



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA



GORDON INSTITUTE
OF BUSINESS SCIENCE

University of Pretoria

Management practices that support retention in South African inbound call centres

Ilvo Forgiarini

Student number: 28580100

A research project submitted to the Gordon Institute of Business Science,
University of Pretoria in partial fulfilment of the requirements for the degree of
Master of Business Administration

November 2009

© University of Pretoria



Abstract

The turnover of call centre agents in South Africa is higher than in most other industries. The costs incurred to retain agents versus the replacement costs of an agent are massive. This research focused on inbound call centre agents and the perception of five management practises which were compared with both managers and agents in two large call centres.

The five management practises tested were communication, call centre structure, performance management, recruitment and selection, and training and development. These five practises impacted on the agents' intention to leave by 36%.

A non-probability sampling method was used to select a sample of inbound call centre agents; a total of 82 agents were surveyed. Regression, stepwise selection, Wilcoxon Scores Rank Sum test, Pearson and Spearman correlation tests were some of the tools used to interpret the survey.

The research concluded that communication had the strongest correlation with an agent's intention to leave. Communication had the best combination of a matching variable to be predicted on a stepwise selection.

The research further showed that the managers' and call centre agents' perception differs to the extent that managers believe sufficient communication is made to keep call centre agents satisfied, and this is contrary to the agents'

perception.

Interesting to note is that 82% of the agents have considered leaving their organisation at some point, 63% of the employees do not want to be working at their current employer in the next year, and 53% had considered leaving within the past three months.

This research has contributed to the body of knowledge. Organisations and managers are well positioned to direct their focus to specific management practises identified in the research which will assist them in retaining call centre agents.



Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other university.

I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Ilvo Forgiarini (28580100)

11 November 2009



Acknowledgments

I would like to acknowledge foremost Erica, my lovely wife and children, Elena and Enzo, who have had to compromise and endure my time away from them for the past two years, and for being the most wonderful family. I love you all.

The successful completion of this research project would never have been achieved without the encouragement and support of my family, friends, colleagues, GIBS faculty and fellow MBA students (THIR: Syndicate 11).

Lastly, but not least, I would like to thank Caren Scheepers my research supervisor for her endless patience, commitment and interest in the project. Thank to you for your encouraging words and guidance.

Bless you all



Table of contents

Abstract	ii
Declaration	iv
Acknowledgments	v
List of figures	x
List of tables	xi
List of acronyms	xiii
Chapter 1. Introduction to research problem	1
1.1. Introduction	1
1.2. Illustration of the problem	1
1.3. Motivation for the study	3
1.4. Purpose of the study	4
Chapter 2. Literature review	6
2.1. Introduction	6
2.2. Call centre agents and their environment	6
2.2.1 Call centres	6
2.2.2 Turnover	9
2.2.3 Turnover cost	11
2.2.4 Generation influence	14
2.2.5 Retention drivers and factors	15
2.3. Management practices	16
2.4. Recruitment and retention	21
2.5. Communication and retention	23
2.6. Performance management and retention	26
2.7. Training and retention	28
2.8. Structure and retention	30
2.9. Summary from literature	32
Chapter 3. Research questions	34
3.1. Research Question 1: Communication	34
3.2. Research Question 2: Call centre structure	34
3.3. Research Question 3: Performance management	34



3.4.	Research Question 4: Recruitment & selection.....	34
3.5.	Research Question 5: Training & development.....	35
3.6.	Research Question 6: Greatest influence?.....	35
Chapter 4.	Research methodology and design	36
4.1.	Introduction	36
4.2.	Research design	36
4.2.1	Research method	36
4.2.2	Research approach	37
4.2.3	Research strategy.....	38
4.3.	Population and sampling.....	39
4.3.1	Population of relevance	39
4.3.2	Unit of analysis	40
4.3.3	Sampling method and size	40
4.4.	Survey design	41
4.4.1	Pilot questionnaires	41
4.4.2	Data collection	41
4.4.3	Statistical analysis	42
4.4.4	Variables.....	42
4.5.	Data integrity	42
4.5.1	Data validity and reliability	42
4.5.2	Sensitivity	43
4.5.3	Survey error.....	43
4.6.	Potential research limitations	44
4.7.	Conclusion	44
Chapter 5.	Results.....	45
5.1.	Introduction	45
5.2.	Data collected	47
5.3.	Agent and manager gender.....	48
5.4.	Intention to leave (ITL)	49
5.5.	Correlations between dependent and independent variables for the two groups	52
5.5.1	Managers correlation	53
5.5.2	Agents correlation.....	55
5.6.	Comparing the perceptions of agents with the managers	57



5.6.1	Agents', managers' means and Wilcoxon p-value	57
5.6.2	Results to research Question 1, Communication	58
5.6.3	Results to research Question 2, Call centre structure	60
5.6.4	Results to research Question 3, performance management	61
5.6.5	Results to research Question 4, Recruitment & selection	62
5.6.6	Results to research Question 5, Training & development	64
5.6.7	Results to research Question 6: Best predictor	66
5.6.7.1	Analysis using a stepwise regression r-squared	66
5.6.7.2	Stepwise regression	67
5.7.	Conclusion	69
Chapter 6.	Discussion of results	70
6.1.	Introduction	70
6.2.	Overview on the intention to leave (ITL), for inbound call centres in South Africa	71
6.2.1	Managers and agents variable correlation	74
6.2.1.1	Managers	74
6.2.1.2	Agents	75
6.2.2	Comparing the agents with the managers	76
6.3.	Research questions	76
6.3.1	Discussion for Research Question 1, Communication	76
6.3.2	Discussion for Research Question 2, Call centre structure	79
6.3.3	Discussion for Research Question 3, Performance management	80
6.3.4	Discussion for Research Question 4, Recruitment & selection	82
6.3.5	Discussion for Research Question 5, Training & development	84
6.3.6	Discussion for Research Question 6, Best predictor	86
6.4.	Conclusion of discussion	88
Chapter 7.	Conclusion and recommendations	89
7.1.	Introduction	89
7.2.	Review of research back ground and objectives	89
7.3.	Research findings	90
7.4.	Recommendations for stake holders	91
7.5.	Recommendations for future research	92
7.6.	Conclusion	93
Reference list		94



Appendix 1 Agent Questionnaire.....	103
Appendix 2 Manager Questionnaire	105
Appendix 3 Consent Form.....	107
Appendix 4 Raw data agents.....	108
Appendix 5 Raw data managers	111
Appendix 6 Stats key reference for SAS	116
Appendix 7 Agents results from SAS.....	117
Appendix 8 Managers results from SAS	122
Appendix 9 Stepwise selection from SAS.....	125
Appendix 10 Wilcoxon Rank Sum Test from SAS	128



List of figures

Figure 2.1 Increased workload for remaining staff (Grant Thornton, 2008).....	8
Figure 2.2 Turnover classification scheme.....	11
Figure 2.3 Communication flow (Watson Wyatt, as cited by Yates, 2006).....	24
Figure 4.1 Research flow	41
Figure 6.1 Radar diagram on dependent variables	71



List of tables

Table 2-1 Best practice matrix.....	20
Table 5-1 Dependant variable (intention to leave) questions	45
Table 5-2 Independent questions grouped into factors	46
Table 5-3 Gender	48
Table 5-4 Ratio of intention to leave.....	50
Table 5-5 Intention to leave.....	51
Table 5-6 Correlation interpretation table.....	53
Table 5-7 Managers' correlation coefficient between factors	54
Table 5-8 Agents' correlation between factors	56
Table 5-9 Wilcoxon summary and P-value.....	57
Table 5-10 Survey results on communication	59
Table 5-11 Survey results on call centre structure	60
Table 5-12 Survey results on performance management	62
Table 5-13 Survey results on recruitment & selection	63
Table 5-14 Survey results on training and development	65
Table 5-15 Regression analysis of the five practices	67
Table 5-16 Stepwise selection results.....	68
Table 5-17 Stepwise summary.....	68
Table 6-1 Intention to leave.....	73
Table 6-2 Correlation between agents and managers	74
Table 6-3 Managers and agents correlation coefficient for communication	78
Table 6-4 Manager and agent correlation coefficient for call centre structure	80
Table 6-5 Manager and agent correlation coefficient for performance management.....	81



Table 6-6 Managers' and agents' correlation coefficient for recruitment and selection.....	83
Table 6-7 Management and agents correlation coefficient for training and development.....	85
Table 6-8 Regression parameter estimates	86
Table 6-9 Comparison between agents and managers.....	87

List of acronyms

BCTWF	Best company to work for
CIPD	Chartered institute of personal and development
HR	Human resources
HRM	Human Resource Management
ITL	Intention to leave
LTO	Labour turnover
P	P-value
R	Coefficient
ROI	Return on investment
SAS	Statistical Analysis System
SHRM	Strategic Human resource management
UK	United Kingdom



Chapter 1. Introduction to research problem

1.1. Introduction

Call centre managers have been struggling with the influencing factors of labour turnover and retention strategies. Some call centres have been more successful in managing the labour turnover than other call centres. CIPD (2008) reported that in 2008 the UK had a 17.3% turnover rate, based on a survey of 779 organisations. The call centre industry average is 45% (Mc Mullock, 2004); on an individual call centre level that rate could be far worse.

Many researchers have conducted studies to understand, identify factors, and find influencing attributes to be able to manage and reduce this phenomenon (Burchman & Schmitt, 2001; McMulloch, 2004; Mashatola, 2003; Stone & Liyanearachchi, 2007).

1.2. Illustration of the problem

The problem of having a high turnover of staff is that one is continually training new entrants, they are not as productive as an employee that has been with the firm for a longer period, unnecessary costs are incurred, and high turnover of staff indicates instability in the market or firm.

A Human Resource strategy is the result of a set of decisions a company makes about the people with whom it does business (Welbourne, 2003). Strategic Human Resource Management (SHRM) is linking the Human



Resource Management (HRM) with the strategic objectives and goals of the organisation (Truss & Gratton, 1994). Truss and Gratton (1994) elaborate further that the responsibility for the management of human resources is devolved down the management line. The responsibility of HRM does not rest solely with HR but also becomes the responsibility of functional managers (Buford, 2006).

There appears to be a lack of understanding of the process of enhancing the willingness and ability of line managers to take on responsibility for HR management practices.

Holman *et al.*, (2005) surveyed 142 call centres in the UK and concluded that an average call centre turnover is 13%, and in only half the call centres was the turnover below 8%. The shocking upper 10% turnover rate ranged from 26% to 82%. They listed six main HR resource practices that were common across call centres, and a further 10 varying HR practices.

The aim of this research is to gain insight and to determine how different call centre managers perceive their management practices. This will assist and improve their retentions strategies. How do these practices influence the retention of call centre agents? This will create a better understanding for South African call centre managers. By actively influencing turnover, managers are able to manage the labour turnover costs of agents in call centres by reducing this unnecessary churn and thus have a more productive workforce.



According to Hay (2002), the reasons for increasing turnover are primarily poor management, and poor training and career development. He further adds that this problem is aggravated when companies face tough economic times (Hay, 2002).

A typical call centre agent is a matriculant, their age range is mostly 19 – 30 years, and most agents view this job as a good starting point to prepare for a career outside the call centre (Baker, 2002).

In terms of management practices, the common set of variables comprises recruitment and selection, work structure, training and development, performance management, and effective communication (Buford, 2006).

The call centre agents are able to give insight pertaining to these factors; i.e. perceived outcomes and intention to leave. The literature review highlights the variables chosen in this research. This research will evaluate the perceptions of both agents and managers on these five constructs; i.e. communication, organisational structure, performance management, recruitment, and training, which are fundamental practises of management in any organisation.

1.3. Motivation for the study

Shanblag (2008) cites research conducted by Frost and Sullivan (2008) where in a South African context there has been a significant surge in the number of call centres – they have grown from 450 in 2004 to over 1 300 in 2007.



The turnover rate in a call centre is one of the highest in comparison with other industries. Many authors have attempted to calculate the cost of turnover as this amount equates to a high percentage of annual spend (McMullock, 2004; Robison, 2008; Costa, 2008).

An article in Customer Management Insight by Gross (2005), he notes that the call centre industry is satisfied when they have a 30% turnover rate; in other industries this would be alarming. Gross (2005) explains that formal management practices such as recruitment, career path coaching, and compensation are some of the reasons for this high turnover, but beyond the basics a good retention strategy involves plenty of creative thinking and action that promote a good place to work. The result can be used to design HR and management policies, and retention strategies, in call centres.

The findings could provide managers with ways to reduce turnover through effective management practices.

1.4. Purpose of the study

The overall purpose of the study is to add academic knowledge to the above debate by identifying and evaluating the perceptions of five management practices for retaining call centre agents. The perceptions will be analysed by evaluating the managers and agents' perceptions based on management's practices. This will create a better understanding and awareness of these



management practices and their influence on employee retention.

Call centres in South Africa need to focus on the issues of agent turnover and retention in the same way that they assess the physical and financial aspects because turnover can be detrimental to organisational effectiveness. Cappelli (2000) suggests that the goal of retention should not be to minimise turnover but it should influence who leaves, and when.

Chapter two focuses on the literature regarding retention and turnover in the call centre industry. It explores management practices that influence the agent's intention to leave the company. The purpose of the literature review is to identify what is currently known about management practices and their influence on employee retention.

Chapter 2. Literature review

2.1. Introduction

The purpose of this chapter is to present a review of the existing body of knowledge relevant to this research and pull it all together at the end of the chapter. Descriptive studies assume some previous understanding of the nature of the researched problem (Zikmund, 2003).

The literature review commences with a broad overview of the retention of call centre agents and seeks to narrow down it to the specific issues surrounding management practises.

The literature review comprises seven sections. Firstly, a review of the call centres today in respect of turnover, retention cost of turnover and drivers. The next six sections review the literature with regards to the management practices. Each topic and section is explored in adequate detail, covering the five management practises, to provide the researcher with sufficient background information to conduct the survey and research project.

2.2. Call centre agents and their environment

2.2.1 Call centres

Gans *et al.*, (2003) define call centres as a set of resources that are an integral part of many businesses, typically personnel, computers and telecommunications equipment that facilitate the delivery of services via the



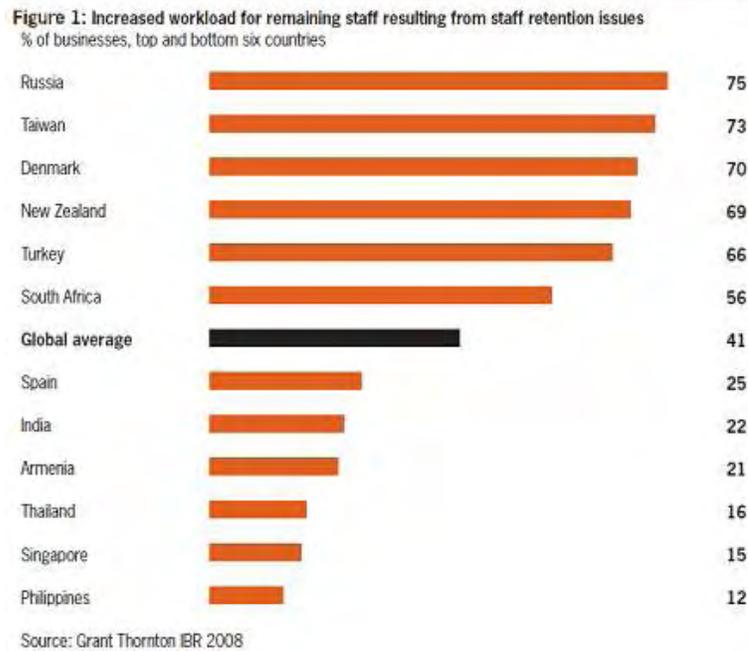
telephone. The functions they provide are highly varied, ranging from customer service, help desk and emergency response services, to tele-marketing and order taking.

The main difference in call centres is whether they handle inbound or outbound traffic. Inbound call centres handle incoming calls that originate from outside callers calling into a centre. These types of centres provide customer support, help desk services, reservation and sales support, and order-taking functions and claims processing. Outbound call centres handle outgoing calls, i.e. calls that originate from within the centre. These types of operations have been traditionally associated with tele-marketing and business surveys. In this research the focus is on inbound call centres.

Shanblag (2008) cites research conducted by Frost and Sullivan (2008) where in a South African context there has been a significant surge in the number of call centres - from 450 in 2004 to over 1,300 in 2007. The number of outsourced seats in South Africa was estimated to be between 24,000 and 25,000. Projecting these figures to 2009 at the same growth rate, the number of call centres could exceed 1 800.

McMullock (2004) cites research conducted by LIMBRA. LIMBRA conducted a contact centre work culture study, examining the low-turnover centres (5% or less) and compared them with high-turnover call centres (45% or higher), and found that work cultures impact turnover by influencing the level of job satisfaction that leads to agent retention (as cited by McMulloch, 2004).

LIMBRA defines “work culture” as the set of values and preferences that underlie operational practice, company practice, and management practice (as cited by McMulloch, 2004).



Thorton (2008) argues that the impact on the remaining staff resulting from retention issues is high, on average. The following figure illustrates the top and bottom six countries influenced by percentage of businesses, nearest to the average.

Figure 2.1 Increased workload for remaining staff (Grant Thorton, 2008)

Robison (2008) reports five predictors of turnover, where the “immediate manager”, was the highest predictor; the other four predictors were poor fit to



the job, co-workers not committed to quality, pay with benefits and connection to the organisation or to senior management. She adds that not all turnover is bad; new blood is healthy, and new employees can bring fresh ideas to their organisations, but losing a valuable employee costs a business time and money, and causes stress in other employees (Robison, 2008).

Costa (2008) argues that high employment turnover in call centres is the key symptom of bad or poor management practise. He identifies 10 attributes that create this poor management practise. If reversed, these would be interpreted as “good management practises”, which contribute to a low employment turnover and an increased retention of staff (Costa, 2008).

2.2.2 Turnover

Turnover is defined as an individual's permanent withdrawal from an organisation (Robbins and Judges, 2007).

Sutherland and Jordaan (2004) summarised two main schools of thought when referring to the causes of, and lead up, turnover; viz. economic and psychological. The two schools are not mutually exclusive in their view of the turnover factor, but rather in terms of their relative importance. Cappelli (2000) emphasises that economic schools refer to market forces such as skills scarcity, supply and demand, and opportunity as the main causes of turnover, whereas psychological schools emphasise individual decisions.



