analyses yielded categories of higher ($n = 60$), average ($n = 43$) and poorer ($n = 9$) performers.

Upon examination of the three clusters, it became evident that the higher performing cluster included more females than males. Suff, Reilly and Mercer (2005) describe a typical call centre sales agent as a female in her mid-20's with no post matriculation qualification. According to Benner *et al.* (2007), approximately 57% of South African sales agents are female and they develop naturally into both team leaders and managers. The high representation of females in the higher performing cluster also corresponds with a finding of Belt, Richardson and Webster (2002) that women in a call centre sales environment are more comfortable with the principle of customer service and more adept at listening to and empathising with customers. These researchers also found that females are more tolerant with difficult clients and respond less aggressively to irate clients than do their male

counterparts. In addition, female call centre sales agents may use their femininity to calm upset clients and to persuade clients to buy more products. It may, therefore, to be expected that more females would be present in the higher performing cluster.

Upon further investigation of the three clusters it emerged that the higher performing cluster also consisted of more black sales staff than either coloureds or Indians. According to Benner *et al.* (2007), black sales agents (79%) are represented most strongly in South African call centres. In addition, approximately 84% of call centre sales staff in this country have a Grade 12 level of education, approximately 3% have a lower than Grade 12 level of education and approximately 13% have a diploma or degree. However, this trend is reversed in other countries, where a university degree is required to be employed in a call centre. The high representation of black sales agents in this study may be a result of the large numbers of candidates who are available for call centre sales agents work as a result of the low skills requirement of the position (O'Hara, 2001).

The second part of the statistical analyses provided a description of the correlational statistics. The Pearson product moment correlation was determined to establish the direction and strength of the relationships between the original JTI and SPI items and the univariate and multivariate performance measures.

The original JTI test items yielded a statistically significant relationship of small practical effect size between the E-I scale and mean sales and the consistency of sales. This finding was expected because extraversion has been positively related to sales performance (Judge, Heller & Mount, 2002). This finding is also consistent with research which suggests that extraverts may cope and perform better in occupations where interpersonal interaction is essential, such as the call centre sales environment (Langelaan, Bakker, van Doornen & Schaufeli, 2006; Michielsen, De Vries & Van Heck, 2003). Morgeson, Reider and Campion (2005) describe an extravert as displaying organisationally committed behaviours which include well-developed social skills and cooperation with team members and clients. Austin *et al.* (2008) suggest that extraverts are extremely likely to engage in deep acting instead of surface acting and this, in turn, both preserves their energy and enhances optimal coping in a stressful environment, such as the call centre sales environment. An introvert is expected to exhibit surface acting more than deep acting because they are expected to be both talkative and social (Austin *et al.*, 2008). They may lack the confidence in social situations which is required of call centre sales staff (Mehl, Gosling & Pennebaker, 2006) and they may build rapport with clients more slowly than extraverts (Opra Consulting Group, 2007). The poor correlations between the S-N, T-F and J-P scales of the JTI and call centre sales

performance suggest that the low reliability and inter-item correlations previously found on the JTI should be further investigated, because it could have negatively affected the results.

The original SPI test items yielded statistically significant negative relationships of medium practical effect size between the C-A scale on mean quality of medium effect size and mean sales of small practical effect size. This finding suggests that the consistent (C) sales personality type individuals, who are characterised by a preference for organising their daily lives in a systematic, organised and planned way (Myers, 1998), are more prevalent among call centre sales staff. There was a lower prevalence of the adaptive (A) personality preference, which indicates an inclination towards flexibility and openness to change (Myers, 1998). This finding is inconsistent with the findings of the literature review, which suggested that adaptability contributes to sales performance (Park & Holloway, 2003). Ployhart and Bliese (2006) define adaptability as the sales agents' skills, ability and temperament to modify a variety of tasks and environmental features. Paulsson, Ivergard and Hunt (2005) and Karaevli and Hall (2006) furthermore suggest that adaptability enhances and develops an individual's competencies and may, therefore, lead to higher sales performance. The finding on the C-A scale suggests that the opposite of the ideal sales personality type was indeed found, which tended towards consistent (C) selling rather than adaptive (A) selling.

The SN-IN scale of the SPI yielded a statistically significant negative relationship on mean quality of small practical effect size. This finding is inconsistent with the literature which suggests that call centre sales staff usually has a lower preference for separated networks (SN) and a higher preference for integrated networks (IN). According to the Opra Consulting Group (2007), a preference for integrated networks (IN) indicates that a sales agent is willing to use both personal and professional contacts to build client databases and to seek new opportunities. In a study of 326 sales staff members conducted in New Zealand (Sales Preference Indicator Sample Report, 2008) and a South African study with 644 sales staff and customer contact staff (Donnelly & Tredoux, 2010) it was found that sales agents with a higher preference for separated networks (SN) find it difficult to build a client basis which focuses mainly on sales. They also tend to dislike conducting sales telephonically. The South African study further found that sales agents with a high preference for integrated networks (IN) enjoy integrating their personal and professional lives and view the sales occupation as a respectable career. They may, therefore, be expected to achieve greater call centre sales performance. The findings on the SN-IN scale of the SPI suggest that the opposite of the ideal sales personality type was indeed found, which is a preference for separated networks (SN) and not integrated networks (IN) as the research suggests.

The SF-OF scale yielded statistically significant negative relationships of small practical effect size on mean efficiency and mean sales. This finding is also inconsistent with the literature which suggests that call centre sales agents have a lower preference for self-focus (SF) and a higher preference for organisational focus (OF) (Opra Consulting Group, 2007). Self-focus refers to the interest which sales agents have in their own careers, rewards and progression. Brett *et al.* (1995) found that organisationally focused sales agents tend to be committed to both their organisations and the overall organisational strategic goals. It was expected that call centre sales staff would include a higher level of sales personality types that are organisationally focused (OF) as this sales personality type has been found to be related to higher sales performance than a self-focused (SF) sales agent because sales success is determined by strategic and committed team efforts (LaForge, Avila, Schwepker & Williams, 2001). Research also suggests that a less committed and self-focused sales agent may hinder the effectiveness of teams and, therefore, adversely affect sales performance (Dixon, Gassenheimer & Feldman Barr, 2003). A self-focused sales agent tends to view others as less capable than him/herself and is intolerant of the shortcomings of others. They may, therefore, be expected to achieve lower levels of sales performance than organisationally focused sales agents. The findings on the SF-OF scale of the SPI suggest that more self-focused (SF) sales personality types were found rather than organisational focused (OF) sales personality types, which are, according to research the more suitable sales personality type for call centre sales agents.