Van Niekerk (2005) defines voluntary turnover as an employee seeking better job prospects or employment conditions or more job satisfaction, and involuntary turnover as that initiated by the employer, e.g. retrenchment or dismissal for poor performance. .

This research is concerned with voluntary turnover as opposed to involuntary turnover. Studies have shown that turnover intent is the best immediate predictor of voluntary turnover (Price, 2001). Wöcke and Sutherland (2008) cite Lee, Mitchell *et al.*, (1999) and Maertz *et al.*, (2001) as re-affirming that intention to leave is the best predictor of turnover. Thus the emphasis in this research of “intention to leave” as a predictor of turnover.

Allen (2008) classifies turnover into various categories. Voluntary turnover is classified in two parts; functional and dysfunctional. Dysfunctional voluntary turnover is destructive to the organisation as this leads to the resignation of high performers or those with valuable skills, and this leads to high replacement costs. He further claims that functional voluntary turnover is not harmful to the organisation, and this includes the resignation of poor performers and employees whose skills are easy replaced (Allen, 2008).

Allen (2008) explains further that unavoidable turnover stems from causes beyond an organisation’s control, whereas avoidable voluntary turnover stems from causes that an organisation may be able to influence. On the part of the

employee, involuntary turnover can be defined as the employer's initiative, i.e. retrenchment, dismissal or a change to the organisational restructure.

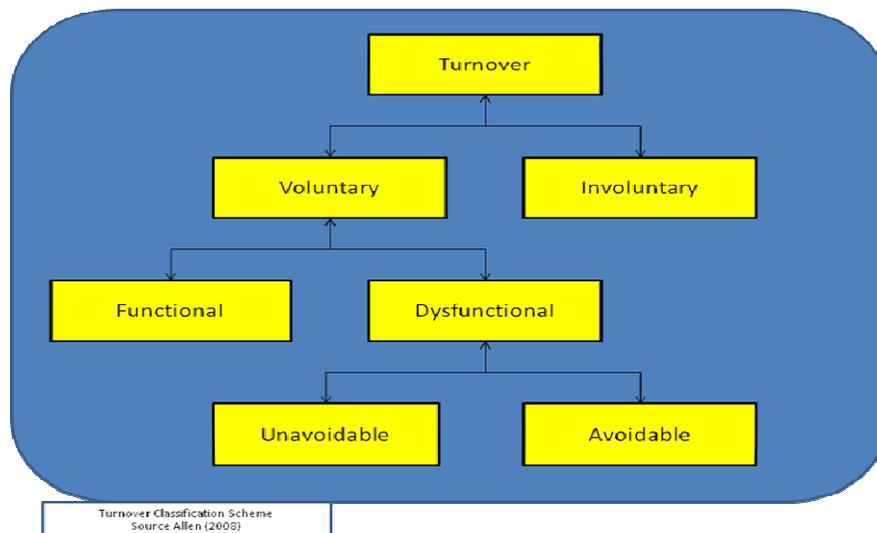


Figure 2.2 Turnover classification scheme

This research will focus on the voluntary dysfunctional avoidable turnover amongst call centre agents in an inbound call centre.

Sutherland *et al.*, (2004) state that the effects of turnover could be either beneficial or costly to the organisation. When a poor performer voluntary leaves the organisation it is understood as beneficial; when a good employee leaves it is costly to the organisation (Cappelli, 2000).

2.2.3 Turnover cost

The cost incurred for turnover of staff carries a tangible and an intangible cost. Hillmer *et al.* (2004) highlight seven components which make up the tangible



costs: screening, interviewing, testing, wages, training, orientation and technology.

The intangible categories are the cost of lost productivity for a new agent, the cost of rework for increased errors made by new agents, and the cost of increased supervision. Psychological contracts could be a strong lever in factoring in the reduction of labour turnover costs and an increase in retention elements in call centre agents.

According to Burchman *et al.* (2001) turnover costs are categorised as direct, indirect, and opportunity costs. Opportunity costs have a different aspect comparing with Hillmer *et al.*'s view (2004); this cost takes into account the loss of customers due to poor service, decreased productivity, operating under-capacity, and the potential of good agents and a knowledge base.

Burchman *et al.*'s (2001) definition explains the indirect costs; whereas Hillmer *et al.*'s (2004) intangible costs are often not considered as a financial impact when calculating the cost of replacing staff.

DDI World (2003) in their research on reducing turnover claims they estimate the cost for replacing a non-managerial employee (agents) at 30% of the employee's annual salary. According to Michaud (2000), the financial cost of labour turnover of a knowledge worker could be as much as a year's salary. Brown and Duguid (1996) defined the concept of a knowledge worker as a "learning person" and is the centre of knowledge and skill transfer in an



organisation. Davenport (2005) interprets knowledge workers as the innovators, designers, and marketers of a company's products and services. He adds that they are also the strategists, executives, and specialists whose ideas and expertise fuel the organisations success.

Assuming one has a 100-seat call centre, with McMulloch's (2004) worst case scenario (i.e. 45% turnover rate), the DDI World's (2003) research of 30% of the annual cost, and averaging a cost to company of R6 000 pm:

$$100 \text{ seats} \times 45\% \text{ LTO rate} \times R 6000 \times 12 \text{ months} \times 30\% \text{ cost} = R972 000.00.$$

This would equate to just under a million rand per annum lost in turnover expenses. These labour expenses can be either direct or indirect costs, as suggested by Burchman *et al.* (2001).

Capelli (2000) refers to three losses when an employee leaves:

- The loss of productivity before they leave,
- Then until the individual is replaced to the same productively level, and
- The invested amount to train the employee and the difficulty to replace them with someone equal or better.

Robins and Judge's (2007) defined perception as important in the study of organisational behaviour because people behaviour is based on their



perception of what is reality. Therefore individuals' perception is said to influence behaviour.

2.2.4 Generation influence

Glass (2007) defines the three last varied generations found in a typical organisation as follows:

- Baby Boomers Born between 1941 and 1960.
- Generation X Born between 1961 and 1976.
- Generation Y or Millennial Born between 1977 and 1992.

Glass (2007) shows that the three generations above have their own makeup and as such need to be managed differently. Consider also that the next generation will be entering the work space as from 2010, thus creating a new dynamic of employee in the workplace.

Westerman and Yamamura (2007) refer to the younger generation X and Y stating that they are more likely to leave an organisation before the average period of the later generations. They state that Generation X and Generation Y employees comprise 45% of the workforce in 2007, increasing in number to approximately 60% of the full-time workforce by 2010 in the USA (Westerman & Yamamura, 2007).



2.2.5 Retention drivers and factors

Researching retention can be determined by why people stay. Scarpello and Ledvika (2006) have developed four profiles to describe most employees:

- **Turnover:** Highly dissatisfied at work, free of external pressures to stay and will quit at the first chance.
- **Turn-off:** Dislike the job but stay because of pay, benefits or some other extrinsic job rewards.
- **Turn-on:** Highly satisfied and motivated at work, but may leave if external pressures become significant.
- **Turn-on plus:** Highly motivated at work and satisfied with the local environment; likely to remain and continue to be productive.

Mashatola (2003) in his research identified four top turnover and retention factors in two sample frames; agent and manager: Firstly, turnover factors for agents include pay, development and career advancement, flexible working hours, and culture and values. Secondly, retention factors for agents include competitive pay, development and career advancement, social support, challenges, and job autonomy.

Borstorff and Marker (2007) suggest that there are different influencing factors



for the intent to leave between baby boomers and generation X & Y. This needs to be taken into consideration as each generation has different expectations at different stages of their lives.

2.3. Management practices

Several studies have pointed out that the practice of managers is of critical importance in motivating and retaining staff (Buckingham, 1999; Thompson *et al.*, 1999), but those studies fail to indicate details of those specific behaviours and actions to enhance retention.

There has been a lack of consensus regarding a universal set of HRM practices; in most cases the most frequently identified were realistic job previews, orientation programming, compensation systems, job security, performance appraisals, training and development, career advancement, and effective communication (Delery & Doty, 1996).

Various authors (Huselid, 1995; Hemdi & Nasuridin, 2007) have confirmed that in the hotel industry, HRM practices have a positive influence on trust in an organisation which in turn has a positive influence on the retention of employees. The HRM practices used in this study are performance measures, training and development, and career advancement.

Telfer (2008) and Pfeffer (1994) both argue that the greater use of 16 management practices would result in higher productivity and profitability across



organisations. These practices include participation and empowerment, incentive pay, selectivity in recruiting, information sharing, measurement of practices, self-managed teams, training and skills development. Telfer (2008) also cites Deloitte's (2008) where the best management practices, according to the Deloitte Best Company to Work for (BCTWF) include communication, training and development, and performance management.

Mashatola (2003) further suggests that the decision by the call centre agent to stay or leave is due to a complex interaction of 11 factors. These factors are expectation that the organisation should provide growth opportunities; perception of general treatment of employees (fairness, transparent, trust and freedom of expression); stimulation and challenging role; work schedules that fit with lifestyle needs (day time job); excellent facilities and technology; working conditions with minimum stress; management's competence in managing work and guiding agents; behaviours of co-workers; the organisation's interest in the individual's non-work interests; accessibility of workstation; and the organisation's size and external image.

Holman *et al.* (2005) examined the following HR practices; pay performance measures, training, selection, job and work design, and employee retention. These factors are mainly in the control of line management.

Cross *et al.* (2008) investigated high levels of churn and absenteeism, issues of motivation and commitment, lack of career progression opportunities, and loss



of agents following investment in training and development. Many of these issues may be attributed to both a lack of understanding and communication.

In terms of the relationship between HR management practices and job satisfaction, Petrescu and Simmons (2008) concluded that HR management practices have a significant effect on job satisfaction. The variables considered as HR management practises were work organisation, supervision, employee involvement, recruitment and selection, training and learning, and pay practices.

Delery *et al.* (1996) identified seven strategic human relations management practices; i.e. internal career opportunities, formal training systems, appraisal measures, profit sharing, employee security, voice mechanisms, and job definition.

Job satisfaction is a major contributor for the retention of employees, as agreed by many authors (Petrescu *et al.*, 2008; Hellman, 1997; Price, 2001; Tett & Meyer, 1993; Trevor, 2001).

Buford's (2006) study discussed the essentials of the 10 HR essentials that human service organisations can use to structure their HR programmes' resources. These themes impact the following human resource areas: employee morale, ethics, recruitment and hiring, performance management, management practices, training and development, multicultural immersion, employee retention, organisational effectiveness, and managing change.



Allen (2008) stated that management practices which aid retention are recruitment and selection, communication and socialisation, training and development, compensation and reward, supervision and employee engagement. In the above literature sources the trends of management practices have many similar factors.

The call centre agents would be able to give insight pertaining to these perceived factors and “intention to leave”. Organisational structures create and support the management principles, communication, performance management, recruitment and training, are fundamental practices of management in any organisation. This research will evaluate the perceptions of both agents and managers on these five management practises, and identify the one that influences retention the most.

Table 2-1 Best practice matrix

Arthur (1992)	Pfeffer (1995)	Huselid (1995)	MacDuffie (1995)	Tamkin (2008)
Broadly defines jobs	Employment security	Personnel selection	Work teams	Management support
Employee participation	Selectivity in recruiting	Performance appraisals	Problem-solving groups	Training & development
Formal dispute resolution	High wages	Incentive compensation	Employee suggestions	Pay and benefits
Information sharing	Incentive pay	Job design	Job rotation	Communication
Highly skilled workers	Employee ownership	Grievance procedures	Decentralisation	Autonomy
Self-managed teams	Information sharing	Information sharing	Recruitment & hiring	Skill and qualification
Extensive skills training	Participation and empowerment	Attitude assessment	Contingent compensation	Health and safety
High wages	Self-managed teams	Labour/management participation	Status differentiation	
Salaried Workers	Training and development	Recruiting intensity	Training of experienced employees	
Stock ownership	Cross-utilisation & cross-training	Training hours	Training of new employees	
	Symbolic egalitarianism	Promotion criteria (seniority vs. merit)		
	Wage compression			
	Promotion from within			



2.4. Recruitment and retention

Call centres can attribute the high turnover rate to the recruitment practice. Doshi (2002) discusses the high turnover rate and the recruitment practice, and her article further mentions that the high turnover in call centres has been a universally accepted problem for the call centres industry. In her opinion, the problem commences with the recruitment practice because potential employees could be mismatched to the job specification (Doshi, 2002).

Moss *et al.* (2008) conclude that, although call centre turnover rates were generally high, much of that turnover was associated with new employees who quickly realised that the nature of the call centre work did not suit them. This confirms that the recruitment selection process and early identification of a misfit to job is a crucial point to be managed. Only 9% of call centres in the UK use systematic selection testing, such as Psychometric and aptitude tests (Moss *et al.*, 2008).

Burchman *et al.* (2001) explained that the high percentage of attrition in the first few weeks may be due to problems in sourcing and recruitment. The process of selecting and recruiting has no process or guidelines; i.e. they may not have accurately screened job applicants or the job responsibilities may not have been clear during the initial stages.



CIPD (2008) UK found the turnover rate highest in the private sector, typically in retailing, hotels, catering and call centres. CIPD (2008) alludes to the fact that job previewing could reduce early resignations as the candidate is exposed to the environment and organisation. This will ensure expectations are in line between employee and employer, and post employment dissonance is kept low.

Rioux and Bernthal (1999) concluded that better recruitment and selection strategies result in improved organisational outcomes. The more effective the organisation's recruitment and selection, the more likely they are to hire and retain satisfied employees. Doshi (2002) wrote from an IT perspective and agreed that at the recruitment stage itself, there could be a mismatch between the potential employee and the job specification. In her opinion there are often situations of square pegs in round holes (Doshi, 2002). However recruiting candidates with good people skills, the right attitude, good communication and willingness to learn, attrition can be handled to a greater extent (Doshi, 2002).

CIPD (2008) pointed out that poor recruitment and selection decisions, both on the part of the employee and the employer, are to blame for increased turnover rates. Analoui (2007) suggested the importance of flexible recruitment practices and the extent to which the organisation can be flexible in the ever-shifting work environment. The attraction and selection of the best candidate for the right job requires a flexible and different recruitment system and practices for sections of the work force. Analoui (2007) goes on further to note that the process of getting the right people at the right time is part of HR planning.



Jassim *et al.* (1998) mused as to how can a firm can recruit the right employees, going on further to say that most managers have different selection models to insure they are employing the right person.

2.5. Communication and retention

“Communication is the glue that binds various elements, coordinating activities, allow people to work together and produce results” (Grobler & Warnich, 2005). According to these authors, communication is the activity of conveying information (Grobler & Warnich, 2005).

Yates (2006) reported on Watson Wyatt’s Communication ROI study where convincing evidence was found that companies with high effective internal communication practices improve employee engagement. Employee engagement is similar to job satisfaction, and positively influences employee productivity and employee retention. Yates’s (2006) figure below explained how effective communication increases ROI.

The Watson Wyatt study (as cited by Yates, 2006) defines eight effective communication areas; educating employees about the organisation and values, helping employees understand the business, aligning employee’s actions with customers needs, providing employees with financial information and objectives, providing employees with information on the value of the rewards programmes and policies, integrating new employees into the organisation, and exhibiting strong leadership by managing during the organisational change.

These eight can be communicated both in formal and informal methods.

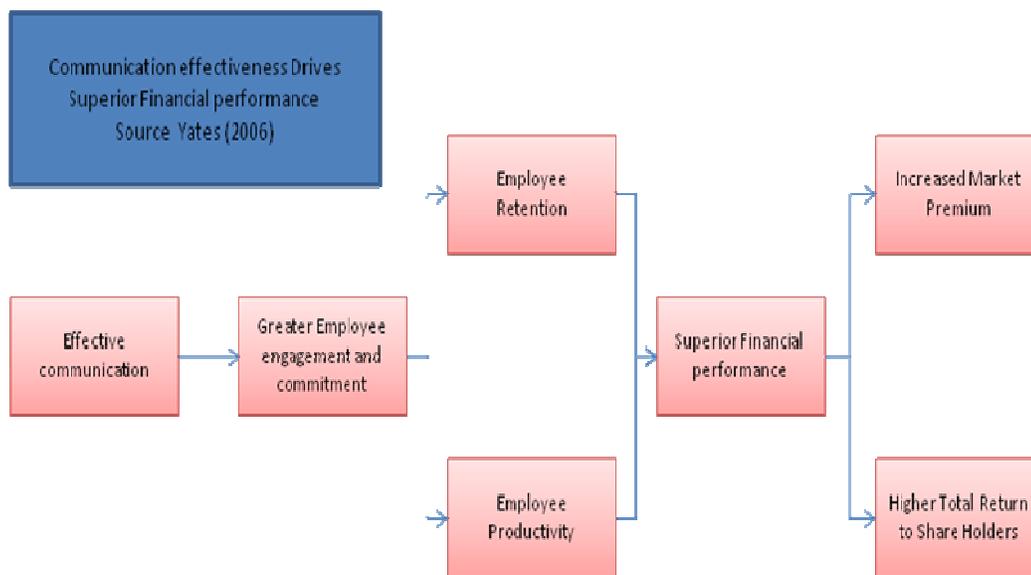


Figure 2.3 Communication flow (Watson Wyatt, as cited by Yates, 2006)

Johnson *et al.* (1994) gave a definition on formal and informal communication in an organisation. Formal communication is believed to be "official", such as oral communication up and down the organisational levels.

Some other formal communication practices are training, counselling and coaching. Informal communication usually doesn't follow the organisational levels and it tends to be more personal; like work-related conversations with co-workers and calling friends in another work unit on how to handle a work problem. This could support the formal communication definition.



Effectively managed, informal channels are better at communicating the overall mission of the organisation and reducing the intention to resign (Johnson *et al.*, 1994). Their study found that informal channels of communication are more effective and are highly praised (Johnson *et al.*, 1994). Subramanian (2006) mentioned that the informal communication channel enhances respect between employees, camaraderie and commitment, and that keeps the employee attrition low.

CIPD (2008) proclaimed that communication plays a positive role in retentions, i.e. creating media that employees can use to have a 'voice' through consulting bodies such as regular appraisals, attitude surveys, coaching and grievance systems. This will provide dissatisfied employees with a number of mechanisms to sort out their problems before resigning or forming the intent to resign. Borstorff *et al.* (2007) further added that the old models of top-down and team-based communication culture are obsolete – areas where management needs work on good informal relationship for retaining employees.