The CP-COM scale yielded a statistically significant positive relationship of small practical effect size on mean efficiency. This was the only positive correlation on the SPI and is consistent with research in the sense that call centre sale staff usually manifest the more competitive sales personality types (Opra Consulting Group, 2007). This is also consistent with the literature that suggests that a sales organisation will be successful only if the workforce comprises competitive sales agents (West, 2001). According to Rapp, Agnihotri and Baker (2011) a sales agent's competitiveness refers to the ability to make a quick and accurate decision independently with regards to a customer's request and to determine whether the sales organisation is able to deliver. Rapp, Agnihotri and Baker (2011) argue that a sales organisation will achieve ultimate sales success only if the sales agent applies his/her competitiveness within the sales role. The finding on the CP-COM scale of the SPI suggests that the sales agents in this study are more competitive (COM) rather than cooperative (CP), which is deemed the more suitable sales personality type for call centre sales agents.

The purpose of the development of the SPI was to identify call centre sale staff sales

personality types. According to the authors of the SPI (Opra Consulting Group, 2007), the expected sales personality types include the adaptive (A), integrated networks (IN), organisational focused (OF) and competitive (COM) sales personality types. However, it emerged from the results of this study that the opposite sales personality types were found in this study, namely, consistent (C), separated networks (SN) and self-focused (SF) sales personality types with the exception of the competitive sales personality type (COM) that was, indeed, found. The correlations found between the SPI scales and call centre sales performance could be ascribed to different factors. The first factor would be the low reliabilities and inter-item correlations that were established early in the study which could have affected the results. Secondly, the call centre sales personality type profile that arose from this study does not fit the typical call centre sales agent profile, as suggested by the literature. This could be indicative of the participating organisation's call centre sales team not fitting the typical (suitable) call centre sales agent's profile.

The above correlations were investigated using the best subset predictors of original test items on the JTI and SPI on univariate performance measures. The regression weights for the JTI original items indicated that the extroverted-introverted score is the strongest predictor, followed by the judging-perceiving score. These two predictors in combination explained 13.6% and 9.3% of the variances in mean sales and consistency of sales respectively. The addition of a third predictor contributed minimal (approximately 1%) additional variance.

The regression weights on the SPI original items indicated that the consistent-adaptive scale was the most strongly correlated of all the scales considered in the prediction of mean quality and mean sales, and marginally lower than the cooperative-competitive scale in the prediction of mean efficiency. Similar to the findings on the JTI, the addition of other scales into the predictor sets made a minimal contribution.

In conclusion, it would appear that the predictor variables, namely, personality type and sales personality type, did not sufficiently predict call centre sales agents' performance in terms of mean quality, mean efficiency, mean sales and consistency of sales. Despite the fact that a factor analyses was conducted, the predictive validity of the predictor variables did not increase.

In addition, a parallel comparison of the significant differences on personality type (JTI) and sales personality type (SPI) was undertaken when sales staff is clustered according to their performance. The clusters were grouped into two categories, namely, an average/poorly

performing group ($n = 52$) and a higher performing group ($n = 60$).

The findings on the original JTI items suggested that the two groups (average/poorly versus higher performing groups) differed in terms of extraversion and introversion, with average/poor performers tending towards introversion and the high performers including both extraverts and introverts. This finding is supported in the literature, which suggests that extraverts are more suited to call centre sales environments (Judge *et al.*, 2002; Langelaan *et al*, 2006; Michielsen *et al.*, 2003; Morgeson *et al.*, 2005).

The original SPI items yielded a statistically significant correlation between the two groups respectively on the SF-OF scale with medium practical effect size. This suggests that the two groups differ, with the average/poorly performing group tending towards organisational focus and the higher performing group tending towards self-focus. This finding does not correspond to the literature suggesting that the average/poorer performers tend to be more organisationally focused (OF) and higher performers tend to be self-focused (SF) (Opra Consulting Group, 2007; Brett *et al.*, 1995; LaForge *et al.*, 2001; Dixon *et al.*, 2003).

3.4.1   Conclusions: implications for practice

The low reliabilities coefficients that were found for the personality measures in this study suggest that suitable personality assessments, with an acceptable degree of reliability and inter-item correlations, should be incorporated in the assessment of the performance of call centre sales staff. Personality measures with low reliabilities and inter-item correlations may significantly reduce the value of personality assessment and its predictive value in identifying suitable call centre sales staff.

It is evident that a thorough investigation should be conducted into the call centre sales role and the call centre sales environment to understand the way in which performance is defined and measured in such an environment. In addition, the call centre sales position and its complexity levels should be investigated in greater depth so as to define call centre sales performance properly, both in terms of quantitative and qualitative performance measures while considering the emotionally intensive labour that the position typically require. Investigations such as these should contribute to an understanding of the way in which call centre sales performance should be defined, particularly since it is clear that the call centre sales role does not correspond to traditional sales roles.

It also appears advisable to identify the underlying dimensions of job performance based on

the personality characteristics required to perform successfully on the job. If call centre sales performance is not defined in a realistic manner, this may result in the recruitment and hiring of staff members who do not have suitable personality types for the position. It was evident in this study that the call centre sales position is a position of low complexity, requiring routine and mundane labour. Large numbers of potential employees may, therefore, be readily available to fill this position. Although the call centre sale position includes a critical sales component, people with a preference for routine and mundane labour may, thus, be attracted to this position. For example, an individual with a non-selling preference such as the judging (J) personality type or the consistent (C) sales personality type, may be attracted to the position, whereas the opposite personality type, perceiving (P) or adaptive (A) sales personality type, would, indeed, be more suitable.

It was evident in the literature review that the characteristics of flexibility and adaptability are important in predicting sales performance. If was further emphasised that the main focus of a sales organisation is the generation of sales and the building of close customer relationships. Recruiting staff members with suitable sales personality types to meet these requirements is, therefore, crucial in ensuring sales success. If this is not taken into account sufficiently during the hiring process, this will result in unsuitable candidates being employed, with the accompanying costs to the people and organisation involved.