Poor communication is the major reason for employees wanting to leave and a factor that raises levels of unnecessary stress in the work place (Atkinson, 2006), thus influencing job satisfaction. Jassim *et al.*, (1998) explained that good communication is essential for effective work.

Johnson *et al.* (1994) further argued that informal structures somewhat relegate the communication role to formal communication; however informal communication carries an important element in the practices of manager



communication. Holman *et al.* (2005) included practices such as listening and organisational directional information as communication practises that seemed to be lacking in some call centres.

Luss and Nyce (2004) elaborated further on the Watson Wyatt Communication ROI survey (2003), in that organisations have a 50% better chance of reducing turnover rates if they communicate effectively to their employees. Murlis and Schubert (2001) argued that there are six core elements in the employee performance model articulated by the Hay Group (2001). These six elements include practices such as performance management, training and development, and communication. The Watson Wyatt survey (2003) reported that good communication is more likely to report a turnover rate less than other industry peers, by a significance variance of 18% less turnover.

Pfeffer (1995) stated that communication across levels is improved when interacting in a less formal setting; managers and employees are more likely to know what is actually going on and able to communicate ideas more directly.

2.6. Performance management and retention

The term “performance management” was adopted by the Total Quality management initiatives in the 1980s and created as a management tool to manage and increase performance (Grobler *et al.*, 2005). Grobler *et al.* (2005) cite Renton’s (2000) work, noting 20 key requirements to effective performance



management, contributing to increasing employee retention.

Holman *et al.* (2005) highlighted three common performance management practices used in his study; performance appraisal, electronic performance monitoring, and call quality monitoring. These practices support and identify individual training and development needs. Holman's (2005) findings were that 10% of call centres' monitoring systems had adverse effects on the agents' well being.

Performance management increases job satisfaction, as coaching and recognitions create an effective relationship and communication medium, thus giving workers a "voice" through employee involvement. This ensures poor performers are coached, counselled and trained, whereas good performers will be recognised and rewarded. Performance management is desirable, especially if pay can be influenced by performance appraisals (Petrescu *et al.*, 2008).

Grobler *et al.*, (2005) as cited by Dowling (1999), stated that some advantages for performance management tools would improve communication. MacBeath (2008) suggested that a well developed performance management and talent management strategy with developed policies reduces the intention for employees to leave and noted the importance a company should place on employee engagement and retention.



Pfeffer (1995) defined two main functions of performance measurement; firstly to provide feedback as to how the performance is going, and secondly, that the management will be noticed, i.e. not a case of "out of sight out of mind".

Performance management is a critical element of management; it creates a dialogue regarding an individual's performance, it discusses key achievements, strengths, development areas and future career desires.

Retaining employees is not just about offering the larger salary; employees are becoming more savvy every year. Employees expect to be rewarded for work well done, coaching and training where there are skills gaps, and without performance management it becomes very difficult to measure, compare, evaluate, be fair and gain the most out of the performance objectives. Retentions are indirectly influenced by staff satisfaction (Nettleton, 2008).

2.7. Training and retention

CIPD (2008) pointed out that a lack of training and development opportunities was also a reason for voluntary turnover. Many employers consider that training increases morale, boosts motivation, and improves personnel retention. Marriott Hotels found, for example, that effective training of its entry-level workers had a profound effect on keeping these employees (Umiker, 2004).

Cappelli (2008) argued that one of the most important tools available to organisations in their drive to retain employees is that of employee



development. Cappelli (2008) further added that organisations would rather allow employees to move within the organisation than lose them to another. This gives employees an opportunity to advance their careers which has a direct correlation with decreasing labour turnover.

Retention research has indicated that individuals tend to stay longer where they are experiencing personal professional growth; essentially career planning; each individual is appraised for his unique risk and managed equally (Gaffney, 2005).

Call centre agents, on average, receive 15 days training in the first year and seven days in the second year; and 70% of call centres' scheduled training is through performance measuring (Holman *et al.*, 2005).

Petrescu *et al.*, (2008) findings pointed out the strong relationship between training and job satisfaction. The training increases satisfaction, reduces attrition, and increases productivity due to newly acquired skills and knowledge.

On the contrary, Deckop *et al.*, (2006) found that training had no relationship on retention and performance appraisals, and had a negative effect on employees intention to leave.

Witty (2009) from Vault.com cites a study conducted by Worldatwork. The study ranked training and development opportunities as one of the most important predictors of retention. These authors (as cited by Witty, 2009)



further explain that if employers show their employees that they are committed to the company and their employees, employees feel valued and stay with the company. According to Burchman *et al.* (2001), high turnover rates after six months were due to agents' dissatisfaction with training, ongoing job experience, pay, and inconsistent management decisions.

There are further bonuses for employers who place emphasis on training and work hard to see their staff improve. They will find their employees have an increase in company pride, enjoy their work more, and are more content with their work-life balance (Atkinson, 2006). Meanwhile, poor training generates a desire to leave (Atkinson, 2006). Ray (2006) argues that training is a key component for successful staff retention strategy, and in turn will lead to higher levels of customer service excellence. Training is a key retention tool and it is part of the employee psychological contract of employment; ensuring that staff have the opportunity to develop their skills (Vowler, 2005).

2.8. Structure and retention

Robbins (1990) defined organisational structure as the way tasks are allocated, who reports to whom, and the formal coordination mechanism and interaction patterns that follow. He identified three components; formalisation, complexity, and centralisation; later he broadened the three to six (Robbins, 1990).

Robbins *et al.* (2007) defined organisational structures as how tasks are



formally delegated and coordinated. Robbins *et al.* argued there are six elements managers need to address in their organisational structure; i.e. work specialisation, departmentalisation, chain of command, span of control, centralisation and decentralisation, and lastly, formalisation (2007). They added that the basis for the argument is that organisational structure impacts both attitudes and behaviours (Robbins *et al.*, 2007).

Organisations are structured in a variety of different ways depending on their objectives. Structures allow the responsibilities for various functions and processes to be different. Incorrect structures will limit the effectiveness of managers and their practices. The span of control is the ratio of employees reporting to managers (Robbins *et al.*, 2007).

Price (2001) and Huselid (1995) included seven structural variables in the causal model; justice, job stress, remuneration, promotional chances, repetitiveness of work, and social support.

Petrescu *et al.* (2008) explained how organisational structures or work organisations create effective reporting lines, processes of work, structures for effective communication, performance management systems, and training programmes.

Moss *et al.* (2008) noted that most call centres are designed with flat hierarchies to achieve maximum cost efficiencies; however, over time they have changed by increasing layering, and this has created career growth opportunities for



valued employees and has reduced turnover.

Pataconi (2009) explained that “span of control” can influence the levels of communication with the employees. Depending on the complexity of the job, the span of control will be broader or narrower.

Carzo and Yanouzas (1969) reported the difference between tall and flat organisational structures. Tall organisational structures are superior when rated on performance, profit, and rate of return on revenue. But they took longer to process decisions.

On the other hand, flatter structures took longer to resolve conflicts and to coordinate efforts. Groups operating in taller structures showed significantly better performance than groups under the flatter structures, so performance management is able to contribute positively in reducing turnover. Carzo (1963) reported the effects of tight and loose organisational structures. Loose structured groups take less time to make decisions, and employees are more satisfied with loose structures.

2.9. Summary from literature

Effective management retention in an organisation is not easy; for the purpose of this research five management practices have been selected:

Organisation structure creates the environment for effective communication which creates the right relationships. Recruitment ensures the right people



have been chosen to fit the job specifications. Performance management measures the improvements, benchmarks standards, highlights training limitations, and improves productivity.

Training and development creates certain sustainability to support growth in an organisation. This literature review has created the background to support the research objective, which is to identify the factors that aid employee retention in call centres in SA.

The next chapter deals with the specific research questions.

Chapter 3. Research questions

When referring to management practices that influence retention of call centre agents, the following are the research questions posited:

3.1. Research Question 1: Communication

Do the managers and agents have a similar perception regarding call centre communication as a factor to improve retention?

3.2. Research Question 2: Call centre structure

Do the managers and agents have a similar perception regarding call centre structure as a factor to improve retention?

3.3. Research Question 3: Performance management

Do the managers and agents have a similar perception on call centre performance management as a factor to improve retention?

3.4. Research Question 4: Recruitment & selection

Do the managers and agents have a similar perception regarding call centre recruitment and selection as a factor to improve retention?



3.5. Research Question 5: Training & development

Do the managers and agents have a similar perception regarding training & development as a factor to improve retention?

3.6. Research Question 6: Greatest influence?

Which of the five factors has the greatest influence on ITL (intention to leave)?



Chapter 4. Research methodology and design

4.1. Introduction

This chapter explains the research methodology followed for this study. The literature discussed in Chapter 2 formed the theoretical basis for designing the structure of the research.

4.2. Research design

The objective of the study determined during the early stages of the research must be included in the research design to ensure that data collection is appropriate for solving the research (Zikmund, 2003).

4.2.1 Research method

The nature of the problem researched determines whether the research is (a) exploratory, (b) descriptive, or (c) causal (Zikmund, 2003).

The definitions of these types of research can be summarised as:

- Exploratory research is conducted to clarify the ambiguous problem.
- Descriptive research is primary used to describe characteristics of a population or phenomenon.



- Causal research answers questions of why (Zikmund, 2003).

This research is classified as descriptive since the purpose was to investigate and describe management practices that support the retention of call centre agents in South Africa. Descriptive research seeks to find answers about the who, what, when and how questions (Zikmund, 2003).

4.2.2 Research approach

Descriptive research methods are generally used when a body of knowledge already exists on the topic and the validity of specific research questions are evaluated (Zikmund, 2003). Typical research tools for descriptive are surveys, cross-sectional analysis of case data, longitudinal analysis of case data, and analyses of causal relationships (Zikmund, 2003).

It is on this basis that the researcher intends using quantitative, descriptive research techniques in this study.

This descriptive research was conducted in the form of a quantitative study of data collected from survey questionnaires. Survey questionnaires for managers and agents were administered respectively.



4.2.3 Research strategy

When considering the research design, as a starting point it is important to understand the master plan.

A survey is a technique where information is collected from a sample of people using a questionnaire. A survey has been found to be a quick, inexpensive, efficient and accurate means of assessing information about a population (Zikmund, 2003).

A pilot of this questionnaire was administered to reduce any possible sample errors. Consent was included in the questionnaire as suggested by the integrated business research project guidelines. Appendix A and B are copies of questionnaire with integrated consent.

No names of companies or respondents names were used and thus responses were treated as confidential. A copy of the call centre consent form can be viewed in Appendix 3.

The questionnaire stated that the survey was voluntary and the applicants could withdraw at any time without penalty, that by completing the survey they acknowledged that they voluntarily participated in the research. In addition a statement confirmed that all personal data would be kept confidential; no names would be recorded, no names were requested, and if any names were divulged to the researcher for any reason they would not be stored in any form relating to



the questionnaires. No data were stored with identifiers.

Questionnaires were returned to the researcher by placing them in a sealed box to ensure confidentiality. The responding organisations were offered the findings of the research as a token of appreciation.

Two questionnaires were administered; one for call centre management and the second for the call centre agents. Primary data were collected from the managers by means of a survey questionnaire. A second survey questionnaire was administered for the call centre agents. The survey covered aspects of perceptions regarding training, structures, communication, performance management and recruitment as independent variables.

Demographic data, i.e. age, gender, and duration of tenure at current employer, were also required to gain a better understanding of the sample. The survey questionnaire was approved by a senior statistician at the university.

4.3. Population and sampling

4.3.1 Population of relevance

Zikmund (2003) defines a target population as “the complete group of specific population elements relevant to the research project”. It was decided to limit the focus to call centre managers and call centre agents operating in inbound call centres in South Africa.



The population of relevance consists of all call centres in South Africa. Skills levels of call centre agents were taken into consideration, and knowledge workers were excluded as they have more complex skills and then other factors influence their intention to leave. For the purpose of this research the term “management” included supervisors.

4.3.2 Unit of analysis

The unit of analysis was call centre managers and call centre agents, operating inbound South African call centres.

4.3.3 Sampling method and size

Zikmund (2003) defined non-probability sampling as “A sampling technique in which units of the sample are selected on the basis of personal judgement or convenience”.

A non-probability sampling method was appropriate, given that the research concerned inbound call centre in South Africa. Convenience sampling was used to select participants; the intention was to survey a minimum of two call centres; each call centre having over 100 agents. The response rate should be greater than 40% to generate sufficient data (Zikmund, 2003).

4.4. Survey design

4.4.1 Pilot questionnaires

The questionnaires were piloted among four respondents; two managers and two agents. The respondents gave their views regarding the comprehension of the questions.

4.4.2 Data collection

A series of 26 questions rated on a 5-point Likert scale was used; the questions related to the five independent variables, i.e. training, structures, communication, performance management, and recruitment. The illustration below depicts the process for the research.



Figure 4.1 Research flow

The statements were not in order of preference or structure. The researcher conducted the survey at the offices of the respective managers and agents.



4.4.3 Statistical analysis

The objective was to analyse the perceptions of the managerial staff and the agents, and to create an understanding of specific managerial practices that influence retention of agents in the South African call centre industry.

The researcher solicited the services of a knowledgeable statistician to assist with data processing. With the assistance of a statistician from the university, a regression analysis and step-wise selection was administered.

4.4.4 Variables

The dependant variable is the intention to resign.

The independent variables are training, communication, performance management, structure, and recruitment.

4.5. Data integrity

4.5.1 Data validity and reliability

Validity is the ability of the measuring instrument to measure what it is intended to measure (Zikmund, 2003). Telfer (as cited by Leedy & Ormrod, 2005) stated that in the correlation research method it is crucial to observe the extent to which a researcher discovers a statistical correlation between two perceptions depending on the accuracy how well those perceptions have been calculated.



Validity and reliability are important for an effective correlation coefficient. Reliability is the degree to which measures are free from error and yield consistent results (Zikmund, 2003). After conducting the pilot study some minor changes in wording were made to ensure understanding

4.5.2 Sensitivity

The different categories, such as “agree and disagree” do not allow the recording of subtle attitude changes. Stacey (2005) proposed one should only score items as equal intervals with a maximum of five response categories, such as “strongly agree”, “agree”, “neutral”, “disagree”, and “strongly disagree” as possible categories to increase the scale’s sensitivity. Likert scales and balance rating scales are known to be effective measurement of attitudes (Zikmund, 2003).

4.5.3 Survey error

The researcher paid careful attention to eliminate errors from the sample in order to ensure the integrity of the data. The use of a statistician and the method used to collect, distribute and capture questionnaires helped reduce the two main error types:

- Random sample error, i.e. the difference between the result of a sample and result census.
- Systematic error (basis) is the error created by a respondent or an



administrative error.

4.6. Potential research limitations

- The researcher cautions against assuming representation as the sample was drawn from Johannesburg only.
- The agents reporting to the researcher may have been biased because of a reporting line influence, but it was not evident as the agents not reporting to the researcher had similar results.
- Reverse scoring needed to be carried out on questions 5, 13, 18 and 19 as the questions were negatively phased to ensure accuracy of the findings.

4.7. Conclusion

In order to meet the requirements and objectives of the research as outlined in Chapter 1, the data validity and reliability resulting from the application of the survey questionnaires was closely monitored.

The method used for the research was detailed in this chapter. The following chapter details the results of the survey.



Chapter 5. Results

5.1. Introduction

This chapter describes the results of the analyses on the survey data in order to provide answers to the propositions as defined for this research. The aim of the project was to research the perception of the agents and managers based on five management practices that affect employment retention.

A proposition is a statement concerned with the relationship among concepts, and an assertion of a universal connection between events that have certain properties (Zikmund, 2003). The proposition in this research was investigated by rating the perceptions and ranking the mean, and the correlation and regression of the factors generated by the questionnaire. In this chapter the results are presented separately for each proposition.

Table 5-1 Dependant variable (intention to leave) questions

Q N#	Agent	Factor	Manager
4	I hardly ever think about leaving my current employer.	Intent to leave	I believe my agents hardly ever think about leaving their current employer.
8	It will take a lot for me to leave the company I currently work for.	Intent to leave	It will take a lot for the agent to leave the company they currently work for.
13	I have been looking for another job in the last 3 months	Intent to leave	I believe that some agents have been looking for another job in the last 3 months.
17	I enjoy working at my present company	Intent to leave	I believe my agents enjoy working at the present company
24	I still want to work here next year	Intent to leave	I believe most of my agents still want to work here next year

Table 5-2 Independent questions grouped into factors

Q N#	Agent	Factor	Manager
2	I feel well informed about what is happening within the company.	Communication	I believe I keep my agents well informed with regards to what is happening in the company.
9	I receive formal feedback from my manager/ supervisor	Communication	I always give formal feedback to my agents.
14	My superior listens to what I have to say	Communication	I actively listen to my agents.
16	There is open communication with myself and my superior	Communication	There is open communication with myself and my subordinate
23	Supervisors and management keep me informed about the issues affecting my work.	Communication	I believe I keep my agents well informed about all issues affecting their work.
5	Do believe that there are too many levels of supervision between agents and decision makers	Structure	I do believe that there are too many levels of supervision between agents and decision makers
19	I believe that there is too little supervision in the call centre.	Structure	I believe that there is too little supervision in the call centre.
1	I have a good professional work relationship with my manager.	Structure	I have good professional work relationship with my agents.
26	I have a clear reporting structure, and know who I report to.	Structure	Agents have a clear reporting structure to be managed by.
12	I receive informal feedback from my manager/ supervisor often	Performance	I often give informal feedback to my agents.
3	My superior sets clear goals for me.	Performance	I believe I set clear goals for my agents.
6	My superior and I discuss the results I am expected to achieve.	Performance	I discuss the results I expect with my agents.
7	I believe that the recruitment method and process used to employ me was effective	Recruitment	I believe that the recruitment method and process used to employ agents is effective
10	I believe that the management process to recruit my fellow agents is effective	Recruitment	I believe that the management process used to employ agents is effective
21	I believe my superior hires employees with skills that help the team succeed	Recruitment	I believe I hire employees with skills that help the team succeed



Q N#	Agent	Factor	Manager
18	Before I started as a call centre agent I thought this job to be simple.	Recruitment	The agents do not realize the difficulty of the job until they have been here for some time.
11	I support and agree that induction training should be conducted for all new call centre agents	Training	I support and agree that induction training should be conducted for all new call centre agents
15	I support and agree that Skills training should be conducted continually with all call centre agents	Training	I support and agree that skills training should be conducted continually with all call centre agents
20	My company offers me access to work related training	Training	My company offers all agents access to work related training
22	My supervisors and managers support me in attending training to develop new skills.	Training	I believe that I support my agents in attending training to develop new skills.
25	I support and agree that product training should be conducted continually with all call centre agents	Training	I support and agree that product training should be conducted continually with all call centre agents

5.2. Data collected

A total of 100 agent questionnaires and 10 manager questionnaires were distributed to the two call centres. All the respondents met the criteria for inclusion in the population of interest, as defined in Chapter 4. The response rate from the questionnaire handed to agents was 82%, and the response rate from the managers was 90%.