3.4.2   Limitations of the study

A core limitation of the study is the poor reliability and low inter-item correlations that were found for the JTI and SPI. This constraint may have impacted negatively on the correlations determined between the personality type, sales personality type and the performance measures. The predictive validity of the inventories may, therefore, have been reduced. The findings on the SPI also suggested that the sales personality type of the sales agents of this study did not fit the typical ideal sales agent profile of call centre sales organisations according to the literature review. Furthermore, the study did not include sufficient call centre agents from different age, gender and ethnic groups for the results to be generalisable to the diverse South African population.

3.4.3   Recommendations for future research

Concerns about the low reliability and validity of the JTI and SPI were raised a number of times throughout the study. A recommendation for future research would, therefore, be to identify reliable and valid personality measures which may be used in appointing suitable call

centre sales staff in South Africa. Thus, to achieve this, the call centre sales environment and the sales role should be explored in depth in order to identify the underlying dimensions of call centre sales performance that may be linked to the personality characteristics that are necessary to perform successfully in this role. If call centre sales performance is demarcated accurately, this will assist researchers in identifying suitable personality assessments that may be applied to predict such performance.

A further element that was highlighted in this study was the importance of appropriate emotional performance and not merely sales performance in a call centre sales environment. It was highlighted in the literature review that appropriate emotional performance is critical in a call centre and that this requirement may affect the overall performance of sales staff in a call centre sales environment. Chesbrough and Spohrer (2006) maintained that the technology based, service orientated industry of the call centre sales environment should be managed according to the human-in-the-loop services system. Performance in this environment is, therefore, dependent on sales staff and customer interaction and, thus, effective call centre sales performance management is critical for optimal service and sales delivery (Parasuraman, Berry & Zeithaml, 1985). It was evident in the literature review that people's personality and their emotional performance are related. A further investigation of this relationship may shed additional light on suitable person–environment fit in a call centre.

Finally, the sample size was too small to enable the moderating effects of the various age, gender and ethnic groups on the relationship between personality type and sales performance to be identified. It is, therefore, recommended that a sample of call centre sales agents representative of the different age, gender and ethnic groups in South Africa should be included in future research so as to enable generalisations to be made about the relationship between call centre sales agents' personality and their job performance.

The social desirability aspect of personality tests has been discussed briefly in this study. As mentioned before, the impact of high social desirability scores on personality assessment has not yet been established and various opinions exist relating to the effect which social desirability has on the personality profile of the participant. Thus, it is recommended that social desirability (impression management) be investigated further to establish the impact it has on the results of personality assessment.

3.5 CHAPTER SUMMARY

Chapter 3 reviewed the key focus and background of the study. Trends in the literature and

the theoretical relationships between personality type, sales personality type and call centre sales performance were discussed. Chapter 3 also outlined the research design, explaining the research approach, research method and the sample. The statistical analysis yielded results for the empirical study on personality type, sales personality type and call centre sales performance. The chapter concluded with a brief discussion of the conclusion drawn from the research results, the limitations of the study and recommendations for future research.

CHAPTER 4
CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

Chapter 4 discusses the outcome of the research study. The chapter concludes with a discussion of the conclusions of the study, its limitations and recommendations for future research.

4.1   CONCLUSIONS

The conclusions regarding both the literature review and empirical study will now be discussed.

4.1.1 Conclusions regarding the literature review

A detailed literature review was conducted to establish whether any theoretical relationships exist between personality type, sales personality type and the performance of sales staff. This information may was used to support the purpose of the study and the empirical findings.

4.1.1.1   The first aim: Conceptualise personality type from a theoretical perspective
Personality type was approached from the Jungian personality theory perspective, which suggests that personality is structured into the consciousness, personal unconscious and collective unconscious (Jung, 1969). Jung (1964) divided the consciousness into the ego and the persona, and describes the shadow as that part of the personal unconscious which is the personality.

The E and I personality types, as described by Jung (Briggs & Briggs-Myers, 1984), refer to the way in which individuals orient themselves to their outer or inner worlds. Individuals with an E-personality type draw their energy from their outer worlds whereas individuals with an I-type obtain their energy from their inner worlds (Eales-White, 2007). E-personality type individuals relates more easily to people and things around them while I-types relate more easily to ideas and thoughts in their own minds (Briggs & Briggs-Myers, 1984).

The S and N personality types describe the manner in which an individual perceives or gathers information (Eales-White, 2007). Briggs and Briggs-Myers (1984) describe the S-personality type as focused on what exists in the present and the message that is received through one's senses. They describe the N-personality type as imaginative and as

generating new possibilities, ideas and insights.

The T and F personality types refer to the individual's preference for making judgments or decisions about things (Eales-White, 2007). T-personality type individuals base their decisions on logic, impersonal analysis and truth (Briggs & Briggs-Myers, 1984) while the F-personality types base their decisions on values and feelings (Briggs & Briggs-Myers, 1984).

The J and P personality types indicate the way in which individuals prefer to live in the world around them (Eales-White, 2007). The J-personality type indicates a preference for having things decided, planned and organised (Briggs & Briggs-Myers, 1984). On the other hand, the P-personality type prefers flexibility and is open to change (Eales-White, 2007) and may be described as spontaneous and flexible (Briggs & Briggs-Myers, 1984).

In short, personality type was conceptualised from a theoretical perspective and explained as two basic E-I attitudes and characterised by four psychological functions, namely, T-F and S-N personality types (Jung, 1969). Briggs and Briggs-Myers (1984) added the J-P personality types to Jung's existing personality theory. Numerous studies have investigated the relationship between personality and the performance of sales staff, but the extent to which personality assessment may reliably and validly predict the performance of sales staff has been criticised. It has, however, also been suggested that counterproductive behaviours, such as absenteeism, staff turnover and tardiness, affect call centre sales performance and may be addressed through proper personality assessment (Barrick & Mount, 2005).

4.1.1.2 The second aim: Conceptualise sales personality type from a theoretical perspective.

Sales personality type was described in relation to Grandey's surface and deep acting theory (Grandey, 2000) and Côté's social interaction theory (Côté, 2005). The authentic and inauthentic display of behaviour, as a result of the demands of the work situation, is to be found at the core of these theories. In addition, these types of behaviour may be applicable to the challenging nature of the call centre sales position. A suitable sales personality profile may result in an optimal person–environment fit that may, in turn, lead to a higher sales performance.

The C and A-sales personality types refer to the manner in which sales staff members present themselves to a customer during a sales transaction (Opra Consulting Group, 2007). The C-sales personality types may constantly present themselves in a similar fashion to customers and follow a similar sales approach. This approach is often inflexible to the needs

of the customer. The A-sales personality type, however, may be described as flexible and considerate towards the needs of the customer (Opra Consulting Group, 2007). The salesperson with an A-sales personality type establishes strong relationships with customers as he/she attempts to understand what it is that his/her customers need in order to encourage sales.

The EC and EO sales personality type is described in terms of the level of emotional involvement which sales staff members experience during their interaction with customers (Opra Consulting Group, 2007). Emotional connection refers to the degree to which the interactive process affects the salesperson emotionally with this, ultimately, affecting the sales process and performance outcome. On the other hand, emotional objectivity refers to the natural preference of salespersons to detach themselves emotionally from interactions with the customer and, therefore, to focus on the transaction and not on their feelings (Opra Consulting Group, 2007).

The Q and O sales personality type may be described as the preference either to work alone or to enjoy interaction with others (Opra Consulting Group, 2007). The Q-sales personality type is similar to introversion and refers to private individuals who prefer their own company to that of others. On the other hand, the O-sales personality type is described as extravert, sociable, assertive and energetic (Barrick *et al.*, 2001).

The SN and IN sales personality type is described as the sales personality preference as regards integrating the professional and personal spheres of life (Opra Consulting Group, 2007). The SN-sales personality type is similar to introversion as the person is quieter and more reserved (Psytech SA, 2010) and does not enjoy the emotional discomfort which arises from mixing one's professional life with one's personal life (Opra Consulting Group, 2007). However, the IN-sales personality type individuals enjoy integrating their professional life with their private lives and, consequently, they build customer bases quickly (Opra Consulting Group, 2007).

The SF and OF sales personality types suggest where sales staff focus their attention as regards to seeking rewards. People with a SF sales personality type are more concerned with their own feelings and attitudes than those of the organisation (Opra Consulting Group, 2007). The focus of the SF-sales personality types is on the personal reward they may generate from a sales transaction. On the other hand, the OF-sales personality types are more committed to the goals and achievement of the organisation than their own (Opra Consulting Group, 2007). In other words, the OF-sales personality type is more concerned

with overall organisational goal achievement than personal rewards when selling.

The final sales personality types are the CP and COM sales personality types. The CP-sales personality type may be described as working well with others in a team (Ivancevich, Konopaske & Matteson, 2008). This sales personality type has been referred to as an agreeable personality attribute which is essential in sales success (Ivancevich *et al.*, 2008; Yilmaz & Hunt, 2001). On the other hand, the COM-sales personality type is described as needing to achieve and continuously improving on performance (Hurtz & Donovan, 2000).

In short, sales personality type was conceptualised from a theoretical perspective in order to identify which sales personality types would be the most suitable in the call centre sales environment so as to ensure good person–environment fit. It is evident from the literature review that the sales process has changed dramatically as a result of technological developments and that the call centre sales environment is a challenging environment in which to work (Deery *et al.*, 2002; Russell, 2009). The call centre sales environment is characterised by its extreme target driven sales objectives and the pressure to deliver high quality customer service (Russell, 2009). Consequently, call centre sales staff function under immense pressure which causes high levels of counterproductive behaviours and poor performance. It is clear that poor person–environment fit may lead to role-conflict and, thus, to poor performance (Hülsheger & Schewe, 2011).

4.1.1.3 The third aim: Conceptualise the performance of sales staff in a call centre environment from a theoretical perspective.

As mentioned previously, the Tayloristic approach to call centres is described as being mechanistic, routinised and rigid (Taylor & Bain, 2001), predictable, repetitive and monotonous (Russell, 2009). The performance criteria of the call centre sales role tend to be defined according to low level, quantitative or "hard" performance criteria, including recorded time on the telephone with customers, sales volumes generated and the quality of the sales process according to a predetermined checklist. However, the attempt to balance "hard" performance with high service quality results in emotionally intensive labour amongst call centre sales staff (Aksin *et al.*, 2007; Wallace *et al.*, 2000). In this study, quantitative performance criteria were used to cluster performance criteria according to quality, efficiency, sales and the consistency of sales over a three month period.

To summarise, the researcher concluded that call centre sales performance may be defined in terms of the time on the telephone with customers, sales volumes, the quality of the sales process, efficiency, the consistency of sales and the emotional performance of sales staff as

regards to ensuring high quality and high quantity sales delivery.

4.1.1.4 The fourth aim: Conceptualise the theoretical relationship between personality type, sales personality type and the performance of sales staff.

It may be concluded that various theoretical relationships exist between the personality type and sales performance and sales personality type and sales performance, as presented in Tables 4.1 and 4.2.

Table 4.1

Theoretical description of personality type and the relationship with performance

Description of personality type and relationship with performance
Extraversion and introversion: The E-type personality is described as objective, externally orientated and energised by the external world. This extraverted, outgoing personality type enjoys working with other people and it may, therefore, be predicted that this personality type may enjoy negotiating and influencing others, as is required in sales roles (Barrick & Mount, 2005). Extraversion and sociability have been linked to sales performance (Rollins, 1990; Yilmaz & Hunt, 2001). Extraversion is synonymous with high affectivity or emotional stability and research indicates that this type of person engages less in surface acting which, in turn, results in more authentic behaviour and may elicit more positive responses from customers (Brotheridge & Lee, 2003; Côté, 2005; Gosserand & Diefendorff, 2005). The introvert's energy is derived from his/her inner world and is subjectively orientated (Psytech SA, 2010). The I-type combined with the F type of the JTI is sensitive and thoughtful and often displays genuine empathy towards others (Psytech SA, 2010). However, the I-personality type may feel emotional discomfort when they experience rejection or conflict from customers and this may, in turn, result in a poorer sales performance (Opra Consulting Group, 2007). Based on the above, it is expected that the E-personality type would be more likely to be related to effective call centre sales performance as compared to the I-personality type.