All 82 questionnaires were filled in appropriately and were error free, therefore no questionnaires were rejected.



The data capture sheets were kept in a simple Excel format and can be found in Appendix 4 and Appendix 5. It must be noted that some respondents did not complete some questions in the questionnaire; this was taken into account while compiling the statistics. The missing data were merely demographics and not directly relevant to the proposal questions. The intention for the demographics was to create a fuller understanding of the sample population.

Reverse scoring was carried out on questions 5, 13, 18 and 19, as the questions were negatively phased. This was taken into account to ensure accuracy of the results.

5.3. Agent and manager gender

The ratio of females was higher than that of males; 59% of agents were female and 67% of the managers were female (Table 5-3), whereas 41% of the agents and 33% of the managers were male.

Table 5-3 Gender

		Account	Percent
Agent	Female	46	59%
	Male	32	41%
Manager	Female	6	67%
	Male	3	33%



The average duration that agents had been employed with the organisation is 45 months. This emphasises the perception of high turnover in this industry, as 52% had been employed for less than 24 months, and the longest tenure was 15 years. As for the managers, the mean duration was just under six years and the longest tenure was just over 13 years.

The average age for the agents was 26 years, as for the managers the average age was 29 years. The age and duration of employment has been noted, as the perceptions may differ by generation or length of service.

5.4. Intention to leave (ITL)

Chapter 1 argued that intention to leave was an effective means to analyse retention. From the results from this research project, 39.5% of agents have thought of leaving the current employer, 30.5% have not considered leaving the current employer recently, and 30% of the respondents failed to agree or disagree with the statements. This high ratio of respondents that chose not to respond can be interpreted as a response; this has been noted and will be discussed further in Chapter 6.

Table 5-4 Ratio of intention to leave

Q N#	Question	S/ Disagree	Disagree	Neither	Agree	S / Agree
4	I hardly ever think about leaving my current employer.	22 (27%)	21 (26%)	24 (29%)	9 (11%)	6 (7%)
8	It will take a lot for me to leave the company I currently work for.	21 (26%)	13 (16%)	28 (34%)	14 (17%)	6 (7%)
13	I have been looking for another job in the last 3 months	22 (27%)	17 (20%)	13 (16%)	16 (20%)	14 (17%)
17	I enjoy working at my present company	13 (16%)	7 (9%)	28 (34%)	25 (30%)	9 (11%)
24	I still want to work here next year	17 (20%)	9 (11%)	30 (36%)	15 (18%)	11 (15%)
	Totals	95 (23.5%)	67 (16%)	123 (30%)	79 (19%)	46 (11.5%)
		Disagree Percentage		Agree Percentage		
		39.50%		30.50%		

Analysing results of the questions individually in Table 5-4; question 4, i.e. “I hardly ever think about leaving my current employer”, only 18% of agents agreed with this statement; and 82% have considered leaving their current employer.

Question 8, “It will take a lot for me to leave the company I currently work for”, 34% were undecided, whereas 24% were satisfied with their employer and are committed.

Question 13, “I have been looking for another job in the last 3 months”, only



37% of employees have not considered resigning in the last three months, and the rest has been looking for other employment. Question 17, “I enjoy working at my present company”, 41% enjoy working at the current employer, whereas 59% do not. Question 24, “I still want to work here next year”, 37% still want to work at the current employer in the following year, 31% want resign in the next year and 36% are undecided.

Table 5-5 Intention to leave

Intent to leave						
Q N#	Agent question	Mean	Std Deviation	Manager question	Mean	Std Deviation
4	I hardly ever think about leaving my current employer.	2.439	1.208	I believe my agents hardly ever think about leaving their current employer.	2.444	1.014
8	It will take a lot for me to leave the company I currently work for.	2.646	1.240	It will take a lot for the agent to leave the company they currently work for.	2.666	1.118
13	I have been looking for another job in the last 3 months	2.793	1.463	I believe that some agents have been looking for another job in the last 3 months.	1.778	0.667
17	I enjoy working at my present company	3.122	1.211	I believe my agents enjoy working at the present company	3.000	1.000
24	I still want to work here next year	2.927	1.294	I believe most of my agents still want to work here next year	2.889	1.167
	Combined (factor 1) Intention to leave	2.785	0.977	Combined (factor 1) Intention to leave	2.555	0.780
	Wilcoxon score Rank sum test	Two sided Pr>(Z)		0.451		



The questions were grouped as a factor; “Intention to leave”, the mean for each question was ranked, and this mean was compared between managers and agents using a Wilcoxon ranks sum test. The p-value is then interpreted as significant or not significant; if $p > 0.05$ then the test is not significant and if $p < 0.05$ then the value is significant.

The p-value is 0,451, this is greater than the 0.05 significance level which is interpreted as that there is low confidence in the results. The managers’ perception of the agents’ intention to leave was lower than the agents’ mean. This was evident on all the individual survey questions in this grouped factor as the results were 2.785 for agents and 2.555 for managers.

5.5. Correlations between dependent and independent variables for the two groups

A Spearman correlation coefficient was conducted on the managers because N is relatively small. A Pearson correlation coefficient was conducted on the agents because N is large enough. Zikmund (2003) explains that a simple correlation coefficient is a statistical measure of association between two variables.

The correlation coefficient, r , ranges from +1.0 to -1.0. If the value of r is +1.0 there is a perfect positive linear relationship, and if the value of r is -1.0 there is a perfect negative linear relationship (Zikmund, 2003).



Table 5-6 Correlation interpretation table

Correlation interpretation table	
r	Rating
0.0	No correlation
0.2	Low correlation
0.5	Medium correlation
0.7	High correlation
1.0	Perfect correlation

5.5.1 Managers correlation

To understand the correlation of the of the managers’ perception against the management practices, a Spearman correlation coefficient was conducted because the number of respondents was nine. A p-value ≤ 0.05 confirms a significant correlation between variables, with an equal to or greater than 95% confidence level. If the p-value is > 0.05 there is no significance correlation.

The table below illustrates the correlation between factors in the manager’s survey. “Intention to leave” has high correlations with “call centre structure” (r is 0.722) and “performance management” (r is 0.844); the p-values are less than 0.05, justifying the significance. Furthermore, a significant correlation between communication and training & development was found as r was 0.670 and the p-value was 0.0484.

Table 5-7 Managers' correlation coefficient between factors

Managers survey results Spearman Correlation Coefficients, N = 9							
Prob > r under H0: Rho=0							
		Intention to leave	Communication	Call centre Structure	Performance Management	Recruitment & selection	Training & development
Intention to leave	r	1.000	0.236	0.722	0.844	0.048	0.373
	p	-	0.541	0.028	0.004	0.903	0.322
Communication	r	0.236	1.000	0.334	0.377	-0.035	0.670
	p	0.541	-	0.380	0.318	0.929	0.048
Call centre Structure	r	0.722	0.334	1.000	0.549	0.244	0.628
	p	0.028	0.380	-	0.126	0.528	0.070
Performance Management	r	0.844	0.377	0.549	1.000	0.353	0.612
	p	0.004	0.318	0.126	0.000	0.352	0.080
recruitment & selection	r	0.048	-0.035	0.244	-	1.000	0.538
	p	0.903	0.929	0.528	0.352	-	0.135
Training & development	r	0.373	0.670	0.628	0.612	0.538	1.000
	p	0.322	0.048	0.070	0.080	0.135	-

r = correlation coefficient

p or P-value = level of significance

5.5.2 Agents correlation

To understand the correlation of the agents' perception against the management practices, a Pearson correlation coefficient was conducted because the number of respondents was 82. Communication has the highest r value compared with the other factors.

The correlation is relatively high between communication and performance management; r is 0.712 and the p-value is < 0.001 . Communication has a moderate correlation with the intention to leave, recruitment & selection, and training & development.

There was a moderate correlation between training & development and performance management; r is 0.552 and the p-value is < 0.001 .

Table 5-8 Agents' correlation between factors

Agents survey results Pearson Correlation Coefficients, N = 82							
Prob > r under H0: Rho=0							
		Intention to leave	Communication	Call centre Structure	Performance Management	Recruitment & selection	Training & development
Intention to leave	r	1.000	0.580	0.212	0.355	0.293	0.389
	p	-	<.0001	0.056	0.001	0.008	0.000
Communication	r	0.580	1.000	0.405	0.712	0.500	0.537
	p	<.0001	-	0.000	<.0001	<.0001	<.0001
Organisational Structure	r	0.212	0.405	1.000	0.286	0.189	0.375
	p	0.056	0.000	-	0.009	0.089	0.001
Performance Management	r	0.355	0.712	0.286	1.000	0.466	0.552
	p	0.001	<.0001	0.009	-	<.0001	<.0001
Recruitment & selection	r	0.293	0.500	0.189	0.466	1.000	0.355
	p	0.008	<.0001	0.089	<.0001	-	0.001
Training & development	r	0.389	0.537	0.375	0.552	0.355	1.000
	p	0.000	<.0001	0.001	<.0001	0.001	-

r = correlation coefficient

p or P-value = level of significance

Noticeably, unlike in the managers' findings, other than communication, a low correlation was found between intention to leave and the other four independent variables.



5.6. Comparing the perceptions of agents with the managers

To compare the managers and agents, the Wilcoxon Scores Rank Sums test was applied. This is a non-parametric procedure and was used because normality could not be assumed as a result of the small number of managers in the sample group.

5.6.1 Agents', managers' means and Wilcoxon p-value

Table 5-9 Wilcoxon summary and P-value

The Wilcoxon rank-sum test is a non-parametric alternative to the two sample *t*-test which is based solely on the order of the observations from the two samples (Gibbons, 1993).

	Managers		Agents		Wilcoxon P Value
	Mean	STD Deviation	Mean	STD Deviation	
Intention to leave	2.556	0.780	2.785	0.977	0.4514
Communication	4.156	0.488	3.644	0.788	0.0491*
Call centre Structure	3.611	0.435	3.546	0.629	0.6004
Performance Management	3.852	0.556	3.667	0.903	0.8144
Recruitment & selection	3.278	0.592	3.476	0.671	0.4280
Training & development	4.133	0.469	4.063	0.608	0.9253



In Table 5.9 the agents' intention to leave is relatively low and the expectation of the managers for the agents to leave also is low. On a five point Likert's scale, the managers' perception of the agents is lower than the agents' expectation; 2.5 and 2.7 respectively.

Communication, and training & development for the managers' results are relatively highly correlated; both above 4.1, whereas in the agents' results only training & development was relatively high to agree with the statements.

The only significant difference between the means of the managers and the agents is with regards to communication, with a p-value of 0.0491, and this is below the 5% significance level.

5.6.2 Results to research Question 1, Communication

Do the managers and agents have a similar perception on call centre communication as a factor to improve retention?

The questions were grouped into the factor "communication". The mean for each question was ranked, and then the mean was compared between managers and agents using a Wilcoxon Ranks Sum test. (Table 5-10)

The managers' mean is 4.156 and agents' mean is 3.644, comparing the means between managers and agents with regards to communication as an independent factor. The p-value of 0.0491 suggests there is a significant

difference. The mean for the managers is higher than the agents and this is supported by the significance of the Wilcoxon p-value. This is the only Wilcoxon Sum test in this research that had a p-value less than 0.05 in comparison with the other factors tested.

Table 5-10 Survey results on communication

Communication						
Q N#	Agent question	Mean	p	Manager question	Mean	p
2	I feel well informed about what is happening within the company.	3.292	1.150	I believe I keep my agents are well informed with regards to what is happening in the company.	4.111	0.601
9	I receive formal feedback from my manager/supervisor	3.629	0.927	I always give formal feedback to my agents.	4.222	0.667
14	My superior listens to what I have to say	3.658	1.158	I actively listen to my agents.	4.111	0.601
16	There is open communication with myself and my superior	3.914	1.032	There is open communication with myself and my subordinates	4.000	1.000
23	Supervisors and management keep me informed about the issues affecting my work.	3.719	1.033	I believe I keep my agents are well informed about all issues affecting their work.	4.333	0.707
	Combined (factor 2) Communication	3.644	0.788		4.156	0.488
Wilcoxon score Rank sum test		Two sided Pr>(Z)		0.049 *		
* significant at the 5% level						

5.6.3 Results to research Question 2, Call centre structure

Do the managers and agents have a similar perception on call centre structure as a factor to improve retention?

Table 5-11 Survey results on call centre structure

Call centre Structure						
Q N#	Agent question	Mean	p	Manager question	Mean	p
1	I receive informal feedback from my manager/ supervisor often.	3.390	1.130	I often give informal feedback to my agents.	4.000	0.707
5	I do believe that there are too many levels of supervision between agents and decision makers.	2.865	1.331	I do believe that there are too many levels of supervision between agents and decision makers.	3.000	0.707
19	I believe that there is too little supervision in the call centre.	3.768	1.157	I believe that there is too little supervision in the call centre.	3.778	0.441
26	I have a clear reporting structure, and know who I report to.	4.158	0.974	Agents have a clear reporting structure to be managed.	3.667	1.658
	Combined (factor 3) Organisational Communication	3.545	0.628		3.611	0.435
Wilcoxon score Rank sum test		Two sided Pr>(Z)		0.600		

The table above shows the individual question rating and significance the



following was found. The managers' mean for call centre structure is 3.611, whereas the agents' mean is 3.546 when comparing the means between managers and agents with regards to call centre structure. These independent factors have no statistical significance between the means as the p-value is 0.6004; only if the p value is less than 0.05 would this have been significant.

The managers have a slightly higher expectation than the agents in respect of call centre structure but do not have a high confidence level.

5.6.4 Results to research Question 3, performance management

Do the managers and agents have a similar perception on call centre performance management as a factor to improve retention?

The managers' mean is 3.852 and the agents' mean is 3.667, comparing the means between managers and agents with regards to performance management. Comparing these means, there is no statistical significant difference between the means as the p-value is 0.814. This is interpreted that the difference is not significant between the agents and managers, even if the manager tends to agree more than the agents.

Table 5-12 Survey results on performance management

Performance Management						
Q N#	Agent question	Mean	p	Manager question	Mean	P
3	My superior sets clear goals for me.	3.487	1.269	I believe I set clear goals for my agents.	4.000	0.707
6	My superior and I discuss the results I am expected to achieve.	3.890	1.018	I discuss the results I expect with my agents.	4.000	0.866
12	I believe my superior hires employees with skills that help the team succeed.	3.621	1.061	I believe I hire employees with skills that help the team succeed.	3.556	1.130
	Combined (factor 3) Organisational Communication	3.667	0.902		3.852	0.556
Wilcoxon score Rank sum test		Two sided Pr>(Z)		0.814		

5.6.5 Results to research Question 4, Recruitment & selection

Do the managers and agents have a similar perception on call centre recruitment as a factor to improve retention?

The mean and standard deviation is compared between agents' and managers' questions. The questions are grouped into recruitment and selection as factor 5, and the Wilcoxon ranks sum p-value is evaluated against $p > 0.05$.

The managers' mean is 3.277 and agents' mean is 3.476, comparing the means between managers and agents with regards to recruitment and selection, as an independent factor. The Wilcoxon p-value is 0.428; this is once again far greater than the 0.05, which suggests the difference is not significant.

Table 5-13 Survey results on recruitment & selection

Recruitment and Selection						
Q N#	Agent question	Mean	p	Manager question	Mean	P
7	I believe that the recruitment method and process used to employ me was effective	3.768	1.136	I believe that the recruitment method and process used to employ agents is effective	3.111	1.054
10	I believe that the management process to recruit my fellow agents is effective.	3.341	1.021	I believe that the management process used to employ agents is effective	3.222	0.972
18	Before I started as a call centre agent I thought this job to be simple.	2.939	1.289	The agents do not realize the difficulty of the job until they have been here for some time.	2.778	0.833
21	I have a good professional work relationship with my manager.	3.853	1.031	I have good professional work relationship with my agents.	4.000	0.866
	Combined (factor 2) Communication	3.476	0.671		3.277	0.592
* SD = standard deviation						
Wilcoxon score Rank sum test		Two sided Pr>(Z)		0.428		



5.6.6 Results to research Question 5, Training & development

Do the managers and agents have a similar perception on training as a factor to improve retention?

The managers mean is 4.133 and the agents mean is 4.063, comparing the means between managers and agents considering training and development as an independent factor. Comparing these means, this independent factor does not have a statistical significant difference between the means as the p-value is 0.9253; this is far greater than the 0.05 level.

Training & development has a positively high mean, above 4 which means that the respondents strongly agree with the statement regarding the importance of training and development, as seen in the following table.

Table 5-14 Survey results on training and development

Training & development						
Q N#	Agent question	Mean	p	Manager question	Mean	P
11	I support and agree that induction training should be conducted for all new call centre agents	4.451	0.833	I support and agree that induction training should be conducted for all new call centre agents	4.778	0.441
15	I support and agree that Skills training should be conducted continually with all call centre agents	4.451	0.848	I support and agree that skills training should be conducted continually with all call centre agents	4.444	0.527
20	My company offers me access to work related training	3.560	1.078	My company offers all agents access to work related training	3.222	1.394
22	My supervisors and manages support me in attending training to develop new skills.	3.560	1.080	I believe that I support my agents in attending training to develop new skills.	4.111	1.054
25	I support and agree that product training should be conducted continually with all call centre agents	4.292	0.975	I support and agree that product training should be conducted continually with all call centre agents	4.111	0.333
	Combined (factor 2) Communication	4.063	0.608		4.133	0.469
Wilcoxon score Rank sum test		Two sided Pr>(Z)		0.925		



5.6.7 Results to research Question 6: Best predictor

“To identify which of the five factors has the greatest influence of Intention to leave based on managers and employee’s perception.”