Description of personality type and relationship with performance
Sensing and intuition: The S-personality type is focused on what is concrete, present and visible. This personality type has a preference for taking in the hard facts of a given situation. On the other hand, the N-type is mediated by the conscious that involves an intrinsic type of knowledge, beyond what is visible. Openness to experience is also referred to as the "intellect" or "imagination" and describes intelligent, curious and adaptable behaviour (Ivancevich *et al.*, 2008). The N-type appears to be related to openness to experience which, in turn, has been positively linked to sales performance. It has been found that the N-type is more prevalent in sales occupations and more strongly related to effective sales performance than the S-personality type (Personnel today, 2007). In conclusion, it may be expected that call centre sales agents characterised by the S-personality type would achieve less sales success as compared to the N-personality type.
Thinking and feeling: The T-type is described as a person who has a logical and analytical approach towards understanding things in the world. The T-type combined with the E-type would result in an empathic, genuine interpersonal relationship with customers. Both empathy and extraversion have been related to effective sales performance (Barrick & Mount, 2005; McBane, 1995; Rollins, 1990; Yilmaz & Hunt, 2001). The F-type personality preference is described as evaluating situations and occurrences in terms of the feelings they evoke within the individual, either pleasant or unpleasant. This personality type bases decisions on values and the impact the decision will have on people. The F-personality type is described as being sympathetic, guided by personal values, tender-hearted and compassionate (Briggs & Briggs-Myers, 1984). Similar to the I-personality type, the F-personality type may experience feelings of discomfort when customers reject their sales offer and this, in turn, may lead to a poorer sales performance (Opra Consulting Group, 2007). In conclusion, it may be expected that the T-personality type is more likely to be related to effective call centre sales performance than the F-personality type.

Description of personality type and relationship with performance
Judging and perceiving: The J-personality type is organised, scheduled and works in a systematic fashion. These individuals like things to be planned and they prefer avoiding last minute pressures (Briggs & Briggs-Myers, 1984). The J-type correlates highly with conscientiousness, which is associated with reliability and thoroughness (McCrae & John, 1992; Psytech SA, 2010). The J-type and conscientiousness refer to the individual's ability to organise, the order such an individual bring to bear on everyday activities, the willingness to adhere to rules and the effort exerted to complete tasks (Barrick & Mount, 2005; Psytech SA, 2010). Conscientiousness has been found to be positively related to overall job performance (Barrick & Mount, 2005). The P-personality type is described as flexible, adaptable and open to change. These individuals enjoy it if things to be undecided and they enjoy last minute pressures (Briggs & Briggs-Myers, 1984). Such flexibility and adaptability may refer to the diverse ways in which the salesperson presents him/herself, depending on the needs of the customer. The ability to adapt to a customer's need is linked to positive sales performance (Weitz, 1978; Yilmaz & Hunt, 2001). Weitz, Sujan and Sujan (1986, p. 175) describes adaptive selling as "the altering of sales behaviours during a customer interaction or across customer interactions based on perceived information about the nature of the selling situation". Weitz (1978) suggests that salespeople should continuously modify their behaviour during the sales process. During interaction with the customer, a strategic objective is selected to achieve the desired sales result and a message is formulated and delivered to the customer. If the sales objective is not reached, the strategy is reassessed and the previous sales stages are adjusted and improved until the objective has been realised (Weitz, 1978). In conclusion the J-personality type is less likely to be related to positive call centre sales performance than the P-personality type. Based on the above, it is expected that the E, N, T and P personality types are more likely to be found in the call centre sales environment and that they would produce a higher sales performance.

Table 4.2

Theoretical description of sales personality type and the relationship with performance

Description of sales personality type and the relationship with performance
Consistent and adaptive: The C-sales personality type refers to the constant and repetitive manner in which sales staff members present themselves to the customer (Opra Consulting Group, 2007). This personality type is not very empathic and tends to be more self-focused which, in turn, results in miscommunication with the customer and may result in poorer sales performance (Opra Consulting Group, 2007). The A-sales personality type usually adjusts to the needs of customers (Opra Consulting Group, 2007). In view of the fact that they are tactful and considerate they tend to establish good rapport with customers and, therefore, to address the needs of the customer (Opra Consulting Group, 2007). If sales staff members make adjustments during the various sales encounters and apply different selling techniques, they are exhibiting a high level of adaptive selling (Spiro & Weitz, 1990). The A-sales personality type is also positively related to assertiveness, gregariousness and affiliation (Opra Consulting Group, 2007) while adaptive selling further is positively related to gregariousness, affiliation (Opra Consulting Group, 2007) and sociability which, in turn, are positively related to sales performance (Rollins, 1990; Yilmaz & Hunt, 2001). It may, therefore, be expected that the A-sales personality type would be likely to achieve a higher sales success in a call centre sales environment than the C-sales personality type.

Description of sales personality type and the relationship with performance
Emotional connection and emotional objective: The EC-sales personality type refers to the effort involved when a salesperson is objective as regards to the interaction which takes place during a sales transaction. Emotional connectivity indicates the degree of emotional involvement of the salesperson in the sales process that may either help or hinder the actual sales that are made. Emotional connectivity refers to the ability of sales staff members to detach them from either the positive or negative emotion demonstrated by the customer (Opra Consulting Group, 2007). McBane (1995) suggests that emotional displays by customers affect the performance of sales staff negatively. Costa and McCrae (1992) describe individuals who are neurotic as highly emotional and prone to feelings that are upsetting. According to Zapf and Holz (2006), individuals who are more neurotic tend to surface act more which often results in strain and resentment. This may lead to lower sales performance, as the behaviour is inauthentic and may elicit negative responses in the customer (Côté, 2005). The EO-sales personality type is described as emotionally stable, resilient and optimistic (Opra Consulting Group, 2007). An important contribution to the existing framework of personality predicting sales performance is the identification of emotional stability, defined as the capability to allocate resources to completing a task (Barrick & Mount, 2005). Emotional stability or objectivity may assist sales staff both to cope with predetermined sales targets and to deal with continuous rejection during the sales process. Barrick and Mount (2005) also describe emotional stability as promoting the ability to get along with other employees and deal with difficult customers. Emotional objectivity is critical in the organisational context as the appropriate expression and suppression of emotions are an integral part of most job functions. Emotional objectivity is also believed to correlate highly with the realisation of performance goals (Holman, Martínez-Iñigo & Totterdell, 2008). McBane (1995) maintains that an EO-sales personality type has the ability to empathise with potential customers, overcome resistance and understand the needs of customers. Research suggests that empathising with a customer by understanding how the buyer perceives the situation should result in a higher sales performance (McBane, 1995).

Costa and McCrae (1992) describe individuals who are low on neuroticism as emotionally stable, even-tempered and with the ability to manage stressful situations effectively. It has been found that individuals low on neuroticism engage less frequently in surface acting (Brotheridge & Lee, 2003; Gosserand & Diefendorff, 2005). If negative responses by customers decrease because sales staff behaviour is more authentic, the employee concerned will experience less strain and resentment, leading, in turn, to a better sales performance (Côté, 2005).

The researcher concluded that the EO-sales personality type is more likely to produce a higher call centre sales performance than the EC-sales personality type.

Quiet and outgoing:

The Q-sales personality type refers to a reserved individual who usually prefers his/her own company to that of others. These individuals may take more time getting to know other people and building connections. The quiet individual appears not to be adept at generating new business, which often results in a poorer sales performance, although such a person does usually manage existing sales accounts efficiently (Opra Consulting Group, 2007).

The O-sales personality type is flexible and sociable (Opra Consulting Group, 2007). These individuals usually enjoy spending time with people and they build relationships quickly. The O-sales personality type is similar to the extravert and displays social behaviour which is positively related to sales performance (Barrick & Mount, 2005; Rollins, 1990; Yilmaz & Hunt, 2001).

The researcher concluded that the O-sales personality type should show a higher level of call centre sales performance than the Q-sales personality type.

Description of sales personality type and the relationship with performance
Separate networks and integrated networks: An individual who manifests the SN-sales personality type usually keeps personal and professional affiliations separate. This sales personality type takes longer to build a stable customer base as these individuals do not integrate business with pleasure. The SN-sales personality type may be related to the introverted personality type as measured by the JTI. The latter introverted personality type is recognised as being quiet and reserved (Psytech SA, 2010). The SN-sales personality type is characterised by the tendency to avoid negative responses from prospective customers as these negative responses may result in emotional discomfort, especially if these prospective customers are either close family or friends (Opra Consulting Group, 2007). People with the IN-sales personality type view their personal and professional lives as an integrated whole. The IN-sales personality type may be associated with extraversion and friendliness as is characterised by social and convivial behaviour. Extraversion has been positively related to sales performance (Barrick & Mount, 2005), as well as to high affectivity and emotional stability (Psytech SA, 2010). Rejection by customers should, therefore, probably not cause as much emotional discomfort as in the case of the other sales personality types (Psytech SA, 2010). In light of the above, it may be expected that the IN-sales personality type would produce a higher call centre sales performance than the SN-sales personality type.

Description of sales personality type and the relationship with performance

Self-focus and organisational focus:

The SF-sales personality type is more concerned about individual rewards than with what is better for the team (Psytech SA, 2010). The SF-sales personality type individuals base their behaviour on their own feelings and attitudes while basing their decision on their own values (Opra Consulting Group, 2007). The SF-sales personality type enjoys autonomy and freedom and is described as self-reliant and independent. Their performance, however, is less related to sales performance than that of the organisationally focused sales personality type (Opra Consulting Group, 2007).

The OF-sales personality type is described as supportive and appreciative of organisational values. Being organisationally focused may be defined in terms of organisational commitment, which refers to the emotional attachment which sales staff members have with the organisation (Brett *et al.*, 1995; Opra Consulting Group, 2007). This, in turn, is defined as the acceptance of organisational goals and values (Brett *et al.*, 1995). Organisational display rules, which require emotional regulation on the part of sales staff during customer interactions (Deery *et al.*, 2002; Zapf, 2002), are characteristic of the values of a call centre sales organisation. The more authentic the behaviour of sales staff in regulating their emotions during their interactions with customers, the more positive the interaction will be and the higher sales outcomes may be (Côté, 2005). The OF-sales personality type exerts more effort and commitment in adhering to organisational display rules (Opra Consulting Group, 2007). Organisational commitment has been positively linked to sales performance (Singh, 1998).

Organisational focus is also characterised by commitment, teamwork, assertiveness, persuasion and affection (Opra Consulting Group, 2007). The characteristics of persuasion and high affection have been used to describe extraversion and have been linked with emotional stability (Opra Consulting Group, 2007; Psytech SA, 2010). All of the above characteristics have been found to relate to positive responses from customers and, therefore, higher sales performance on the part of sales staff may be expected (Brotheridge & Lee, 2003; Côté, 2005; Gosserand & Diefendorff, 2005).

According to Ivancevich *et al.* (2008), high scores on extroversion, emotional stability or neuroticism, agreeableness, conscientiousness and openness to experience will result in high scores on job involvement and quality customer service. Both organisational commitment (Brett *et al.*, 1995; Singh, 1998) and job involvement (Chughtai, 2008) tend to be positively related to sales performance and to job performance in general.

Based on the above, the OF-sales personality type may be expected to deliver a higher call centre sales performance than the SF-sales personality type.

Cooperative and competitive:

The CP-sales personality type tends to prefer working in a team and sharing success with peers. Ivancevich *et al.* (2008) describe "getting along with others", being courteous and showing tolerant behaviour as agreeable personality dimensions. These dimensions have been found to be critical in both sales and customer service related occupations which are characterized by contact with people (Ivancevich *et al.*, 2008). Yilmaz and Hunt (2001) found that cooperative behaviour is essential in work related success, but not specifically in call centre sales performance.

The COM-sales personality type is high achievement orientated and independent. A strong "need for achievement" or "achievement motivation" correlates with sales performance (Hurtz & Donovan 2000; Mount & Barrick, 1995; Vinchur *et al.*, 1998). According to Krishnan, Netemeyer and Boles (2002), highly competitive individuals constantly monitor their own performance in relation to that of their peers and, in order to perform better than others, they are prepared to expend considerable effort in being successful. Although previous research has suggested that there is a positive relationship between competitiveness and sales performance (Plotkin, 1987), Schwepker and Ingram (1994) found that certain working conditions are necessary if this is to hold true with the working environment being found to be a mediator between competitiveness and sales performance (Bartkus, Peterson, & Bellenger, 1989). Competitive, self-efficacious

individuals tend to achieve a higher sales performance as they set higher goals, which they usually achieve (Krishnan *et al.*, 2002). In short, it may be deduced that the CP-sales personality type is less likely to produce high call centre sales performance than the COM-sales personality type.