5.6.7.1 Analysis using a stepwise regression r-squared

Regression analysis was used to obtain an indication of the best predictor for the intention to leave. Regression is a technique for measuring the linear association between dependant and independent variables (Zikmund, 2003).

When all the independent variables are put into the model, the relationship is significant but not strong; r square = 0.3607. This means that 36% of the variation in the dependent factor (intention to leave) can be explained by the independent variable.

In Table 5-8, the Pearson correlation indicated that communication has the highest influence on the dependant variable; this is supported by the regression analysis where communication has the highest parameter estimate, seen in Table 5-15.

Table 5-15 Regression analysis of the five practices

Regression Parameter Estimates					
Variable	DF	Parameter	Standard	t Value	Pr > t
		Estimate	Error		
Intercept	1	-0.1896	0.7269	-0.2600	0.7949
Communication	1	0.7891	0.1781	4.4300	<.0001
Call centre Structure	1	-0.0901	0.1596	-0.5600	0.5739
Performance Management	1	-0.1913	0.1496	-1.2800	0.2047
Recruitment & selection	1	0.0156	0.1572	0.1000	0.9214
Training & development	1	0.2625	0.1873	1.4000	0.1650

Training & development would be the next positively highest parameter estimate, but not significantly. Call centre structure and performance managements have a negative relationship, whereas communication, recruitment and selection and training and development have a positive relationship, with the intention to leave.

Communication shows that the Pr-value is <.0001 and t is 4.4300. .

5.6.7.2 Stepwise regression

Stepwise regression finds the best combination of matching variables to predict the dependent variable. From the results in Tables 5-15 and 5-16 it shows that communication, factor 2, is that independent variable. The parameter estimate

is 0.7197 and standard error is 0.11295.

Table 5-16 Stepwise selection results

Step Wise selection					
Variable	Parameter	Standard	Type II SS	F Value	Pr > F
	Estimate	Error			
Intercept	0.16477	0.42096	0.09819	0.15	0.6965
Communication	0.71917	0.11295	25.98567	40.54	<.0001

All variables left in the model are significant at 0.1500 levels. No other variable met the 0.1500 significance level for entry into the model. The partial r-squared for communication realised 0.3363 (or 33%), and compared with the r-squared of 0.3607, it is the best predictor of factor one (Table 5-17).

Table 5-17 Stepwise summary

Summary of Stepwise Selection							
Step	Variable	Number	Partial	Model	C(p)	F Value	Pr > F
	Entered	Vars In	r-Square	r-Square			
1	Communication	1	0.3363	0.3363	0.897	40.54	<.0001

5.7. Conclusion

The programme used to calculate the statistical findings was:

SAS Institute Inc. 2004.

Base SAS 9.1.3 Procedures Guide,

Volumes 1, 2, 3 and 4.

Cary, NC: SAS Institute Inc.

All results from SAS can be found in Appendix 6 to 10.

Credibility for this research process was achieved through standardisation and consistency of the data analysis methodology.

When coding the results of the survey the researcher had to take in to consideration that questions 1, 13, 18, and 19 needed to be in reverse scored as the questions were articulated in reverse.

This chapter contains the results defined in Chapter 4 regarding the research questions in Chapter 3, based on the survey carried out. The discussion set out in Chapter 6 is an interpretation and critical analysis of the findings.



Chapter 6. Discussion of results

6.1. Introduction

In Chapter 6 the results are discussed in terms of the research questions and the literature reviewed. This chapter provides insight into the findings in terms of the context of the study and in light of the theory base. It indicates that the research objective has been met.

The research results discussed in this chapter contribute to enhance the understanding of the management principles that support retention of call centre agents in South Africa, specifically the five management principles. The discussion is an interpretation and critical analysis of the findings of the research set out in Chapter 5 and the literature discussed in Chapter 2 relating to the findings of the research. It supports what may be concluded as a response to the research questions.

In this Chapter the difference between the means of the factors in the survey can be demonstrated. The perceptions are relatively similar; however the independent variable perception of communication is significantly different between managers and agents.

The figure below illustrates the scoring of the respondents, taking the mean of all the factors between managers and agents. All the mean responses agreed with the statement given. The figure also illustrates that the expectations are

different between agent and manager.

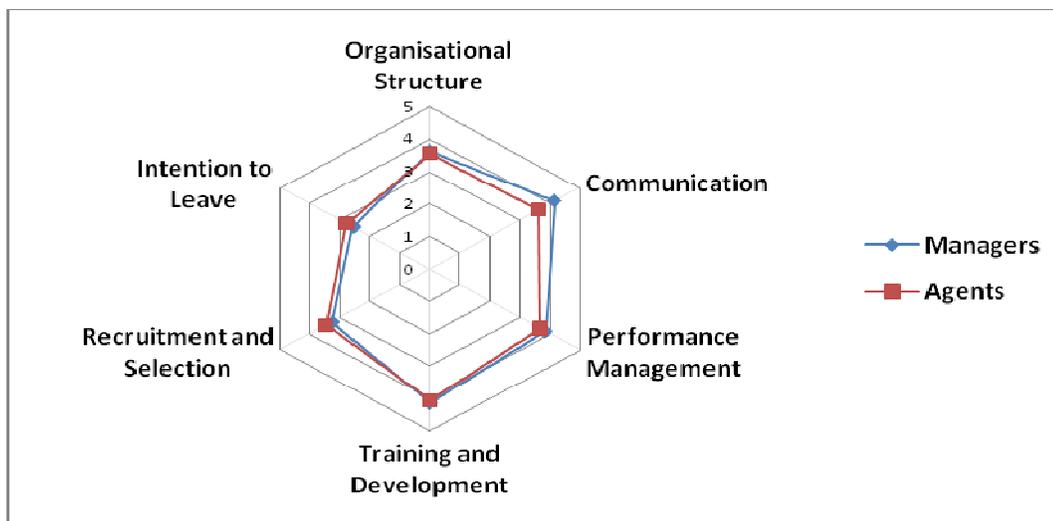


Figure 6.1 Radar diagram on dependent variables

6.2. Overview on the intention to leave (ITL), for inbound call centres in South Africa

Employee retention strategies are a key study area within HRM. Most of the literature related to management practices is found within the HRM framework. Intention to leave, as mentioned in Lee, Mitchell *et al.* (1999), is the best way to predict turnover or retention.

Table 5-4 in Chapter 5 shows that 39.5% of the agents have considered leaving the current employer, and 47% have thought of leaving the current employer within the past three months. These figures are relatively high, but consider that the call centre industry would be satisfied with 30%, where other industries



would find this alarmingly high (Gross, 2005).

It was noted in Chapter 5 that the high ratio of respondents that chose not to respond can actually be interpreted as responses. If an agent was not intending to leave, why would he/she not state that he/she was intending to stay? This assumption would increase the percentage for intention to leave from 39.5% to 69.5%.

McMullock (2004) predicted the call centre industry turnover to be 45%. The intention to leave in the call centres where the researcher collected data was as high as 69.5%. This confirms the perception that call centre agents' churn is high. The average time employees have been employed with the same employer was 45 months, more than half had been there only 24 months, and below 70% had the intention to leave. These statistics are very high considering the costs incurred for replacing employees, as explained in Chapter 2.

The managers' perception of the agents' intention to leave is lower than the agents' perception. This result indicated that the managers believe that they are satisfying the needs of their agents, but comparing the data with the agents perception this is not the case. The managers need to reassess their perceptions. This difference is not significant as the p-value is 0,451, i.e. greater than the 0.05 level.



With regards to question 13, where the question asked if the agent had looked for another job in the last three months, the managers' perception was very low compared with the agents', the difference is between 1.778 and 2.793 respectively, as 53% of the respondents had considered leaving within the last three months.

It is interesting to note in the data for the means for "Intention to leave" on an individual question level (Table 5.4), that 82% of the employees have considered leaving at some point, 63% of the employees do not want to be working at the current employer in the next year, and 53% have considered leaving in the past 3 months! For those 76% of employees, it would not take much for them to be convinced to leave the current employer.

Table 6-1 Intention to leave

Question 13			
I have been looking for another job in the last 3 months			
Agents	Agents	Managers	Managers
Mean	Std Deviation	Mean	Std Deviation
2.793	1.463	1.778	0.667

More than half of the agents have considered leaving in the last three months. If one considers the difference between the managers and agents, the managers believe that their agents do not consider leaving.

Based on a 5-point Likert scale, the managers are one point out on the expectations of their agents; this perception error shows that the managers do not know or understand their agents.

6.2.1 Managers and agents variable correlation

Table 6-2 illustrates the correlation between intention to leave and the other five dependant variables. The table separates agents and managers.

Table 6-2 Correlation between agents and managers

Managers and Agents Correlation Coefficients for							
Intention to leave							
		Intention to leave	Communication	Call centre Structure	Performance Management	Recruitment & selection	Training & development
Managers Spearman Correlation Coefficients	r	1.000	0.236	0.722	0.844	0.048	0.373
	P	-	0.541	0.028	0.004	0.903	0.322
Agents Pearson Correlation Coefficient	r	1.000	0.580	0.212	0.355	0.293	0.389
	P	-	<.0001	0.056	0.001	0.008	0.000

6.2.1.1 *Managers*

A high correlation was evident between the dependant variable “intention to leave” and two independent variables; “call centre structure” and “performance



management” (r is 0.722 and 0.844 respectively).

The p-values are less than 0.05 (p-values are 0.028 and 0.042 respectively) confirming the correlation between the two factors with a 95% confidence level, as identified by Moss, Salzman *et al.* (2008) and MacBeath (2008). Moss referred to organisational structure and MacBeath referred to performance management, both correlated towards the intention to leave.

Other variables that were highly correlated were “communication” and “training and development”. This correlation was explained by the need for formal communication practices, as mentioned in articles by Johnson, Donohue *et al.* (1994) and Yates (2006). Training, development and education are based on the formal practice of communication, whereas coaching and mentoring could be viewed as informal communication.

6.2.1.2 Agents

The agents’ correlation between variables is significantly different from the managers’ correlation.

Two main correlations were noted, the first noticeable correlation is between “communication” and four of the variables which are “intention to leave”, “Performance management”, “recruitment & selection” and “training & development”.



This is evident in the literature in Chapter 2, these three management practices, would have a direct influence on retention, (Holman, Wood *et al.*, 2005, Cross, Barry *et al.*, 2008, Burchman and Schmitt, 2001)

The second relationship to be discussed is the moderate correlation between; training & development and performance management. This is due to training having a direct influence on performance management. The best way to evaluate training is by measuring performance after the training.

6.2.2 Comparing the agents with the managers

The scores for the table below can be interpreted as; the managers scored the questionnaire on average higher than those of the agent. This would mean that managers have a higher expectation or they are not totally in touch with the agents' intentions and perceptions to resign.

6.3. Research questions

6.3.1 Discussion for Research Question 1, Communication

Do the managers and agents have a similar perception on call centre communication as a factor to improve retention?

The results using Wilcoxon rank sum tests justifies that the p-value is less than the 0.05 significance level. The finding does not support the research question that managers and agents have the same perception with regard to



communication. The perception of the managers is that their communication is more effective and adequate than the agents actually acknowledge, Agents agree that communication is effective but not at the same level as the managers believe. The correlation between communication and Intention to leave as mentioned earlier means that if there is a difference in perception or expectation and needs to be aligned my management and the organisation. Yates (2006) in the Watson Wyatt report added the eight effective communication areas, as discussed in Chapter 2. ,

This gap in communication is compounded as the other three independent variable performance management, recruitment & selection and training & development, have some level of correlation with communication as discussed later in this chapter.

Communication as a management practice carries the highest contribution towards a retention practice, compared to the other practices identified in the research project. It must be noted that the other factors are also dependant in the effectiveness of communication for their individual contribution as management retention practices.

Table 5-10 in Chapter 5, shows that the managers' means is 4.156 and agents' means is 3.644, comparing the means between managers and agents with regards to "Communication" as an independent factor. The two means differ, where the p-value is 0.0491, which means the difference is significantly at the

0.05 level.

The following table compares the correlation for managers and agents where a Spearman correlation coefficient was used for the managers and a Pearson correlation coefficient for the agents was used.

Table 6-3 Managers and agents correlation coefficient for communication

Managers and Agents Correlation Coefficients for Communication							
		Intention to leave	Communication	Call centre Structure	Performance Management	Recruitment & selection	Training & development
Managers Spearman Correlation Coefficients	r	0.236	1.000	0.334	0.377	-0.03493	0.66975
	P	0.541	-	0.380	0.318	0.929	0.048
Agents Pearson Correlation Coefficient	r	0.580	1.000	0.405	0.712	0.500	0.537
	P	<.0001	-	0.000	<.0001	<.0001	<.0001

The stepwise regression found communication as the best predictor for intention to leave, which is supported by Luss and Nyce (2004) who state that organisations have a 50% better chance in reducing turnover if they communicate effectively with their employees, both formally and informally.



6.3.2 Discussion for Research Question 2, Call centre structure

Do the managers and agents have a similar perception on call centre structure as a factor to improve retention?

The call centre structure, or organisational structure, is a supporting practice to the other management practices. It creates processes, levels of communication and a span of control, as suggested by Bozionelos (2008) and Patacconi (2009). As the data show, using a Wilcoxon Rank Sum test, there is no significant correlation in the results. The findings support the research question that managers and agents have the same perception with regards to call centre structure for this factor, where the p-value is 0.6004.

The managers' mean for call centre structure is 3.611, and the agents' mean is 3.546. The managers have a slightly higher expectation than the agents in respect of call centre structure, but it is not significant.

The literature in Chapter 2 supports the view that call centre structure create the environment for effective management practices to be carried out.

In the correlation between “call centre structure” and “intention to leave”, seen in the table below, is low for the agents, whereas for the managers the correlation is higher with a confidence level of 97.2% ($r = 0.212$, $P = 0.056$ for agents and $r = 0.722$, $P = 0.028$ for managers).

Table 6-4 Manager and agent correlation coefficient for call centre structure

Managers and Agents Correlation Coefficients for Call centre Structure							
		Intention to leave	Communication	Call centre Structure	Performance Management	Recruitment & selection	Training & development
Managers Spearman Correlation Coefficients	r	0.722	0.334	1.000	0.549	0.24367	0.62766
	p	0.028	0.380	-	0.126	0.528	0.070
Agents Pearson Correlation Coefficient	r	0.212	0.405	1.000	0.286	0.189	0.375
	p	0.056	0.000	-	0.009	0.089	0.001

Managers should have a better understanding of the organisation and its structure. The other factors were not significant against the p value, thus the correlations are not discussed.

6.3.3 Discussion for Research Question 3, Performance management

Do the managers and agents have a similar perception on call centre performance management as a factor to improve retention?

The findings support the research question that managers and agents have the same perception with regards to performance management. The managers' mean is 3.852 and agents' mean is 3.667, comparing the means between managers and agents with regards to performance management as an



independent factor.

Comparing these means, this independent factor has no statistical significant difference between the means as the p-value is 0.814; this is far greater than the 5% level, even if the manager is likely to agree more than the agents.

Deckop, Konrad *et al.* (2006) proposed that performance appraisals had a negative relationship on retention. MacBeath (2008) suggested performance management and policies reduce the intention to leave. Table 6-5 confirms this view as the correlation between intention to leave and performance management is high; with the managers there seems to be a high correlation between the two, compared with the same factor for the agents which is low ($r = 0.844$, $P = 0.004$ for the managers and $r 0.355$, $P = 0.001$ for the agents).

Table 6-5 Manager and agent correlation coefficient for performance management

Managers and Agents Correlation Coefficients for Performance Management							
		Intention to leave	Communication	Call centre Structure	Performance Management	Recruitment & selection	Training & development
Managers Spearman Correlation Coefficients	r	0.844	0.377	0.549	1.000	0.353	0.612
	p	0.004	0.318	0.126	0.004	0.352	0.080
Agents Pearson Correlation	r	0.355	0.712	0.286	1.000	0.466	0.552
	p	0.001	<.0001	0.009	-	<.0001	<.0001



A second correlation coefficient is evident for the agents between communication and performance management ($r = 0.722$ where $p < 0.001$). This view is supported Grobler and Warnich (2005) where they argue that performance management tools would improve communication.

6.3.4 Discussion for Research Question 4, Recruitment & selection

Do the managers and agents have a similar perception on call centre recruitment & selection as a factor to improve retention?

The research question that managers and agents have the same perception with regards to recruitment & selection was agreed. The data indicated no correlation between the means of the agents and managers. The managers' means is 3.277 and agents' mean is 3.476, comparing the means between managers and agents with regards to recruitment & selection as an independent factor. The p-value is 0.428 justifies the agreement with the research question. Interestingly, authors have argued that recruitment & selection which is poorly carried is to blame by both employee and employer (CIPD, 2008) .

Table 6-6 Managers' and agents' correlation coefficient for recruitment and selection

Managers and Agents Correlation Coefficients for Recruitment and development							
		Intention to leave	Communication	Call centre Structure	Performance Management	Recruitment & selection	Training & development
Managers Spearman Correlation Coefficients	r	0.048	-0.035	0.244	0.352	1.000	0.538
	p	0.903	0.929	0.528	0.352	-	0.135
Agents Pearson Correlation Coefficient	r	0.293	0.500	0.189	0.466	1.000	0.355
	p	0.008	<.0001	0.089	<.0001	-	0.001

The agents' correlation in terms of recruitment & selection, and the other factors, is moderately correlated with communication and performance management; in both cases the ratio is significant. Communication's correlation coefficient was 0.500 and performance management was 0.466; both p-values were less than 0.001.

Rioux and Bernthal (1999) and Analoui (2007) both suggest the importance of effective recruitment & selection and initiatives to attract the best candidates. Huselid (1995) agrees that the attributes of recruitment & selection and performance management aid retention. Noticeably the managers' Spearman coefficient has a negative correlation, but this value is so close to zero it can be said that there is no correlation.



Interesting, for the managers' results either the correlation was low or there was no confidence in the data. This result seems strange as there was no significant correlation from the managers' view, yet many articles in the literature note the importance of recruitment & selection as predictor of intention to leave (Doshi, 2002; Moss *et al.* 2008; Burchman & Schmitt, 2001; Analoui, 2007).

6.3.5 Discussion for Research Question 5, Training & development

Do the managers and agents have a similar perception on training & development as a factor to improve retention?