Based on the above it may be deduced that the C, EC, Q, SN, SF, CP sales personality types are less likely to be found in the call centre sales environment and, if found in that environment, they may deliver a poor sales performances. On the other hand, it may be assumed that the A, EO, O, IN, OF and COM sales personality types will be found in the call centre sales environment and that they will yield high sales performances.

4.1.1.5 The fifth aim: Conceptualise the implications of the theoretical relationship between personality type, sales personality type and the performance of sales staff in a call centre insurance sales environment.

It may be concluded from the literature that inefficient hiring procedures may result in poorly performing sales staff and high turnover rates (Johnston & Marshall, 2005). Organisations are suffering enormous losses as a result of poorly performing sales staff (Ronen, 2010). The sales function in an organisation is the largest cost factor and it is also directly linked to the strategic success of the organisation (Dannenburg & Zupancic, 2009). It may, thus, be concluded that the identification of suitable personality types and sales personality types may ensure optimal person–environment fit (Hülsheger & Schewe, 2011) and lead to an acceptable return on the investment made in the salesperson (Abed & Haghighi, 2009).

4.1.2 Conclusions regarding the empirical study

The specific aims relating to the empirical study were to:

4.1.2.1 First aim: Determine the empirical relationship between personality type and the performance of sales staff in a call centre insurance sales environment.

Based on the findings of the study it may be concluded that there are statistically significant, but weak correlations, between personality type, as measured by the original JTI items, and the performance of sales staff in a call centre environment. The statistically significant positive correlations were found on the E-I scale and both mean sales and the consistency of sales.

4.1.2.2 Second aim: Determine the empirical relationship between sales personality type and the performance of sales staff in a call centre insurance sales environment.

Based on the findings in the study it may be concluded that there are statistically significant, but weak correlations, between sales personality type, as measured by the empirical SPI items, and the performance of sales staff in a call centre environment. Statistically significant negative correlations were found on the C-A scale and both mean quality and mean sales. A statistically significant negative correlation was found on the SN-IN scale and mean quality. A statistically significant negative correlation was found on the SF-OF scale and both mean efficiency and mean sales. A statistically significant positive correlation was found on the CP-COM scale and mean efficiency.

4.1.2.3 Third aim: Determine what combination, if any, of "personality type" and "sales personality type" scales may best predict "performance of sales staff" in a call centre insurance sales environment.

The extroverted-introverted (E-I) and judging-perceiving (J-P) scales of the original JTI comprises the best subset predictor of call centre sales performance. These two predictors combined explained 13.6% and 9.3% of the variance in mean sales and consistency of sales respectively. The addition of a third predictor contributed approximately 1% additional variance.

The best subset predictors of the SPI original items were the consistent-adaptive (C-A) scale and the cooperative-competitive (CP-COM) scale. It appears that consistent-adaptive is the best predictor alone and in combination with others in the prediction of mean quality (12.8%) and mean sales (12.4%) whereas agreeable-competitive is the best predictor in combination with others of mean efficiency (13%).

4.1.3   Conclusions regarding the central hypothesis

Based on the results of this study there are statistically significant (both positive and negative) weak correlations between personality, defined as personality type and sales personality type, and the performance of sales staff in a call centre environment.

4.1.4   Suggest recommendations to the discipline of Industrial and Organisational Psychology

The usefulness of personality assessment in the selection of staff has always been criticised with concerns being raised about the reliability and validity thereof. This study suggests that there is a critical need to review and investigate personality assessments for the purposes of recruitment and selection, both in terms of their validity and reliability in the prediction of suitable candidates in the call centre sales environment. The call centre sales job should be investigated and the level and complexity of the role should be explored in greater depth. The job design and level of complexity may influence the way in which the sales role is defined.

The role of a call centre sales agent may not necessarily correspond to a traditional sales role, despite the fact that the emphasis of the call centre sales organisation is focused primarily on sales. The job characteristics underlying sales performance may differ quite significantly from those of the traditional sales role and may impact on the way in which call centre sales staff members are evaluated for recruitment and selection purposes. The

dimensions underlying call centre sales job characteristics and performance measures should be investigated to identify which personality characteristics are necessary in order to achieve success in this position.

4.2 LIMITATIONS

The limitations in the literature review and the empirical study will now be discussed.

4.2.1 Limitations of the literature review

A core limitation of the literature review is the apparent lack of research in South Africa about personality and the performance of sales staff in a call centre sales environment. Those studies which have investigated call centre sales staff in South Africa focused primarily on job satisfaction, staff turnover, emotional intelligence, locus of control and employee burnout (Moller *et al.*, 2004; Nel & De Villiers, 2004; Carrim *et al.*, 2006; Visser & Rothmann, 2009). These studies mainly focused on the variables that determine job satisfaction and an individual's ability to cope with the stressful nature of a job. Further limitations include the limited existing research on psychometric assessments which specifically investigate the sales orientation or sales personality type of call centre sales staff in South Africa.

4.2.2 Limitations of the empirical study

A core limitation of the empirical study is the low reliability and inter-item correlations of the JTI and SPI that were evident in the study. This may have influenced the correlations between the predictor variables and call centre sales performance, which were found to be statistically significant but weak.

The statistically significant negative weak correlations that were found on the SPI may indicate that the sample used in this study did not consist of the typical sales personality type usually found in call centre sales organisations. Furthermore, the comparison of the poorer, average and higher performing clusters, specifically relating to the SPI, provided sales personality profiles that may not be suitable for call centre sales agent positions. This could have impacted the findings on the study and should be explored further.

It has been highlighted throughout the study that the call centre sales role differ considerably from the traditional sales role, despite the fact that the focus of a call centres sales organisation is primarily on sales. The call centre sales environment and the call centre job

role should, thus, be thoroughly investigated and defined. In addition, the underlying dimensions of call centre sales performance should be identified so that the required personality characteristics for success may be acknowledged. Once critical personality characteristics have been identified to ensure call centre sales success, suitable personality measures may be identified to be used in recruitment and selection.

Lastly, a limitation of the study was that the sample was not sufficiently representative of the different age, gender and ethnic groups. The moderating effects of these variables were, therefore, not investigated and it is not possible to generalise the findings of the study to the general South African population.