Umiker (1994) discusses how employees believe that training boosts morale, enhances motivation and improves retention, where as Deckop *et al.* (2006) found that training has no relationship on retention.

In this research project the result confirms the findings which support the research question that managers and agents have the same perception with regards to training & development. The managers' mean is 4.133 and agents' mean is 4.063, comparing the means between managers and agents with regards to training & development as an independent factor. Comparing these means, this independent factor has no statistical significance as the p-value is 0.9253, this is far greater than the 5% level.

Training & development has a positively high mean, above 4; this was the

highest value across all factors tested. This finding is strongly supported by Witty (2009) who ranks training & development as one of the most important predictors of retention.

Table 6-7 Management and agents correlation coefficient for training and development

Managers and Agents Correlation Coefficients for							
Training & development							
		Intention to leave	Communication	Call centre Structure	Performance Management	Recruitment & selection	Training & development
Managers Spearman Correlation Coefficients	r	0.373	0.670	0.628	0.612	0.538	1.000
	p	0.322	0.048	0.070	0.080	0.135	-
Agents Pearson Correlation	r	0.389	0.537	0.375	0.552	0.355	1.000
	p	0.000	<.0001	0.001	<.0001	0.001	-

From a managerial point of view, training & development has a moderate correlation across all factors, but only communication is significant; the others have no significance as the p value is above the confidence level. As for the agents' correlation, all the factors were significant; intention to leave, recruitment & selection, and call centre structure have a low correlation, whereas communication and performance management have a moderate correlation. Ray (2006) supports this argument, as he believes that training is a



key component to successful staff retention.

6.3.6 Discussion for Research Question 6, Best predictor

To identify which of the five factors has the greatest influence of Intention to leave based on managers and employee's perception?

A stepwise regression was conducted, where communication was noted as the best predictor for intention to leave. The correlation coefficient (or r) was 0.33. The total correlation coefficient for all constructs was 0.36; this means that the five management principles combined influence the intention to leave by 36%, and communication on its own influences intention to leave by 33%.

This clarifies why the parameter estimate for communication value is 0.7891; the parameter is significant considering the p value is less than 0.001. This is a linear association between dependant and independent variables, as suggested by Zikmund (2003).

Table 6-8 Regression parameter estimates

Regression Parameter Estimates					
Variable	DF	Parameter	Standard	t Value	Pr > t
		Estimate	Error		
Communication	1	0.7891	0.1781	4.4300	<.0001



Table 6-9 Comparison between agents and managers

	Managers		Agents		Wilcoxon p-Value
	Mean	STD Deviation	Mean	STD Deviation	
Intention to leave	2.556	0.78	2.785	0.977	0.4514
Communication	4.156	0.488	3.644	0.788	0.0491*
Call centre Structure	3.611	0.435	3.546	0.629	0.6004
Performance Management	3.852	0.556	3.667	0.903	0.8144
Recruitment & selection	3.278	0.592	3.476	0.671	0.428
Training & development	4.133	0.469	4.063	0.608	0.9253

* Significant at the 5% level

The notable difference is between the mean scores of the managers and the agents with regards to communication; the difference is confirmed as significant by the p-value of 0.0491. This could mean that managers and agents have different expectations with regards to communication, poor communication leading to job dissatisfaction. Job satisfaction is a major contributor to the retention of employees, as agreed by many authors (Petrescu & Simmons, 2008; Hellman, 1997; Price, 2001; Tett & Meyer, 1993; Trevor, 2001).



6.4. Conclusion of discussion

The research objective outlined in Chapters 3 has been met and the findings contribute to the existing body of knowledge, specifically with regards to management practices that support retention in call centres. . This chapter interpreted the results and related them to the literature discussed in Chapter 2.

Chapter 4 explained the research methodology of the project, and Chapter 5 noted the results. The findings support the perspectives noted in the literature presented, the implications of which are discussed further in Chapter 7.

Communication between managers and agents was found to have the greatest influence on retention in inbound call centres. Interestingly, the perceptions of managers and agents regarding the four practises were similar, with the exception of communication where it was found that managers believe that they communicate sufficiently and effectively with their agents. This is contrary to the agent's perception.



Chapter 7. Conclusion and recommendations

7.1. Introduction

Chapter 1 of this research report defined the problem of retaining call centre agents. Against this back ground the problem checked the perceptions of management practices. Specifically, the goal of this research was to identify the perception of the management practices that should be focused on, by organisations in order to increase retention in call centres in South Africa. This chapter will summarise the findings, define recommendations to stake holders and identify future research recommendations.

7.2. Review of research back ground and objectives

The literature emphasises the importance of the management practices as a key contributor to retain and reduce turnover in call centre agents. Voluntary turnover of employees has a negative influence on profit and productivity. There are many management practices carried out by managers that positively influence the retention of employees. The objective of this research was to find out if the five independent variables had an influence on retention and lastly which variable has the highest influencing attributes to increase retention.

The five independent variables in consideration were communication, call centre structure, performance management, recruitment & selection and training & development.



7.3. Research findings

Results from the surveys given to the two call centres showed that communication has a very high influence on retention of call centre agents. The level of communication is based on all the aspects of communication; verbal and non verbal communication, formal and informal communication as the grounding of a relationship that is created between managers and agents.

This research further shows that the perception between managers and call centre agents differs to the extent that managers believe that sufficient communication is made to keep call centre agents satisfied, so agents have no desire to seek other employment.

The research acknowledges correlation between three different combinations. Firstly, communication and training & development, secondly communication and performance management and lastly, communication and intention to leave.

Should there be poor communication, agents have no ambition to work harder or increase on their performance, nor would they commit to training and development and they would not want to contribute towards further communication in the company. This becomes a vicious circle, and ultimately the agent resigns. In contrast should the communication be more effective, the agents would contribute more and productivity would increase creating a



virtuous circle on retention.

7.4. Recommendations for stake holders

Considering the findings regarding the practise of communication and the parity in the perception between managers and agents. Communication influences many aspects of an organisation, including the efforts to support retention as discussed in this research project.

Organisations should recognise the importance of communication as a vital element in their environment, understanding and eliminating of limitations and barriers that hinder the process of effective communication. Robbins and Judges (2007) identified barriers for effective communication, he adds that communication has four functions; control, motivation, emotional expression and information.

Organisations should create the environment for this healthy communication culture to thrive.

Managers at all levels need to understand the effect of communication; they need to ensure that the employee's communication needs are met as this creates dissatisfaction and intention to leave.

Agents need to be made aware of the organisational expectation of communication and have channels where communication can flow both ways.



Some companies use staff satisfactory surveys, to identify possible future problems or mis-expectations. Communication needs should be incorporated in to this survey.

7.5. Recommendations for future research

In view of this research here are future research suggestions:

- There is a valuable need to understand how communication supports retention of employees. In all aspects such as; the formal or informal, the verbal or nonverbal, oral or written, the channel or the type of network of communication.
- How can organisations create the environment for communication to be most effective, what can companies do to embrace this as a retention strategy?
- The research covered inbound call centres, will the findings be similar to out bound call centres? With the possibility of covering knowledge workers
- The current research found that the five variables influenced an agents' intention to leave by 36 %, which other variables would influence the other 64%?
- The research noticed a difference of opinion in the response dependant on the age and or duration of service of the agents, how different should the approach of communication be between agents where age and



length of service as a variable, considering the generation categories.

7.6. Conclusion

This research has questioned some of the accepted literature in areas of retention and the five management practises, while at the same time confirming other aspects of literature. The findings have contributed to the body of knowledge through offering a better perspective of communication as a retention practise. Given this knowledge, organisations and managers are well positioned to direct their focus to specific management practises identified in the research which will assist them in retaining call centre agents.



Reference list

Allen, D.G. (2008) Retaining Talent. *SHRM Foundation's effective Practice Guidelines Series*, 6th Report, 1-14.

Analoui, F. (2007) *Strategic human resource management*, United Kingdom, International Thomson Business Press.

Atkinson, J. (2006) Firms that train have best retention rates. *Contract Journal*, 433, 6-6.

Baker, G. (2002) Heroes in headsets. *NZ Business*, 16, 35.

Borstorff, P.C., Marker, M.B. (2007) Turnover Drivers and Retention Factors Affecting Hourly Workers: What is Important? *Management Review: An international Journal*, Vol 2, 14-27.

Bozionelos, N. (2008) Improving Employee Motivation and Retention in Call Centres: Is Adding Layers the Answer? *Academy of Management Perspectives*, 22, 114-116.

Brown, J. S. & DUGUID, P. (1991) Organizational learning and communities-of-practice: Toward a unified view of working, learning, and innovation. *Organization science*, 2, 40-57.

Buckingham, M. C. (1999) How great managers develop good people. *Workforce*, 102.

Buford, S.C. (2006) Linking Human Resources to Organizational Performance



and Employee Relations in Human Services Organizations: Ten HR Essentials for Managers. *International Journal of Public Administration*, 29, 517-523.

Burchman, S., Schmitt, D. (2001) In the centre: understanding the costly threat of agent turnover. *Call centre management review*, 15-17.

Cappelli, P. (2000) Managing without commitment. *Organizational Dynamics*, 28, 11-24.

Cappelli, P. (2008) *Talent on demand: managing talent in an age of uncertainty*, Harvard Business Press.

Carzo Jr, R. (1963) Some effects of organization structure on group effectiveness. *Administrative Science Quarterly*, 393-424.

Carzo Jr, R., Yanouzas, J.N. (1969) Effects of flat and tall organization structure. *Administrative Science Quarterly*, 178-191.

CIPD (2008) Annual survey report: 2008: Recruitment, retention and turnover.

Costa, J. (2008) Are you running a toxic call centre? *Call Centre Contact*, 49-51.

Cross, C., Barry, G. & Garavan, T. N. (2008) The Psychological Contract in Call Centres: An Employee Perspective. *Journal of Industrial Relations*, 50, 229.

Davenport, T.H. (2005) *Thinking for a living: How to get better performance and results from knowledge workers*, Harvard Business School Pr.



DDI_WORLD (2003) Reducing turnover. Development Dimensions International.

Deckop, J.R., Konrad, A.M., Perlmutter, F.D., Freely, J.L. (2006) The effect of human resource management practices on the job retention of former welfare clients. *Human Resource Management*, 45, 539-559.

DELERY, J.E., DOTY, D.H. (1996) Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *Academy of Management journal*, 802-835.

Doshi, M. (2002) How call centres can combat attrition. IT people evolve.

Gaffney, S. (2005) Career development as a retention and succession planning tool. *Journal for Quality and Participation*, 28, 7.

Gans, N., Koole, G., Mandelbaum, A. (2003) Telephone call centres: Tutorial, review, and research prospects. *Manufacturing and Service Operations Management*, 5, 79-141.

Gibbons, J.D. (1993) *Nonparametric statistics: An introduction*, Sage Publishers.

Glass, A. (2007) Understanding generational differences for competitive success The Authors. *Industrial and Commercial Training*, 39, 98-103.

Grobler, P., Warnich, S. (2005) *Human resource management in South Africa*, Thomson Learning.



Gross, A. (2005) Is Your Turnover Rate Only 30%? *Call Center Magazine*, 18, 48-48.

Hay, M. (2002) Strategies for survival in the war of talent. *Career Development International*, 7, 52-55.

Hellman, C.M. (1997) Job Satisfaction and Intent to Leave. *Journal of Social Psychology*, 137, 677-689.

Hemdi, M.A., NASURDIN, A.M. (2007) Investigating the Influence of Organizational Justice on Hotel Employees' Organizational Citizenship Behaviour Intentions and Turnover Intentions. *Journal of Human Resources in Hospitality & Tourism*, 7, 1-23.

Hillmer, S., Hillmer, B., McRoberts, G. (2004) The Real Costs of Turnover: Lessons from a Call Centre. *Human Resource Planning*, 27, 34-42.

Holman, D., Wood, S., Stride, C. (2005) *Human resource management in call centres*, Institute of Work Psychology.

Huselid, M.A. (1995) The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management journal*, 635-672.

Jassim, R.K., Jaber, G. (1998) Competitive Advantage Through the Employees. *Research paper, University of Auckland New Zealand*.

Johnson, J.D., Donohue, W.A., Atkin, C.K., Johnson, S. (1994) Differences between formal and informal communication channels. *Journal of business communication*, 31, 111.



Lee, T.W., Mitchell, T.R., Holtom, B. C., McDaniel, L.S., Hill, J.W. (1999) The unfolding model of voluntary turnover: A replication and extension. *Academy of Management Journal*, 450-462.

Leedy, P.D., Ormrod, J.E. (2005) *Practical research: Planning and design*, Upper Saddle River: Pearson Education Inc.

Luss, R., Nyce, S. (2004) Connecting organizational communication to financial performance—methodology behind the 2003/2004 communication ROI study. Washington: Watson Wyatt.

MacBeath (2008) Recruitment and retention: the quest for the right talent. Grant Thomas, International Business report.

Maertz, C., Campion, M., Cooper, C.L., Robertson, I. T. (2001) *Personnel Psychology and Human Resource Management*. New York: John Wiley.

Mashatola, P. (2003) Factors that influence turnover and retention of call centre agents. Johannesburg: University of Witwatersrand.

McMullock, M. (2004) The low turnover contact centre. Hartford: LIMBRA.

Michaud, L. (2000) The Value of retaining employees. *Agency Sales Magazine*.

Moss, P., Salzman, H., Tilly, C. (2008) Under construction: The continuing evolution of job structures in call centres.

Murlis, H., Schubert, P. (2001) Engage employees and boost performance. HayGroup Working Paper.



Nettleton, M. (2008) Recruiting, retaining and training staff. *Manufacturers' Monthly*, 14-15.

Pataconi, A. (2009) Coordination and delay in hierarchies. *RAND Journal of Economics (Blackwell)*, 40, 190-208.

Petrescu, A.I., Simmons, R. (2008) Human resource management practices and workers' job satisfaction. *International Journal of Manpower*, 29, 651-667.

Pfeffer, J. (1995) Producing sustainable competitive advantage through the effective management of people. *Academy of Management Executive*, 9, 55-69.

Price, J.L. (2001) Reflections on the determinants of voluntary turnover. *International Journal of Manpower*, 22, 600-624.

Ray (2006) Agents secrets. *Utility Week*.

Rioux, S., Bernthal, P. (1999) Recruitment and selection Practices survey report. *HR Benchmark group*.

Robbins , S.P., Judges, T.A. (2007) *Organisational Behaviour*, New Jersey: Pearson Prentice Hall.

Robbins, S.P. (1990) *Organization theory: Structure, design, and applications*, New Jersey: Prentice Hall.

Robison, J. (2008) Turning Around Employee Turnover: Costly churn can be reduced if managers know what to look for -- and they usually don't. *Gallup Management Journal Online*, 1-6.



Scarpello, V., Ledvika (2006) *Human Resource Management in South Africa*, Pat Bond.

Shanblag, R. (2008) Study: Outsourced Contact Centres in South Africa to Hit 60,000 Seats by 2014. TMCnet.com.

Stacey, A.G. (2005) The reliability and validity of the item means and standard deviations of ordinal level response data. *Management Dynamics: Journal of the Southern African Institute for Management Scientists*, 14, 2-25.

Stone, M., Liyanearachchi, D. (2007) Managing retention - " Who does it well? *Journal of Database Marketing & Customer Strategy Management*, 14, 90-103.

Subramanian, S. (2006) An "open eye and ear" approach to managerial communication, *The Journal of Business Perspective* 2, 1-10.

Sutherland, M., Jordaan, W. (2004) Factors affecting the retention of knowledge workers. *South African Journal of Human Resource Management*, 63-72.

Telfer, A. (2008) The best company to work for survey in employer branding, applicant's attraction, employee engagements and talent retention. Pretoria: University of Pretoria.

Tett, R.P., Meyer, J.P. (1993) Job Satisfaction, Organisational Commitment, Turnover intention and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology*, 46, 259-293.

Thompson, C.A., Beauvais, L.L., Lyness, K.S. (1999) When work-family benefits are not enough: The influence of work-family culture on benefit utilization, organizational attachment, and work-family conflict. *Journal of*



Vocational Behaviour, 54, 392-415.

Thorton, G. (2008) Recruitment and retention: the quest for the right talent. International Business report.

Trevor, C.O. (2001) Interactions among actual ease-of movement determinants and job satisfaction in the prediction of voluntary turnover. *Academy of Management journal*, 44, 621-638.

Truss, C., Gratton, L. (1994) Strategic human resource management: a conceptual approach. *The International Journal of Human resource management*.

Umiker, W.O. (1994) Does training increase employee retention? *MLO: medical laboratory observer*, 26, 44.

Van Niekerk, O. (2005) What makes a good retention strategy for a professional service firms in South Africa? Pretoria, University of Pretoria.

Vowler, J. (2005) How effective training aids staff retention. *Computer Weekly*, 40-40.

Welbourne, T. (2003) Strategic human resource management (SHRM) What is it?

Westerman, J.W., Yamamura, J.H. (2007) Generational preferences for work environment fit: effects on employee outcomes. *Career Development International*, 12, 150-161.



Witty, J. (2009) Retention, the hidden benefit of training.

Wöcke, A., Sutherland, M. (2008) The impact of employment equity regulations on psychological contracts in South Africa. *The International Journal of Human Resource Management*, 19, 528-542.

Yates, K. (2006) Internal communication effectiveness enhances bottom-line results. *Journal of Organizational Excellence*, 25, 71-79.

Zikmund, W. G. (2003) *Business research methods*, Ohio.



Appendix 1 Agent Questionnaire

Agent Questionnaire

Respondent's informed consent

I am doing a research on retention perception between managers and call center agents. To that end, you are requested to respond to the questionnaire given below. This will help us better understand the roles and management practices in the retention of call center agents, it should not take longer than 20 minutes of your precious time.

NB Your participation is voluntary and you can withdraw at any time without penalty. Of course, all data will be kept confidential. By completing the survey, you indicate that you voluntarily participate in this research, and give permission for further use of the data. If a have any concerns, please feel free to contact me or my supervisor. Our details are provided below:

Researcher: Ivo Forgiarini
E-mail: foegiarini@iburst.co.za
Phone :0825207460

Researcher Supervisor: Dr Caren Scheepers
E-mail: caren.scheepers@irodo.com
Phone: 0829227072

This survey requires you to rate your perception on the following statements. There is no right or wrong answer, your perception of the statement is important for this survey, please tick the appropriate rating on a scale of 1 to 5.