4.3 RECOMMENDATIONS

It is recommended that future investigations into the relationships between personality and the performance of call centre sales staff explore the way in which call centre sales performance should be defined. The call centre sales role is defined as a low complexity level position (Deery *et al.*, 2002). In view of the low complexity of the position (the requirement for routine and mundane labour), individuals with a preference for routine and predictability or a non-selling preference may be attracted to the position, for instance, the judging (J) personality type that prefers routine, clerical labour or the separated networks (SN) sales personality type that does not find the sales process enjoyable. The literature review suggests that flexibility and adaptability are valid predictors of sales performance (Yilmaz & Hunt, 2001). If flexibility is a predictor of sales performance, one may expect that a flexible personality type would be found in sales occupations.

The low level complexity of the call centre sales position may stimulate a superficial sales environment and the challenges of the call centre sales position may never be addressed (Houlihan, 2002). This may also complicate efforts to identify suitable personality types for the call centre sales position.

In view of the fact that the call centre sales role comprises a critical part of the call centre sales organisation, it is advisable to focus on those personality types that have been found to predict sales success in such a position, which is not, necessarily, a low level, low complexity position. Currently, people with low levels of skills are typically recruited for what is perceived to be a low level complexity position. However, the call centre sales position comprises the largest cost factor in the sales organisations (Dannenburg & Zupancic, 2009) while employment costs make up more than 50% of the call centre's total operational expense

(Duder & Rosenwein, 2001). The statistically significant weak correlations found between personality and the performance of sales staff suggest that the requirements of the call centre sales role should be reviewed, particularly in terms of the way in which call centre sales performance is defined.

4.3.1   Future research

The suitability of particular personality measures for identifying call centre sales staff warrants urgent attention. This study suggests that personality inventories with poor reliability and inter-item correlations may impact negatively on the results of a study. Personality type inventories and sales personality type inventories should be investigated further for recruitment and selection purposes, specifically relating to the call centre sales organisation in South Africa.

The call centre sales role should be explored further to identify the underlying dimensions of call centre sales performance in order to classify the personality types and sales personality types that are required to perform effectively in this role. Furthermore, the call centre sales position and environment should be investigated in-depth so as to enable the appropriate measurement of call centre sales performance with the measurement being based not only on quantitative measures, but also on qualitative measures. It is clear from the literature review that it is not possible to measure emotionally intensive labour by means of quantitative measures, but that this type of behaviour should, nevertheless, be taken into account in overall call centre sales performance. Emotional performance is a critical aspect of the call centre sales role and it should be included in future investigations into the call centre sales environment and job role. In view of the fact that emotional regulation relates to personality, it should be also be considered when determining suitable personality measures for the prediction of call centre sales success.

A further recommendation for future research is the impact of high social desirability scores on the results of personality assessment. There is currently extremely limited information available on the effect of faking and impression management by participants while completing personality assessments.

4.4   INTEGRATION OF THE STUDY

The objective of the study was to explore whether relationships exist between personality type and sales personality type and the performance of call centre sales staff. The JTI was

used as a measure of personality type amongst call centre sales staff while the SPI was used to identify sales personality type amongst call centre sales staff.

Personality type was investigated in more detail within the boundaries of the psychodynamic paradigm and Jung's personality theory while sales personality type was explored within the parameters of the social interaction theory, surface and deep acting as related to emotional labour and the person–environment fit model. The call centre sales environment was selected for this study because it plays a significant role in the global economic industry and has significantly boosted job creation in South Africa. Despite the fact that the call centre sales industry is expanding rapidly, it faces significant challenges to sales performance, such as absenteeism, staff turnover and employee wellbeing.

The literature review suggested that the personality and performance of sales staff are related. There are, however, still concerns about the various personality types that are found in different occupations. For example, the level of complexity and the stressful nature of work affect work behaviour and, therefore, different personality types may be expected in different occupations. Test faking and social desirability, in particular, may affect personality measures, but the degree of impact has not yet been clearly established.

The descriptive statistics commenced with an investigation of the psychometric properties of the instruments used in this study, namely, the JTI and SPI. Extremely low reliabilities and inter-item correlations were found and the researcher decided to conduct a factor analysis on both inventories. The factor analyses produced new factor items with similar and, in some instances, lower reliabilities and inter-item correlations and, thus, the researcher decided to conduct the correlational and regression analyses using the original test items.

The study used quantitative performance measures of quality, efficiency, sales and consistent sales. A cluster analysis was conducted on group participants and the categories of high, average and poor performers were used to find relationships between personality type and sales personality types.

The next step in the study included a correlational statistical analysis of the original test items of the JTI and SPI with call centre sales performance. The original JTI test items yielded a statistically significant relationship between the E-I scale and mean sales and the consistency of sales. The original SPI test items yielded statistically significant negative correlations on the C-A scale and both mean quality and mean sales. A statistically significant negative correlation was found on the SN-IN scale and mean quality and a

statistically significant negative correlation was found on the SF-OF scale and both mean efficiency and mean sales. A statistically significant positive correlation was, indeed, found on the CP-COM scale and mean efficiency.

The inferential statistical analysis revealed best subsets on both the JTI and SPI on univariate performance measures. The predictive validity was statistically significant but extremely low on all the items. It may, thus, be deduced that the predictor variables did not predict performance sufficiently in terms of mean quality, mean efficiency, mean sales and consistency of sales.

The study concluded with a parallel comparison of the significant differences between personality type and sales personality types if sales staff members are clustered according to their performance. In order to enhance the comparison between the various performing groups, two new groups were created by combining the average and poorer performers ($n = 52$) and comparing this group with the higher performers ($n = 60$). This enabled the researcher to compare the means of two groups with similar sample sizes. A statistically significant correlation of medium practical effect size was found between the two groups on the E-I scale of the original JTI items. This suggests that the two groups differed in terms of extraversion and introversion, with average/poor performers tending towards introversion and the high performers including both extraverts and introverts.

The original SPI items yielded a statistically significant correlation of medium practical effect size between the two groups respectively on SF-OF. This suggests that the two groups differed, with the average/poorly performing group tending towards organisational focus and the higher performing group tending towards self-focus. Statistically significant differences with large practical effect size were found between the average/poorly performing group and higher performing group on all the performance measures, including mean quality, mean efficiency, mean sales and mean consistency.

4.5   CHAPTER SUMMARY

Chapter 4 provided an overview of the results of both the literature review and the empirical study. The findings were discussed as were the conclusions and limitations of the study as well as recommendations for future research.

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