How long have you been working with the current employer	Years	Months
Gender	Male	Female
Current age		

1=Strongly Disagree, 2 = Disagree, 3= do not agree or disagree' 4= Agree , 5= Strongly Agree

1	I have a good professional work relationship with my manager.	1	2	3	4	5
2	I feel well informed about what is happening within the company.	1	2	3	4	5
3	My superior sets clear goals for me.	1	2	3	4	5
4	I hardly ever think about leaving my current employer.	1	2	3	4	5
5	Do believe that there are too many levels of supervision between agents and decision makers	1	2	3	4	5
6	My superior and I discuss the results I am expected to achieve.	1	2	3	4	5



7	I believe that the recruitment method and process used to employ me was effective	1	2	3	4	5
8	It will take a lot for me to leave the company I currently work for.	1	2	3	4	5
9	I receive formal feedback from my manager/ supervisor	1	2	3	4	5
10	I believe that the management process to recruit my fellow agents is effective	1	2	3	4	5
11	I support and agree that induction training should be conducted for all new call center agents	1	2	3	4	5
12	I receive informal feedback from my manager/ supervisor often	1	2	3	4	5
13	I have been looking for another job in the last 3 months	1	2	3	4	5
14	My superior listens to what I have to say	1	2	3	4	5
15	I support and agree that Skills training should be conducted continually with all call center agents	1	2	3	4	5
16	There is open communication with myself and my superior	1	2	3	4	5
17	I enjoy working at my present company	1	2	3	4	5
18	Before I started as a call center agent I thought this job to be simple.	1	2	3	4	5
19	I believe that there is too little supervision in the call center.	1	2	3	4	5
20	My company offers me access to work related training	1	2	3	4	5
21	I believe my superior hires employees with skills that help the team succeed	1	2	3	4	5
22	My supervisors and manages support me in attending training to develop new skills.	1	2	3	4	5
23	Supervisors and management keep me informed about the issues affecting my work.	1	2	3	4	5
24	I still want to work here next year	1	2	3	4	5
25	I support and agree that product training should be conducted continually with all call center agents	1	2	3	4	5
26	I have a clear reporting structure, and know who I report to.	1	2	3	4	5

Thank you for your valued time, please place this survey in the designated box.



Appendix 2 Manager Questionnaire

Managers Questionnaire

I am doing a research on retention perception between managers and call center agents. To that end, you are requested to respond to the questionnaire given below. This will help us better understand the roles and management practices in the retention of call center agents, it should not take longer than 20 minutes of your precious time.

NB Your participation is voluntary and you can withdraw at any time without penalty. Of course, all data will be kept confidential. By completing the survey, you indicate that you voluntarily participate in this research, and give permission for further use of the data. If you have any concerns, please feel free to contact me or my supervisor. Our details are provided below:

Researcher: Ilvo Forgiarini
E-mail: forgiarini@iburst.co.za
Phone :0825207460

Researcher Supervisor: Dr Caren Scheepers
E-mail: caren,scheepers@irodo.com
Phone: 0829227072

This survey requires you to rate your perception on the following statements. There is no right or wrong answer, your perception of the statement is important for this survey, please tick the appropriate rating on a scale of 1 to 5.

How long have you been working with the current employer	Years	Months
Gender	Male	Female
Current age		

1=Strongly Disagree, 2 = Disagree, 3= do not agree or disagree' 4= Agree , 5=Strongly Agree

1	I have good professional work relationship with my agents.	1	2	3	4	5
2	I believe I keep my agents well informed with regards to what is happening in the company.	1	2	3	4	5
3	I believe I set clear goals for my agents.	1	2	3	4	5
4	I believe my agents hardly ever think about leaving their current employer.	1	2	3	4	5
5	I do believe that there are too many levels of supervision between agents and decision makers.	1	2	3	4	5
6	I discuss the results I expect with my agents.	1	2	3	4	5
7	I believe that the recruitment method and process used to employ agents is effective	1	2	3	4	5



8	It will take a lot for the agent to leave the company they currently work for.	1	2	3	4	5
9	I always give formal feedback to my agents.	1	2	3	4	5
10	I believe that the management process used to employ agents is effective	1	2	3	4	5
11	I support and agree that induction training should be conducted for all new call center agents	1	2	3	4	5
12	I often give informal feedback to my agents	1	2	3	4	5
13	I believe that some agents have been looking for another job in the last 3 months.	1	2	3	4	5
14	I actively listen to my agents.	1	2	3	4	5
15	I support and agree that skills training should be conducted continually with all call center agents	1	2	3	4	5
16	There is open communication with myself and my subordinate	1	2	3	4	5
17	I believe my agents enjoy working at the present company	1	2	3	4	5
18	The agents do not realize the difficulty of the job until they have been here for some time.	1	2	3	4	5
19	I believe that there is too little supervision in the call center.	1	2	3	4	5
20	My company offers all agents access to work related training	1	2	3	4	5
21	I believe I hire employees with skills that help the team succeed	1	2	3	4	5
22	I believe that I support my agents in attending training to develop new skills.	1	2	3	4	5
23	I believe I keep my agents well informed about the all issues affecting their work.	1	2	3	4	5
24	I believe most of my agents still want to work here next year	1	2	3	4	5
25	I support and agree that product training should be conducted continually with all call center agents	1	2	3	4	5
26	Agents have a clear reporting structure to be managed by.	1	2	3	4	5

Thank you for your valued time, please place this survey in the designated box.

I often give informal feedback to my agents.



Appendix 3 Consent Form



13 July 2009

I am currently enrolled for my MBA at the Gordon institute of business science; University of Pretoria. The aim of my research creates more understandings on, the retention perception between managers and call center agents in South African inbound call centers. To that end, participants are requested to respond to the questionnaire attached. This will help us better understand the roles and management practices in the retention of call center agents, it should not take longer than 20 minutes of your and their precious time.

The participation is voluntary and participants can withdraw at any time without penalty. Of course, all data will be kept confidential. By completing the survey, they indicate that they voluntarily participate in the research, and give permission for further use of the data.

No Names of participants, products, services or organization names will be not be mention in the research and findings

If you have any concerns, please feel free to contact me or my supervisor. Our details are provided below:

Researcher: Ilvo Forgiarini
E-mail: forgiarini@iburst.co.za
Phone :082 520 7460

Researcher Supervisor: Dr Caren Scheepers
E-mail: caren.scheepers@irodo.com
Phone: 082 922 7072

By completing and returning this consent form, you agree I can conduct this survey in your call center for the above described research project. We will arrange to contact participants in the month of August 2009, dates and times will be agreed closer to the time.

I would like to thank you in advance for your assistance

Warmest regards

Ilvo Forgiarini (28580100)

Participant Name: _____(Please print)

Participant Signature: _____

Company name: _____(Please print)

Date: _____



Appendix 4 Raw data agents

Appendix
Agent results to questionnaire

	Months	M/F	Age	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1	20	F	23	1	4	4	3	5	4	4	3	2	3	5	3	1	4	5	4	4	5	1	4	4	4	4	4	5	5
2	25	F	26	2	1	1	1	1	2	3	1	2	2	5	3	5	1	5	1	1	1	1	3	1	1	1	1	1	1
3	12	M	22	3	5	3	2	1	4	4	3	4	3	5	3	5	3	4	4	3	4	3	5	3	3	5	3	2	2
4	19	F	20	3	2	2	3	3	4	2	2	2	4	2	2	4	3	3	3	3	2	4	3	4	4	3	3	3	3
5		F	26	2	2	1	1	2	2	3	1	2	3	5	2	3	3	4	3	1	2	2	3	4	3	3	1	3	3
6	18	F	23	4	4	4	3	3	5	5	3	4	4	5	4	5	5	5	5	4	4	2	4	5	5	5	3	5	5
7	15	F	25	4	4	1	1	1	4	4	1	4	2	5	4	5	1	5	1	2	4	1	5	5	4	4	2	5	4
8	8	M	29	3	3	4	3	3	4	4	3	3	3	5	3	3	3	5	3	4	3	1	3	3	3	5	3	5	4
9	47	F	32	3	3	2	3	3	2	2	3	3	2	3	3	4	3	3	2	2	4	2	3	4	3	3	2	4	3
10		M		3	3	3	3	4	3	4	4	4	3	5	2	1	3	5	4	3	2	3	3	3	3	4	5	5	3
11	16	M	19	2	2	3	3	2	1	2	4	2	4	4	3	3	5	5	5	5	3	2	5	5	4	4	3	5	5
12		F	34	5	3	5	3	3	5	5	3	5	5	5	5	2	5	5	5	4	3	1	5	5	5	5	4	5	5
13		M	20	4	5	4	1	4	4	5	3	4	5	5	5	2	3	4	4	3	4	3	4	4	3	3	4	5	4
14	72	F	37	3	4	4	5	3	5	4	5	4	3	5	5	1	4	5	5	4	3	2	5	5	4	4	3	5	5
15		F		4	4	4	2	4	4	3	3	4	3	5	4	4	4	5	4	3	5	4	5	5	5	4	3	4	3
16	27	M	22	3	4	4	1	5	4	5	2	4	4	5	4	5	2	4	4	3	4	2	4	5	4	4	1	2	5
17	15	M	23	2	2	3	4	4	2	3	2	2	3	2	2	4	2	2	2	1	2	4	3	3	3	3	2	2	1
18	12	F	26	4	4	4	3	4	4	4	3	4	4	4	3	4	5	4	3	4	3	3	4	4	4	4	3	4	5
19		F		2	2	1	1	2	2	3	1	2	3	5	2	3	3	4	3	1	2	2	3	4	3	3	1	3	3
20	12	M	27	1	4	5	3	4	5	5	3	4	4	4	5	3	5	5	5	4	2	1	4	4	4	5	4	5	5
21		M	22	3	3	4	2	1	4	4	4	4	4	4	4	4	4	4	4	3	1	2	4	4	4	4	4	4	5
22	12	F	34	3	4	4	2	3	4	3	2	4	4	5	5	1	3	5	3	2	5	3	4	5	3	2	5	3	



23	12	F	34	2	1	2	1	2	3	4	1	3	3	5	4	5	3	4	3	1	4	5	4	4	4	2	1	5	3	
24		M	34	4	3	2	1	2	2	4	1	3	3	4	3	5	4	4	5	1	3	1	3	4	3	3	1	4	4	
25		F		3	3	2	2	5	3	5	3	3	5	5	5	5	1	5	1	3	1	1	4	1	4	5	1	5	5	
26	24	M	23	4	3	3	3	2	4	3	3	3	3	4	4	2	3	4	4	3	2	2	4	1	4	4	4	4	4	
27	12	M	26	1	3	2	2	3	4	5	3	4	3	4	3	1	5	4	5	5	1	1	1	5	4	5	5	5	5	
28	12	M	24	2	2	3	2	4	3	4	2	3	3	4	3	4	3	4	3	3	3	2	3	4	4	3	4	4	3	
29		M		1	1	1	5	5	3	5	1	5	1	1	1	1	4	1	5	3	1	3	5	4	5	1	5	5	5	
30		F	27	5	5	5	4	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	
31				2	2	1	5	2	4	4	3	5	3	5	5	3	5	4	5	3	4	1	3	4	3	4	3	4	4	
32	13	M	28	3	4	5	2	2	5	4	4	3	4	5	5	2	5	5	5	4	2	2	4	4	4	5	4	5	5	
33	12	F	25	2	2	1	1	4	4	3	3	4	1	3	4	3	4	3	3	1	3	3	1	3	3	3	1	3	4	
34	36	F	26	2	3	2	3	3	2	4	3	2	2	5	2	3	2	5	2	4	5	3	3	3	3	4	3	5	5	
35		F	24	5	4	5	5	3	5	5	4	4	4	4	4	1	4	5	5	5	5	3	3	4	3	5	5	5	5	
36	30	F	23	3	5	5	3	2	4	2	3	4	4	5	1	1	2	4	4	4	5	2	3	2	2	3	3	3	4	
37	13	M	18	4	3	5	3	4	4	3	3	4	4	5	4	2	5	5	5	3	1	2	3	4	4	3	3	5	5	
38	24	M	25	4	2	4	1	3	4	3	1	3	3	5	3	1	5	5	4	1	3	4	4	4	1	3	1	4	5	
39		F	24	4	2	4	2	4	3	3	1	3	2	5	3	4	5	5	5	4	4	1	3	5	3	3	2	5	5	
40	24	M	23	3	4	3	2	1	4	3	2	3	2	3	4	2	4	5	4	2	4	1	3	2	3	4	3	4	2	
41	24	M	26	3	2	4	2	2	3	4	2	3	4	4	4	2	4	4	4	3	4	3	4	4	4	3	2	4	4	
42		F	28	5	5	4	2	5	4	4	2	4	4	4	5	2	5	4	4	2	2	5	4	4	4	4	1	4	4	
43				4	4	3	3	4	5	4	4	4	3	5	4	2	3	5	4	4	4	2	4	4	4	5	4	4	5	
44		F		4	4	4	2	5	5	5	1	3	2	5	4	5	5	5	3	2	3	2	4	4	5	4	3	5	4	
45		F	27	5	5	5	3	2	5	4	4	5	2	5	3	3	5	5	5	5	5	5	2	5	4	5	5	5	3	
46	15	F	29	4	4	4	3	3	4	4	2	4	4	4	4	4	4	4	4	4	4	2	4	4	4	4	4	3	4	4
47	30	M	29	4	4	4	3	5	5	4	3	4	4	5	4	4	3	5	4	3	4	2	5	5	4	4	3	5	4	
48	12	F	26	4	4	4	3	3	4	5	3	4	4	5	4	1	3	4	4	4	3	3	4	4	4	4	4	4	4	
49		F	33	3	3	3	2	4	3	2	5	3	3	4	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	
50	116	F	29	5	4	5	3	3	5	5	3	4	4	4	5	2	4	5	4	4	3	2	5	4	5	4	4	5	5	
51	34	F	26	1	3	4	2	4	5	4	3	4	4	3	5	4	4	5	4	3	2	2	1	4	4	4	3	5	5	
52	65	M	30	3	2	4	1	3	4	2	2	3	3	3	3	5	3	3	4	1	3	4	3	4	1	3	2	3	3	
53		F	26	2	3	1	1	1	1	1	1	1	1	4	5	5	1	4	1	1	1	1	1	1	1	1	1	5	3	
54	61	F	27	3	1	1	1	5	4	1	1	1	1	5	1	5	1	5	4	1	5	1	1	4	4	1	1	5	4	
55		F	24	4	5	5	5	3	5	5	5	5	4	5	5	2	5	5	5	5	3	1	4	4	5	5	5	5	5	



56	17	M	25	4	2	2	1	4	5	1	2	4	1	5	2	5	4	5	4	3	4	2	1	1	1	1	2	5	4
57	65	F	25	4	4	4	1	5	3	4	1	4	3	4	3	5	2	4	3	2	4	4	3	4	3	3	1	5	4
58	17	F	25	5	3	5	2	2	5	5	4	4	5	5	4	5	4	5	4	4	3	5	4	4	2	4	4	5	5
59	188	F	46	4	3	4	1	5	4	1	1	4	3	5	4	3	1	4	3	3	1	1	4	3	4	3	3	5	4
60	164	F	33	4	2	2	1	2	3	3	4	3	3	4	4	5	2	5	4	3	2	2	3	3	4	4	2	4	3
61	77	M	30	5	5	5	5	1	5	1	5	5	2	5	3	4	5	5	5	5	1	1	5	3	5	5	1	5	5
62	144	F	47	5	2	5	1	3	5	5	1	5	3	5	5	4	5	5	5	3	1	1	4	5	1	5	3	5	5
63	181	F	35	4	4	4	4	3	4	4	4	4	4	5	4	2	4	5	4	4	3	1	3	4	3	3	5	5	4
64	90	M	32	5	5	4	4	4	4	3	4	5	3	5	3	4	5	5	5	4	3	2	4	5	5	4	4	5	5
65	60	F	25	4	5	4	3	4	5	3	3	4	3	4	4	5	5	5	5	4	3	3	4	3	5	5	3	5	5
66	24	M		1	5	5	1	5	5	5	1	5	5	5	5	1	5	5	5	1	1	1	5	5	5	5	1	5	5
67	26		22	3	1	5	2	5	5	5	2	3	3	5	4	4	5	5	3	3	5	4	2	4	4	5	3	4	5
68	20	M	24	4	4	3	3	1	5	4	3	5	4	4	3	1	4	5	5	5	3	1	5	5	3	4	5	4	5
69	84	M		4	2	3	3	5	3	3	3	3	3	3	3	3	3	4	4	3	4	3	3	3	4	3	3	3	3
70	36		20	4	2	4	1	3	4	4	1	4	3	4	4	5	4	4	4	3	3	1	4	4	4	4	3	5	4
71	17	M	20	5	3	3	1	1	2	4	1	4	3	5	3	5	3	5	4	4	4	1	4	5	3	2	3	5	5
72	24	M	25	4	5	5	1	1	5	5	1		4	5	3	5	4	5	4	1	1	2	2	4	4	3	3	1	4
73	157	F	33	4	2	4	4	5	4	5	4	4	5	5	4	1	2	5	4	4	4	3	5	5	4	2	3	5	5
74		F	21	4	4	5	3	3	4	4	3	4	4	4	4	4	4	4	4	4	3	3	3	4	4	5	5	4	4
75	65	M	26	3	3	4	1	1	5	5	1	3	1	5	5	5	3	5	3	3	5	1	5	5	3	3	1	3	5
76	120	F	42	5	4	4	3	5	4	5	3	4	5	5	4	2	4	5	4	4	4	2	4	5	4	4	3	4	5
77	8	F	27	4	4	5	4	2	4	4	4	4	4	4	4	2	4	4	5	4	2	2	4	4	4	4	4	4	4
78		M	21	3	4	4	4	4	4	4	1	4	4	4	4	5	4	4	4	3	3	2	3	3	3	3	1	4	4
79	85	F	27	4	5	4	4	3	4	5	5	5	5	5	4	4	5	5	5	5	1	2	5	5	4	5	5	5	5
80		M	25	4	3	3	2	4	4	4	2	4	3	4	1	2	3	5	4	3	2	2	2	3	2	3	4	5	5
81		F	24	4	4	4	2	1	4	5	4	4	4	5	4	4	4	5	5	4	5	1	4	5	1	4	3	5	5
82	44	F	24	2	3	2	2	2	4	4	3	4	4	5	3	2	4	4	4	4	2	2	3	4	3	4	3	4	4



Appendix 5 Raw data managers

Appendix
Managers results to questionnaire

	Months	M/F	Age	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1	27	F	22	3	4	5	4	2	5	1	3	4	1	5	2	3	4	5	5	5	4	2	1	4	5	5	5	4	5
2	65	F	26	5	4	4	1	3	4	3	3	5	3	5	2	5	5	5	5	2	3	2	3	5	5	5	1	4	3
2	29	M	28	3	4	4	2	2	4	4	3	3	4	5	4	4	4	5	4	3	2	2	2	4	4	3	3	4	4
4	43	F	35	4	4	4	2	3	2	4	1	4	3	4	3	4	3	4	2	2	2	2	3	2	2	4	2	4	1
5	36	F	26	4	4	4	3	3	4	3	1	4	3	4	3	4	4	4	4	3	3	2	4	4	4	4	2	4	4
6	43	M	26	4	5	3	1	3	4	2	2	4	3	5	4	5	4	4	3	2	4	3	2	4	4	4	3	4	1
7	145	F	33	5	5	5	3	4	5	3	4	5	4	5	5	5	4	5	5	3	4	3	5	5	5	5	4	5	5
8	163	M	35	4	4	3	3	4	4	4	4	5	4	5	5	4	4	4	4	3	4	2	4	4	3	5	3	4	5
9		F	35	4	3	4	3	3	4	4	3	4	4	5	4	4	5	4	4	4	3	2	5	4	5	4	3	4	5



Appendix 6 Stats key reference for SAS

Key reference

Reversed scored questions

Q5=6-q5

Q13=6-q13

Q18=6-q18

Q19=6-q19

Question by factor (q)

Factor 1 = Intention to leave = mean (of q4 q8 q13 q17 q24);

Factor 2 = Communication = mean (of q2 q9 q14 q16 q23);

Factor 3 = Call centre structure = mean (of q1 q5 q19 q26);

Factor 4 = Performance Management = mean (of q3 q6 q12);

Factor 5 = Recruitment and Selection = mean (of q7 q10 q18 q21);

Factor 6 = Training and development = mean (of q11 q15 q20 q22 q25)

Appendix 7 Agents results from SAS

The SAS System
The FREQ Procedure

Time				
Time	Frequency	Percent	Cumulative Frequency	Cumulative Percent
8	2	3.51	2	3.51
12	9	15.79	11	19.30
13	2	3.51	13	22.81
15	3	5.26	16	28.07
16	1	1.75	17	29.82
17	3	5.26	20	35.09
18	1	1.75	21	36.84
19	1	1.75	22	38.60
20	2	3.51	24	42.11
24	6	10.53	30	52.63
25	1	1.75	31	54.39
26	1	1.75	32	56.14
27	1	1.75	33	57.89
30	2	3.51	35	61.40
34	1	1.75	36	63.16
36	2	3.51	38	66.67
44	1	1.75	39	68.42
47	1	1.75	40	70.18
60	1	1.75	41	71.93
61	1	1.75	42	73.68
65	3	5.26	45	78.95
72	1	1.75	46	80.70
77	1	1.75	47	82.46
84	1	1.75	48	84.21
85	1	1.75	49	85.96

Time				
Time	Frequency	Percent	Cumulative Frequency	Cumulative Percent
90	1	1.75	50	87.72
116	1	1.75	51	89.47
120	1	1.75	52	91.23
144	1	1.75	53	92.98
157	1	1.75	54	94.74
164	1	1.75	55	96.49
181	1	1.75	56	98.25
188	1	1.75	57	100.00

Frequency Missing = 25

gender				
gender	Frequency	Percent	Cumulative Frequency	Cumulative Percent
f	46	58.97	46	58.97
m	32	41.03	78	100.00

Frequency Missing = 4

Age				
Age	Frequency	Percent	Cumulative Frequency	Cumulative Percent
18	1	1.39	1	1.39
19	1	1.39	2	2.78
20	4	5.56	6	8.33
21	2	2.78	8	11.11
22	4	5.56	12	16.67
23	6	8.33	18	25.00
24	7	9.72	25	34.72
25	9	12.50	34	47.22
26	10	13.89	44	61.11
27	6	8.33	50	69.44
28	2	2.78	52	72.22
29	4	5.56	56	77.78

Age				
Age	Frequency	Percent	Cumulative Frequency	Cumulative Percent
30	2	2.78	58	80.56
32	2	2.78	60	83.33
33	3	4.17	63	87.50
34	4	5.56	67	93.06
35	1	1.39	68	94.44
37	1	1.39	69	95.83
42	1	1.39	70	97.22
46	1	1.39	71	98.61
47	1	1.39	72	100.00

Frequency Missing = 10



The SAS System
The MEANS Procedure

Variable	Label	N	Mean	Std Dev	Minimum	Maximum
Time	Time	57	45.8245614	46.7253078	8.0000000	188.0000000
Age	Age	72	26.9166667	5.6387742	18.0000000	47.0000000
q1	q1	82	3.3902439	1.1304549	1.0000000	5.0000000
q2	q2	82	3.2926829	1.1599043	1.0000000	5.0000000
q3	q3	82	3.4878049	1.2692362	1.0000000	5.0000000
q4	q4	82	2.4390244	1.2079731	1.0000000	5.0000000
q5	q5	82	2.8658537	1.3311296	1.0000000	5.0000000
q6	q6	82	3.8902439	1.0184241	1.0000000	5.0000000
q7	q7	82	3.7682927	1.1363661	1.0000000	5.0000000
q8	q8	82	2.6463415	1.2409868	1.0000000	5.0000000
q9	q9	81	3.6296296	0.9279607	1.0000000	5.0000000
q10	q10	82	3.3414634	1.0210079	1.0000000	5.0000000
q11	q11	82	4.4512195	0.8337397	1.0000000	5.0000000
q12	q12	82	3.6219512	1.0615647	1.0000000	5.0000000
q13	q13	82	2.7926829	1.4634460	1.0000000	5.0000000
q14	q14	82	3.6585366	1.1463254	1.0000000	5.0000000
q15	q15	82	4.4512195	0.8484181	1.0000000	5.0000000
q16	q16	82	3.9146341	1.0328101	1.0000000	5.0000000
q17	q17	82	3.1219512	1.2109607	1.0000000	5.0000000
q18	q18	82	2.9390244	1.2895359	1.0000000	5.0000000
q19	q19	82	3.7682927	1.1578906	1.0000000	5.0000000
q20	q20	82	3.5609756	1.0783797	1.0000000	5.0000000
q21	q21	82	3.8536585	1.0318622	1.0000000	5.0000000
q22	q22	82	3.5609756	1.0897679	1.0000000	5.0000000
q23	q23	82	3.7195122	1.0336844	1.0000000	5.0000000
q24	q24	82	2.9268293	1.2936740	1.0000000	5.0000000
q25	q25	82	4.2926829	0.9748416	1.0000000	5.0000000
q26	q26	82	4.1585366	0.9746099	1.0000000	5.0000000



The SAS System

The CORR Procedure

6 Variables: factor1 factor2 factor3 factor4 factor5 factor6

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
factor1	82	2.78537	0.97666	228.40000	1.00000	4.80000
factor2	82	3.64390	0.78757	298.80000	1.20000	5.00000
factor3	82	3.54573	0.62870	290.75000	1.75000	5.00000
factor4	82	3.66667	0.90267	300.66667	1.66667	5.00000
factor5	82	3.47561	0.67083	285.00000	1.25000	5.00000
factor6	82	4.06341	0.60767	333.20000	2.40000	5.00000

Pearson Correlation Coefficients, N = 82
Prob > |r| under H0: Rho=0

	factor1	factor2	factor3	factor4	factor5	factor6
factor1	1.00000	0.57994	0.21222	0.35476	0.29341	0.38933
		<.0001	0.0556	0.0011	0.0075	0.0003
factor2	0.57994	1.00000	0.40480	0.71200	0.49978	0.53686
	<.0001		0.0002	<.0001	<.0001	<.0001
factor3	0.21222	0.40480	1.00000	0.28643	0.18929	0.37525
	0.0556	0.0002		0.0091	0.0885	0.0005
factor4	0.35476	0.71200	0.28643	1.00000	0.46552	0.55217
	0.0011	<.0001	0.0091		<.0001	<.0001
factor5	0.29341	0.49978	0.18929	0.46552	1.00000	0.35515
	0.0075	<.0001	0.0885	<.0001		0.0011
factor6	0.38933	0.53686	0.37525	0.55217	0.35515	1.00000
	0.0003	<.0001	0.0005	<.0001	0.0011	

Appendix 8 Managers results from SAS

The SAS System
The FREQ Procedure

Time				
Time	Frequency	Percent	Cumulative Frequency	Cumulative Percent
27	1	11.11	1	11.11
29	1	11.11	2	22.22
36	1	11.11	3	33.33
43	2	22.22	5	55.56
65	1	11.11	6	66.67
76	1	11.11	7	77.78
145	1	11.11	8	88.89
163	1	11.11	9	100.00

gender				
gender	Frequency	Percent	Cumulative Frequency	Cumulative Percent
f	6	66.67	6	66.67
m	3	33.33	9	100.00



The SAS System

The MEANS Procedure

Variable	Label	N	Mean	Std Dev	Minimum	Maximum
Time	Time	9	69.6666667	50.5939720	27.0000000	163.0000000
Age	Age	9	29.5555556	4.9777282	22.0000000	35.0000000
q1	q1	9	4.0000000	0.7071068	3.0000000	5.0000000
q2	q2	9	4.1111111	0.6009252	3.0000000	5.0000000
q3	q3	9	4.0000000	0.7071068	3.0000000	5.0000000
q4	q4	9	2.4444444	1.0137938	1.0000000	4.0000000
q5	q5	9	3.0000000	0.7071068	2.0000000	4.0000000
q6	q6	9	4.0000000	0.8660254	2.0000000	5.0000000
q7	q7	9	3.1111111	1.0540926	1.0000000	4.0000000
q8	q8	9	2.6666667	1.1180340	1.0000000	4.0000000
q9	q9	9	4.2222222	0.6666667	3.0000000	5.0000000
q10	q10	9	3.2222222	0.9718253	1.0000000	4.0000000
q11	q11	9	4.7777778	0.4409586	4.0000000	5.0000000
q12	q12	9	3.5555556	1.1303883	2.0000000	5.0000000
q13	q13	9	1.7777778	0.6666667	1.0000000	3.0000000
q14	q14	9	4.1111111	0.6009252	3.0000000	5.0000000
q15	q15	9	4.4444444	0.5270463	4.0000000	5.0000000
q16	q16	9	4.0000000	1.0000000	2.0000000	5.0000000
q17	q17	9	3.0000000	1.0000000	2.0000000	5.0000000
q18	q18	9	2.7777778	0.8333333	2.0000000	4.0000000
q19	q19	9	3.7777778	0.4409586	3.0000000	4.0000000
q20	q20	9	3.2222222	1.3944334	1.0000000	5.0000000
q21	q21	9	4.0000000	0.8660254	2.0000000	5.0000000
q22	q22	9	4.1111111	1.0540926	2.0000000	5.0000000
q23	q23	9	4.3333333	0.7071068	3.0000000	5.0000000
q24	q24	9	2.8888889	1.1666667	1.0000000	5.0000000
q25	q25	9	4.1111111	0.3333333	4.0000000	5.0000000
q26	q26	9	3.6666667	1.6583124	1.0000000	5.0000000



The SAS System
The CORR Procedure

6 Variables: factor1 factor2 factor3 factor4 factor5 factor6

Simple Statistics

Variable	N	Mean	Std Dev	Median	Minimum	Maximum
factor1	9	2.55556	0.77960	2.60000	1.60000	4.00000
factor2	9	4.15556	0.48762	4.00000	3.40000	4.80000
factor3	9	3.61111	0.43501	3.75000	2.75000	4.00000
factor4	9	3.85185	0.55556	4.00000	3.00000	5.00000
factor5	9	3.27778	0.59219	3.50000	2.00000	4.00000
factor6	9	4.13333	0.46904	4.00000	3.40000	5.00000

Spearman Correlation Coefficients, N = 9
Prob > |r| under H0: Rho=0

	factor1	factor2	factor3	factor4	factor5	factor6
factor1	1.00000	0.23581	0.72165	0.84405	0.04783	0.37343
		0.5413	0.0282	0.0042	0.9028	0.3222
factor2	0.23581	1.00000	0.33416	0.37678	-0.03493	0.66975
	0.5413		0.3795	0.3175	0.9289	0.0484
factor3	0.72165	0.33416	1.00000	0.54871	0.24367	0.62766
	0.0282	0.3795		0.1260	0.5275	0.0703
factor4	0.84405	0.37678	0.54871	1.00000	0.35281	0.61188
	0.0042	0.3175	0.1260		0.3517	0.0799
factor5	0.04783	-0.03493	0.24367	0.35281	1.00000	0.53791
	0.9028	0.9289	0.5275	0.3517		0.1352
factor6	0.37343	0.66975	0.62766	0.61188	0.53791	1.00000
	0.3222	0.0484	0.0703	0.0799	0.1352	

Appendix 9 Stepwise selection from SAS

The SAS System
The REG Procedure
Model: MODEL1
Dependent Variable: factor1

Number of Observations Read 82

Number of Observations Used 82

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	27.86841	5.57368	8.58	<.0001
Error	76	49.39402	0.64992		
Corrected Total	81	77.26244			

Root MSE 0.80618 R-Square 0.3607

Dependent Mean 2.78537 Adj R-Sq 0.3186

Coeff Var 28.94331



Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	-0.18963	0.72687	-0.26	0.7949
factor2	1	0.78906	0.17807	4.43	<.0001
factor3	1	-0.09014	0.15961	-0.56	0.5739
factor4	1	-0.19132	0.14956	-1.28	0.2047
factor5	1	0.01556	0.15721	0.10	0.9214
factor6	1	0.26254	0.18728	1.40	0.1650

The SAS System

The REG Procedure

Model: MODEL1

Dependent Variable: factor1

Number of Observations Read 82

Number of Observations Used 82

Stepwise Selection: Step 1

Variable factor2 Entered: R-Square = 0.3363 and C(p) = 0.8969

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	25.98567	25.98567	40.54	<.0001
Error	80	51.27677	0.64096		
Corrected Total	81	77.26244			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	0.16477	0.42096	0.09819	0.15	0.6965
factor2	0.71917	0.11295	25.98567	40.54	<.0001

Bounds on condition number: 1, 1

All variables left in the model are significant at the 0.1500 level.

No other variable met the 0.1500 significance level for entry into the model.

Summary of Stepwise Selection								
Step	Variable Entered	Variable Removed	Number Vars In	Partial R-Square	Model R-Square	C(p)	F Value	Pr > F
1	factor2		1	0.3363	0.3363	0.8969	40.54	<.0001



Appendix 10 Wilcoxon Rank Sum Test from SAS

The SAS System

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable factor1 Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
Agent	82	3829.0	3772.0	75.027460	46.695122
Manager	9	357.0	414.0	75.027460	39.666667

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 357.0000

Normal Approximation

Z -0.7531

One-Sided Pr < Z 0.2257

Two-Sided Pr > |Z| 0.4514

t Approximation

One-Sided Pr < Z 0.2267

Two-Sided Pr > |Z| 0.4534

Z includes a continuity correction of 0.5.



The SAS System
The NPAR1WAY Procedure

**Wilcoxon Scores (Rank Sums) for Variable factor2
Classified by Variable group**

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
Agent	82	3624.0	3772.0	74.952960	44.195122
Manager	9	562.0	414.0	74.952960	62.444444

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 562.0000

Normal Approximation

Z 1.9679

One-Sided Pr > Z 0.0245

Two-Sided Pr > |Z| 0.0491

t Approximation

One-Sided Pr > Z 0.0261

Two-Sided Pr > |Z| 0.0522

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 3.8989

DF 1

Pr > Chi-Square 0.0483



The SAS System

The NPAR1WAY Procedure

**Wilcoxon Scores (Rank Sums) for Variable factor3
Classified by Variable group**

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
Agent	82	3732.50	3772.0	74.460839	45.518293
Manager	9	453.50	414.0	74.460839	50.388889

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 453.5000

Normal Approximation

Z 0.5238

One-Sided Pr > Z 0.3002

Two-Sided Pr > |Z| 0.6004

t Approximation

One-Sided Pr > Z 0.3009

Two-Sided Pr > |Z| 0.6017

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.2814

DF 1

Pr > Chi-Square 0.5958



The SAS System

The NPAR1WAY Procedure

**Wilcoxon Scores (Rank Sums) for Variable factor4
Classified by Variable group**

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
Agent	82	3754.0	3772.0	74.560006	45.780488
Manager	9	432.0	414.0	74.560006	48.000000

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 432.0000

Normal Approximation

Z 0.2347

One-Sided Pr > Z 0.4072

Two-Sided Pr > |Z| 0.8144

t Approximation

One-Sided Pr > Z 0.4075

Two-Sided Pr > |Z| 0.8150

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.0583

DF 1

Pr > Chi-Square 0.8092



The SAS System

The NPAR1WAY Procedure

**Wilcoxon Scores (Rank Sums) for Variable factor5
Classified by Variable group**

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
Agent	82	3831.50	3772.0	74.439355	46.725610
Manager	9	354.50	414.0	74.439355	39.388889

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 354.5000

Normal Approximation

Z -0.7926

One-Sided Pr < Z 0.2140

Two-Sided Pr > |Z| 0.4280

t Approximation

One-Sided Pr < Z 0.2151

Two-Sided Pr > |Z| 0.4301

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.6389

DF 1

Pr > Chi-Square 0.4241



The SAS System
The NPAR1WAY Procedure

**Wilcoxon Scores (Rank Sums) for Variable factor6
Classified by Variable group**

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
Agent	82	3764.50	3772.0	74.694638	45.908537
Manager	9	421.50	414.0	74.694638	46.833333

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 421.5000

Normal Approximation

Z 0.0937

One-Sided Pr > Z 0.4627

Two-Sided Pr > |Z| 0.9253

t Approximation

One-Sided Pr > Z 0.4628

Two-Sided Pr > |Z| 0.9255

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.0101

DF 1

Pr > Chi-Square 0.9200

fin